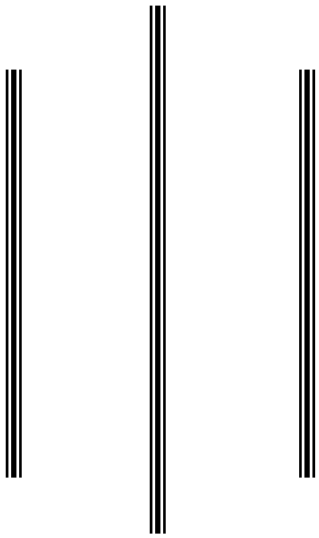
Research on Adolescent Reproductive Health in Six High Schools in Kailali



Written and submitted by: CICD

CENTER FOR INTEGRATED COMMUNITY DEVELOPMENT

DHANGHADI, KAILALI, FAR WESTERN DEVELOPMENT REGION, NEPAL

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RESEARCH ON ADOLESCENT REPRODUCTIVE HEALTH IN 6 HIGH SCHOOLS IN KAILALI

TABLE OF CONTENTS

ABBREVIATIONS USED IN THIS PAPER:

RH	:	Reproductive Health
ARH	:	Adolescent Reproductive Health
MC	:	menses/menstruation
CICD	:	Center for Integrated Community Development
KAP	:	Knowledge, attitude, practice
STD	:	Sexually transmitted disease
FP	:	Family planning

CHAPTER 1

INTRODUCTION / Setting of the Research Project

The Center for Integrated Community Development (CICD) is a non-profit organization which is working in the field of Human Resources Development and Reproductive Health Programs in Kailali/Kanchanpur and other districts in the Far Western development Region of Nepal. CICD trains Auxiliary Nurse Midwives (ANM) and Laboratory Assistant Students in an intensive clinical and community based program, and operates a Reproductive Health center on campus.

As defined by the World Health Organization, Reproductive Health is a state of complete physical, mental and social well being and not merely the absence of disease or infirmity in the areas of reproductive health. Reproductive Health therefore implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and have the freedom to decide if, when and how often to do so. Implicit in this last condition are the rights of women and men to be informed of, and to have access to safe, effective, affordable and acceptable methods of family planning as their choice, Additionally, women have the right of access to appropriate health care services that will
enable them to go safely through pregnancy and childbirth, thus providing couples with the best chance of having a healthy infant.

It is recognized that Reproductive Health is a crucial part of overall health and is central to human development. It affects everybody; it involves intimate and highly valued aspects of life. Not only is it a reflection of health in infancy, childhood and adolescence, it also sets the stage for health beyond the Reproductive years for both women and men and has pronounced effects from one generation to another. (UN).

CICD recognizes that choices regarding health and reproductive health begin in early adolescence, and that trainings and proper education and information is essential for this large portion of Nepal's population to empower them to make the right and safest choices for their own lives and future family as well.

The setting of this research project was in Kailali, in the Far West Development region.
Six high schools were chosen, three within the municipality of Dhangadi (urban) and three in rural areas of the district. Kailai is a generally rural area, with many remote villages within the terai forests. Dhanghadi is the center of the DPHO and the Zonal Hospital: some NGO's and INGO's have bases in Dhanghadi, but recently many have moved to more accessible centers such as Nepalgunj. There has been an increased shift in migration patterns from villages to Dhanghadi municipality due to political issues; this has put a greater burden on schools within the municipality and greatly increased the adolescent population. At last count, 2004, the nargapalika puts the population at 70,000.

CHAPTER 1. 2

STATEMENT OF THE PROBLEM

Kailali, in the Far Western Development Region, is one of the poorest and underdeveloped area in Nepal. The area is mainly rural, with the majority of people relying on subsistence farming. Like other areas of Nepal, the adolescent population makes up a large percentage of the area(making up more than 1/5 of the total population).
Due to the high illiteracy rates, early marriage and childbearing ages, cultural conservativeness and neglected undevelopment and poverty in the Far West, the hypothesis of this study was that certain gaps would be found among high school age teenagers in the area of ARH.. What the study hoped to achieve was to show in what areas the largest gaps were found and if there was much discrepancy among urban and rural students.

Problems particular to this region are listed below:

- Approximately 50% of girls are mothers by the age of 19 in rural areas ; nearly 4/5 of Nepali women are still illiterate (UNICEF 2001).
- Women's illiteracy rates are very high, especially due to early marriage and early pregnancy.
- Unemployment and underemployment rates are high due to lack of education, creating massive poverty in the district.
- STD/HIV/AIDS cases are increasing rapidly due to unsafe sexual practices; statistics from 2001 have shown the Far Western Region records the highest number of HIV infected in the country (Kathmandu Post, June, 2002).
- Adolescents are the most neglected group of people in the community, with no access to Reproductive Health (RH) counseling and services.
- Rapidly changing roles in society and the impact of the media lead to conflicting messages for adolescents, particularly in the areas of sexuality and gender roles.
- Of the 23.18 million people in Nepal, 1/5 are in the adolescent age range. Approximately 13% of the total population is under age 15, an additional 17% are between the ages of 15-24. Adolescents and youths between ages 10-24 equal about 31% of Nepal's population. (Nepal Demographic & Health Survey, 2001)
- HIV/AIDS is affecting adolescents at a growing rate, particularly in the developing world (UNICEF, 2001)
- Lack of research in the area of ARH (Adolescent Reproductive Health) and adolescents in the Far West leads to major blocks in advocacy for health workers and policy makers at all levels.
- The awareness of Reproductive Health issues is very poor at the student level in Kailali District.

CHAPTER 1.3

OBJECTIVES

The overall purpose of this study is to provide baseline information about the level knowledge, attitude and practice (KAP) among adolescent students on the topics and issues related to Reproductive Health and Adolescent Reproductive Health.

Specific objectives include:

- To assess the knowledge level of adolescents about components of RH and ARH topics.
- To assess the knowledge and attitude about use of family planning methods among adolescents.
- To assess the knowledge and attitudes about STD's, & HIV/AIDS, of adolescents to include prevention techniques.
- To explore attitudes of gender roles among adolescents.
- To assess the attitudes among adolescents regarding issues related to early marriage, early pregnancy and fertility.
- To identify the knowledge among adolescents about basic anatomy and physiology related to RH.
- To identify the knowledge and attitude of family planning methods.
- To identify knowledge about condoms and their use & purpose.
- To assess the impact of ARH education in the knowledge, skills and practice among students of adolescent age.

CHAPTER 1.4

RESEARCH METHODOLOGY

1.4.1 STUDY SITES :

The 6 High Schools were selected to give the greatest cross-section of students in the District of Kailali. Thus 3 urban and 3 rural schools were chosen, and different levels of schools (poor government, moderate government, private) were selected. In this way the best sample of representatives of this target group (high school adolescents) could be tested.

1.4.2. BACKGROUND OF THE SCHOOLS:

* Shree Jhanjagirtri Secondary School, Chauri, Baliya, Kailali. 85 km. east of Dhanghadi, 4 km. south of Lumpke Bazaar. VDC: Baliya Ward no. 6.
Reproductive Health teacher: Dauber Bdr Thapamag Headmaster: Badri Prashed Lamsha Total teacher no. :24 Chairman of Management Committee: Bakat Bdr Bist
Total student no.: 1336 Total. Number in Management Committee: 11
This school has a library of 200 books, there is one tape recorder and each class has a blackboard. There is no separate science laboratory but there is some equipment., no microscope. There is one teacher for health. Most of the students are from Chetri or Bahun caste; economic condition is low to middle. Most students come from villages, there is a mix of family educational level, mostly literate, and the majority relies on agriculture at a subsistence level. Government, rural

* Rastriya Secondary School, Jhungha Baghura, Baliya, Kailali 80km. east of Dhanghadi, 10km. east of Chuna Sagar Industry, 2 km. from Lumpke bazaar. VDC: Baliya Ward no. 8, Kailali. Headmaster: Dhan Bahadur Shahi. Chairman of Management Committee: Mahadev Bajgai. Established Chairman: Dhanmaya Karki. Total student no.: 1200 Total teacher no.: 15 Government, rural
This school has a small library of 150 books, one tape recorder, each class has a blackboard. There is one microscope, no science lab. One teacher is assigned as health teacher. As most schools, student's families are agricultural, and are village dwellers.

* Arunadaya:Secondary School, Khairiphata, Kailai. 91 km. east from Dhanghadi, 6 km. east from Lumpke bazaar. VDC: Pathasaiya Ward no. 8, Khairiphata. Chairman of management committee: Tika Ram Bhat. Headmaster: Dhan Bdr Shah. Total teacher no.: 20 Total student no.: 1042 Government, rural

This school has a library of 200 books, there is one tape recorder and each class has a blackboard. There is some science equipment but no separate lab, one microscope. There is one teacher of health. Most students are Bahun and Chetri caste, coming from village background and families mainly rely on subsistence agriculture.

* Shree Sharada Secondary School, Dhanghadi, Kaiali. 2 km. south of Dhanghadi Municipality, Ward no.2. Chairman of Management Committee: Mukli Nath Ojha Headmaster: Prem Raj Bhandhari Total teacher no. :22 Total student no.: 700. Government, urban.
This school has just developed a library with the help of 'Room to Read' and to date has about 400 books. There is a blackboard in each class; the school has one taperecorder. There is no science lab and limited supplies. One teacher is assigned health class. There is a strong mix of castes and religions (Hindu with Moslem and Christian), with a great number of Tharu students. Many students families rely on subsistence agriculture, many students attend school sporadically due to need to work. A majority of students in this school have at least one illiterate parent, and many drop out of school due to lack of money for basic school fees/needs.

* J.C. Everest School, Dhanghadi 2km. south of Dhanghadi Nargapalika. Ward no. 2. Chairman of Management Committee: Surendra Chand. Headmaster: Keshab Bhatta. Total teacher no.: 18 Total student no.: 300 Private, urban
This school is the only private school in the area. The students are a mix of castes, but mainly Bahun and Chetri. Parents are generally wealthier as they can afford school fees, but in this area can still rely on small agriculture only. Some are business or other professionals. Despite this some students have illiterate mothers. Students mainly live in the urban area. There is a separate library with about 600 books, and this is an English medium school. There is science equipment and a fairly good supply of educational resources.

* Shree Panchidaya Secondary School, Dhanghadi 1 km from Dhanghadi Nargapalika Chairman of Management Committee: Bam Bahadur Kathayat. Headmaster: Yoder Prd Joshi Total teacher no.: 31 Total student no. : 1527 Government, urban
This school has a library of approximately 850 books; the school owns a tape recorder and each classroom has a blackboard (with three additional). There is no separate science laboratory, but there is some equipment including 3 microscopes. There are 3 instructors for reproductive health, one BA, two B.Sc. level. This Is a SEDU (Secondary Education Development Unit) school so has access to resources. Most students are Chetri or Bahun background. The students come from village and market area, for most students one or both parents are illiterate. The majority of families rely on subsistence agriculture.

1.4.3 DATA COLLECTION:

The data was collected by responses from a questionnaire developed and written by the CICD research team. This questionnaire was designed to cover all components of RH and ARH. Some information was asked twice, in different types of questions, to double check student's knowledge or attitudes on a certain matter. The questionnaire consisted of 45 questions, open ended as well as closed questions. 10 questions (# 1,2,3,4,5,6,7,35,36,45) were qualitative or open ended/subjective questions. These were designed to explore the student's ideas, attitudes and thoughts.

The remaining 35 questions were quantitative questions or closed ended. (#8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,37, 38,39,40,41,42,43,44) These were designed to create a numerical base of data, to easily discover student's knowledge levels and display them by percentages.

Students were assured that all information was confidential and for research use only. They were told that their names were optional, that we only needed their age and class level. They were also told that they could stop testing at any time and their school head or teachers, or parents would not have access to the papers. In this way the students would feel more at ease answering the questions and telling their real feelings in qualitative questions. The students were also told that this was not a graded test to the view that it would cut down on 'cheating', so students would give their own answers.

1.4.4 QUESTIONAIRRE TOPICS :

Topics relevant to ARH that are reflected in the questionnaire include anatomy and physiology, gender issues, early marriage and sexuality, STD/HIV/IAIDS (prevention, treatment), pregnancy, family planning, social customs and taboos regarding sexuality, safer motherhood, misconceptions of RH and family planning/ reproductive disease issues. Some questions explored the trust/vulnerability levels of this age group.
The questionnaire was pre-tested by a group of CICD students for clarity and consistency.

1.4.5 FIELD WORK:

The research team, at times assisted by CICD ANM students, went to each of the 6 schools initially to obtain permission for the respective headmasters and to allow him to review the questionnaire. The school staff was also briefed on the research: methods and rationale. This took about 2 months of preparation and travel. There were delays in this time period due to school holidays, SLC preparatory periods, and exam periods.

After the schools were finalized, the research team, working with the heads of schools to the best day and time for largest student population (i.e. avoiding holidays, test days, half days, special programs) explained to each class (generally 8-10 level) what the research/questionnaire was about. The students were then asked to volunteer, those who chose not to be were dismissed. The research team then chose the student data group by simple random sampling. Using the lottery method, the student volunteers were asked to select a number and write it down, these numbers were collected and selected at random. At this point only were the numbers selected to show an equal number of male/female, as this was crucial in the data collection (equal number of male/female respondents). The selection process took about 2 hours in total at each school.

After the volunteer group was selected they were asked to fill out the questionnaire. This was done immediately after selection to assure all volunteers would be present. This process took about 2 hours per school. The students were encouraged to ask questions to the research team (who were present throughout) to clarify questions so they would give the best answer.

1.4.6 DATA ANALYSIS:

The research team themselves did the research data analysis. Quantitative data was translated and compared in both English and Nepali to ascertain the best understanding of the answer. The answers were counted and recorded by school, categories were developed by subject/answer and numbers were selected by category.

Quantitative answers were also broken down by school, answers counted and recorded in tables designed by CICD, and percentages were also recorded. Percentages were calculated by the total number of students in most cases, in others by number of respondents.
In all types of data answers were recorded and tabulated to easily discover if there was any discrepancy between rural/urban/private/government schools. Tabulation also made it easy to analyze students' knowledge levels.

The data analysis, tabulation and report writing took about 2 months from start to finish, including revision and evaluation time.

1.4.7 GENERAL EXPERIENCES OF RESEARCHERS:

The researchers were surprised to find little difference in answers to question reflected in the different schools. That is, urban and rural students, private and government students seem consistent in answers (thus attitude and knowledge) on ARH topics. In qualitative answers, the researchers found that many students gave thoughtful answers to questions regarding sexuality and feelings and that this reflected in turn what these students thought about sex. It could not be fully ascertained whether these students were, or how many were sexually active, as this was not the aim of the study. However, based on some answers the researchers felt that some of these students most likely were sexually active.

The students did show a higher degree of vulnerability than expected; and this information coupled with increasing media influence regarding sexuality, the increase of STD's/HIV/AIDS particularly in the border areas with India in the Far West, and the grave problem of child trafficking in the area shows a need for direct and immediate intervention. " Nepal runs the risk of an increased epidemic due to an active sex trade and high rates of girl trafficking in India for sex work. It is estimated that approximately 100,000 Nepalese are engaged in commercial sex work in India". {The World Bank Group, Regional Update, April 2002}.

The researchers felt that the students were very open: almost all gave their names, even though they were told this was not necessary, and no students seems very concerned over the confidentiality of their questionnaires. This seems to indicate the students' openness and lack of fear in this area.

1.4.8 LIMITATIONS OF THE STUDY:

This research paper does not try to break down responses based on age, caste/ethnic group or sex, although the data is tabulated and recorded in a way that this could be part of a later study. Minimal 'cheating' or sharing of ideas was observed, and was quickly stopped to insure the students' own response. In some questions the students' may not have understood the question or concepts, or the wording of the question. In future CICD hopes to have trainings with pre and post tests that would work these out. However, students were free to ask any questions of clarification while filling out the questionnaires, and many students did not hesitate to do so. Many 'don't know' answers came from the younger age groups, but this in itself reflects a need for education at an earlier level.

CHAPTER 2

2.1 REVIEW OF LITERATURE

Before the initiation of the field research the following literature related to ARH education was surveyed and reviewed that seemed to focus on premarital sexuality, family planning, drug and sex abuse and ARH crises.

The Population and Development Programme of Action (UN, Cairo, 1994) has shown that adolescents have not gotten exposure with respect to RH components such as STD's, sexuality and pregnancy and they have to be exposed to age specific programmes in this field. "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 pregnancy, STD's and subsequent risk of infertility." {P.37, vol. 1,ch. 7, section E}

This publication also raises the issue of safe mothering showing the requirement of education about early motherhood which is mentioned to be a cause of mother and baby mortality. "Motherhood at a very young age entails a risk of maternal death that is much greater than average and children of young mothers have higher levels of morbidity and mortality". {P.37, vol. 1, ch. 7, section E} It continues to address the crisis of education related to STD's, HIV and AIDS and the increasing pressure among young people to engage in sexual activity, and in particular those from lower economic levels in society are most vulnerable. This area has especial importance in this research study due to the target population. "In many societies adolescents face pressures to engage in sexual activity. Young women, particularly low-income adolescents, are especially vulnerable. Sexually active adolescents of both sexes are increasingly at high risk of contracting and transmitting STD's including HIV/AIDS and they are typically poorly informed about how to protect themselves". {P.37}.

In the chapter entitled "Cooperation and Support Among Peers" (in *A Force For Change – Young People and HIV/AIDS in South Asia*, published by UNICEF) an increasing number of young people are reported to be involved in premarital sex. This fact puts emphasis on the grave crisis that will develop if teenagers are not well aquainted with ARH. As this publication explains peer pressure can reinforce "macho" sexual behavior such as multiple sex partners, forced sex or rape, and sex with commercial sex workers. It seems indispensable to create reliable grass roots campaigns and discussion groups. "In a study of 800 Nepali students, 71.5% reported having sex before the age of 19. 8.1% of the students were married". {UNICEF, *A Force For Change*, 2001, p28}

The Kathamndu Post of January 3, 2004 also shows a need for information and support services for teenagers. One article criticized the 'Adolescent Friendly Clinic' at Bir Hospital in Kathmandu for failing to deliver efficient services. The article pointed out the need for a center operating full time: " The clinic operates at odd times and the doctors come in the morning and check what ever patients turn up then leave" and it emphasized the need of more effective service because it pointed out "sexual activity among the adolescent population is increasing" {KTM Post, January 3, 2004, p.3}.

In reference to the negative attitude toward HIV positive people and the lack of proper knowledge among people about AIDS as a communicable disease passed through blood, semen and other bodily fluids, the World Bank Regional Update Paper of 2002 reports a horrible incident: "There are examples of whole families having to leave their districts because one member of the family has HIV." {HIV and AIDS, Regional Updates, 2002, by World Bank Group}.

From this it becomes obvious that there is certain research being done on the issue but still, substantially equipped programs to facilitate the under-served generation in this field do not seem to have been monitored on the ground. Although ignorance about sex, ARH and its components is still prevalent among teenagers as well as adults which results in large numbers of a population falling victim to epidemics. "There are already "concentrated" epidemics within certain high-risk behavior groups in Nepal" and this suggests that the disease could soon spread to Nepal's general population of 23 million, potentially making AIDS the number one killer of sexually active Nepalese between the ages of 15 and 49 by the end of the decade. (et. al.).

In this way it can be generally concluded that a greater number of young teenagers, including low income and uneducated groups in the India border areas of Nepal and other areas have increasingly seen numbers of HIV+ and/or AIDS patients. This is to a great extent to their ignorance of ARH components and the studies, surveys and helping programmes that would educate the present generation and coming generations from growing epidemics such as HIV/AIDS; and provide essential health information as family planning and unsafe sexual practices seem indispensable.

2.2 IMPORTANCE OF THE STUDY

The purpose of this operational research was to collect base-line information among high school students in Kailali District on the essential components of Adolescent Reproductive Health. This baseline data was collected and analyzed with a view to assess the attitudes and knowledge level of the students, many who have had this information in mandated curriculums as well as exposure to programs and the media. The data was analyzed against expected findings, to assess the areas most needing concentration in the students education, formal and informal.

Based on findings, recommendations are made and will be shared with implementing agencies at local levels and disseminated among other researchers, health providers and health care workers especially those working in the field of RH and specifically ARH.

The main importance of this study is the fact that people of this region may not have easy access to studying the statistics collected and researched out by government agencies on one hand and on the other hand all literature reviewed here does not concern or impact on local problems of this municipality and this border line region. Neither does the literature give a clear picture of the reality of the level education attained by the youths of this area. Thus it is justifiable to stress that all young people, agencies, NGO's. INGO's concerned with the struggle against epidemics such as drug abuse and HIV/AIDS need to be profited by research specific to the area. Even education sectors such as colleges and schools in this area can find support and resources from the findings of this study. The greatest degree of importance lies with the concerned units and agencies in devising future plans to work for the betterment of their society.

CHAPTER 3

3.1 PRESENTATION and ANALYSIS OF DATA

Breakdown of student background:

TABLE #1

Religion	**school**							
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
HINDU	18	56	31	27	32	36	200	93.02%
MUSLIM	0	0	0	1	1	0	2	0.93%
BUDDHIST	0	0	0	0	1	1	2	0.93%
CHRISTIAN	0	1	2	1	2	1	7	3.25%
no answer	-	1	1	1	-	1	4	1.86%
OTHER	0	blank	0	0	0	0	0	0%

SOURCE: Field report

TABLE #2

CASTE	**school**							
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
BAHUN	6	28	10	11	14	6	75	34.88%
CHETRI	4	18	6	8	6	15	57	26.51%
THARU	3	10	5	1	5	5	29	13.48%
SUDRA	1	1	6	0	3	4	15	6.97%
OTHER*	4	2	5	8	6	8	33	15.35 %
no answer							6	2.80%

* includes Magar, 7 and Thakuri, 15 SOURCE: Field report

TABLE #3

AGE	**school**							
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
12-13	0	5	1	2	2	1	12	5.58%
14	5	14	1	4	3	2	29	13.48%
15	6	15	9	8	8	8	54	25.11%
16	7	21	14	7	13	8	69	32.1%
17	0	5	5	7	4	8	29	13.48%
18	0	0	2	1	4	8	15	6.97%
19-20	0	1	0	0	2	2	5	2.32%
No answer				1		1	2	0.93%

SOURCE: Field report

TABLE #4

SEX	**school**							
SEX	**1**	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
MALE	9	31	14	18	25	14	111	51.62%
FEMALE	9	30	19	11	11	24	104	48.37%

SOURCE: Field report

FAMILY EDUCATION LEVEL: of 160 students responding to this question:
Father's level: 23.75% illiterate, 41.88% to form 6, 14.28% to slc/form 10, 12.5% higher level including university.

Mother's level: 55% illiterate, 34% literate to form 6, 6.25% to slc/form 10, 1.88% to 10+2, 0% higher level

FAMILY OCCUPATION: over 97 students (46.5%) state farming/agriculture as main source of income

AIMS/HOPES: Most often cited were health (57 or 26.51%); teaching (17 or 7.91%)
Social work (29 or 13.49%)

Presentation of Data

215 students of high school level from six (6) schools were selected randomly who then were given the computer pretested questionnaire to fill up there answers freely. The schools the students were selected from were: JC Everest in 6th Ward, Panchadaya in number five (5) ward, Sharada in Ward number 6, Arunodaya in Khairyphata, Rastrya School in Lumke, and Jan Jagrity in Chauri village of Kailali District outside Dhanghadi Town. All schools were sound running high schools. The questions handed over to the students focused on Adolescents' knowledge about sex education and sexually transmitted diseases such as HIV and AIDS as well as safe mothering, family planning, anatomy and physiology. The sample students selected were asked 45 questions on above-mentioned areas. The answers and the data related to sex education and reproductive health are presented and analyzed below:

Title: **<u>Agreement between man and woman before sex.</u>**

To the first question what the students thought of making an agreement between man and woman before having sex, as Table #5 shows 181 that is, 84% of the total students answered that they should make an agreement but 34 students could not give any clear answer to the question which counts for only 16%, though no one disagreed about making an agreement between a man a woman.
The respondents' responses have been given in Table #5 below.

TABLE #5
TITLE: Agreement between a man and woman before sex

Question #1: Both the man and woman should be in agreement (willing) to have sex. If one partner says no there should be no sex. Yes/No. Why/Why not?

	school							
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
YES	17	53	24	28	30	29	181	84.18%
NO	0	0	0	0	0	0	0	0%
no answer, don't know, unclear	1	8	9	1	6	9	34	15.81%

SOURCE: Field report

Title: The students' reasons for agreement

The students were also suggested to supply reasons why they thought they would make agreement before sex as shown in Table #6. 62 respondents pointed out that sex without agreement could not give any satisfaction. The number stands to be 28% of the total.
The respondents' responses have been given in Table #6.

TABLE #6
TITLE: The students' reasons for agreement before sex

SN	**COMMENT**	**total number**	**percentage**
1	would not give any satisfaction	62	28.83%
2	would cause health problem	44	20.46%
3	STD problems	13	6.04%
4	illegal matter	9	4.2%
5	no idea	39	18.14%

SOURCE: Field report

44 students opined that sex without agreement would cause health problems, which is 20% of the total. 13 students believed that sex without agreement might cause STD problems, which is 6% of the total. Only 9 students, that is 4% of the total defined it as an illegal matter, who called it a kind of rape but 39 students which is 18% of the total didn't have any idea related to this.

Title: Having sex with immature person

The students were asked whether one should have sex with an immature person or not and as Table # 7 shows 37 students did not mind having sex with an immature person this number is 17% of the total, whereas 168 students, that is 78% of the total responded negatively.
The respondents' responses have been given in Table #7.

TABLE #7
TITLE: Having sex with an immature person

Question #2: If a person has not reached sexual maturity (too young) we should not have sex with them. Yes/No. Why/why not?								
	school							
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
YES	0	1	0	0	0	36	37	17.21%
NO	17	58	31	27	35	0	168	78.14%
no answer, don't know, unclear	1	2	2	2	1	2	10	4.65%

SOURCE: Field report

10 students had no opinion of the matter, which is 4% of the total.

Title: The student's reasons for agreement

They were asked why they thought one should not have sex with immature persons for which, as Table #8 shows, 31 respondents believed that early sex might have a negative effect on reproductive organs, this is 14.41% of the total.

The respondents' responses have been given in Table #8.

Table #8
TITLE: The students' reasons for not having sex

SN	**COMMENT**	**total number**	**percentage**
1	will have a negative effect on reproductive organs	31	14.42%
2	general health problems, including mental health	74	34.42%
3	no clear idea	31	14.42%
4	will not bring satisfaction	22	10.23%
5	early sex leads to STD's	14	6.51%
6	early sex could be fatal during pregnancy	32	14.88%

SOURCE: Field report

14 respondents knew that early sex might cause (lead to) STD's (6.51% of total). 22 students, that is 10% of the total were in the opinion to discourage it because they believed it would not give proper satisfaction. 74 students were against having sex with immature persons because they thought that it usually causes mental (emotional) as well as general health problems. This number counts for 34.42%. Similarly 32 students opined that having sex with an immature girl might turn out to be fatal to her during pregnancy. which is 14% of the total. 31 students did not have any clear idea on the matter. This number stands to be 14.42% of the total.

Title: Unsafe Sex

To a question what the students meant by unsafe sex as shown in Table #9 below, 92 students which is 42.79% of the total pointed out that it was having sex without a condom.

The respondents' responses have been given in Table #9.

TABLE #9
TITLE: Question #3: The students' comments to: What do you mean by unsafe sex?

SN	**COMMENT**	**total number**	**percentage**
1	sex without a condom	92	42.8%
2	multiple partners	37	17.21%
3	no clear idea	28	13.02%
4	sex in improper way	8	3.72%
5	rape/illegal	4	1.86%
6	sex with HIV+ person	3	1.39%
7	sex without agreement of partner	1	0.46%

SOURCE: Field report

28 respondents, in other words 13% of the total, could not give any answer. 8 respondents, which is 4% said that it is having sex in an improper way. On the other hand 4 students defined it as an illegal act, calling it rape. This number counts for 1.86% of the total. 37 students, that is 17% of the total number, opined that it is having sex with multiple partners. Only one or 0.46% of the total had the opinion that it was sex without agreement between the partners. 3 respondents believed that having sex with an HIV positive partner was unsafe sex. . This numbers stands for 1.39% of the total. 5 more students said that it is having sex without physical maturity. The student number suggesting this is 2.32% of the total.

Title: The consequences of having sex

The students were asked whether one should be prepared to bear the consequences and responsibilities of having sex with his partner or not. The respondents' answers have been given in Table #10 below. 159 students sided for a yes answer, which is 74% of the total whereas 48 students or 22.32% of the total could not give any clear idea.

The respondents' responses have been given in Table #10.

TABLE #10
TITLE: The consequences of having sex

Question #4: If a person feels they are ready to have sex, then they are ready to protect themselves. They need to know that no family planning method works 100%and how to protect themselves from STD's/HIV/AIDS. Comment								
	School							
	1	**2**	**3**	**4**	**5**	**6**	**total**	**Percentage**
AGREE	14	45	22	20	28	30	159	73.95%
DISAGREE	0	5	2	0	0	0	7	3.25%
don't know, unsure, unclear	4	10	9	9	8	8	48	22.32%

SOURCE: Field report

7 students, in other words a relative minority that represents 3.25% of the total, answered that they need not be prepared for any potential consequences

Title: Need to ask if ready for sex

To a question whether it is necessary for young people to make an agreement before sex (if they are ready for sex) or not, as shown in Table # 11 below, 119 students or 55.35% of the total agreed to the idea whereas 53 students which makes 24.65% of the total responded negatively.

The respondents' responses have been given in Table #11.

TABLE #11

TITLE: Need to ask if ready for sex

Question # 5: Young people need to ask each other if they are ready for sex. Yes/No.Why/why not?								
	school							
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
YES	9	33	13	21	20	22	118	54.88%
NO	8	20	12	2	6	5	53	24.65%
no answer, don't know, unclear answer	1	8	8	6	10	11	44	20.46%

SOURCE: Field report

44 students or 20.46% of the total could not come up with any idea.

The students were also suggested to give the reasons why they thought it necessary. The respondents' answers have been given in Table # 12 below. 17 students or 7.90% of the total pointed out that sex without agreement would cause health problems.
The respondents' responses have been given in Table #12.

TABLE # 12
TITLE: The student's comments on need for agreement between youngsters

SN	**COMMENT**	**total number**	**percentage**
1	could cause health problems	17	7.90%
2	not satisfying	54	25.11%

SOURCE: Field report

54 students commented that having sex without agreement would not be satisfying. This number counts for 25.11% of the total.

53 students who did not feel it necessary to make an agreement before sex reasoned in the following ways. These reasons have been given in Table # 13 below. 3 respondents were of the opinion that young people should not make an agreement because they usually cannot reveal their desire to have sex (1.40%). 14 students could not give any suggestions about the question (6.51%). Only 4 respondents expressed the opinion that asking young people about having sex might addict them or increase sexual interest (1.86%).

The respondents' responses have been given in Table #13.

TABLE # 13
TITLE: The students' comments on why agreement is not necessary among youngsters

SN	**COMMENT**	**total number**	**percentage**
1	young people cannot reveal desires	3	1.40%
2	no suggestions	14	6.51%
3	may increase sexual interest	4	1.86%
4	create social/mental problems	16	7.44%
5	males superior and don't need to ask	3	1.40%
6	Unclear	13	6.05%

SOURCE: Field report

16 students had an opinion that asking their young partner for sex might create social as well as mental problems. This number counts for 7.44% of the total. 3 respondents did not seem to agree with the idea of asking their partner for sex (i.e. need for agreement)
because they commented that males are superior to females and thus don't need to wait for their agreement (1.40%). An additional 13 students gave unclear answers (6.05%)

Title: Physical and emotional components of sexuality

The students were asked whether sex includes both physical and mental /emotional parts or components which cannot be separated. The respondents' answers are given in Table # 14 below. 144 students responded positively and this number stands for 62.79% showing the majority whereas 27 students, that is 12.56%, said that it was not so. 55 students on thew other hand could not produce any opinion in relation to the matter. This represents 24.65% of the total.

The respondents' responses have been given in Table #14.

TABLE #14

Question # 6: Sex includes both physical and emotional parts. Humans cannot separate these two parts. Yes/no. Why/why not?

	school							
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
YES	10	43	19	20	21	22	135	62.79%
NO	2	7	3	5	4	6	27	12.56%
no answer, don't know, unclear answer	6	11	11	4	11	10	53	24.65%

SOURCE: Field report

Those who answered positively to the question opined that sex is apart of our nature and therefore physical and mental / emotional parts are inseperatable as can be seen in Table #15. 19 respondents thought that satisfaction is the outcome of physical and mental connection. This number is 8.84% of the total. But 66 or 30.70% of the students did not have any clear idea.

The respondents' responses have been given in Table #15.

TABLE # 15
TITLE: The students' reasons for why physical/emotional parts cannot be separated

SN	COMMENT	total number	percentage
1	Satisfaction	19	8.84%
2	no clear idea	66	30.70%
3	related to physical	12	5.58%
4	related to mental	4	1.86%

SOURCE: Field report

Only 12, in other words 5.58% of respondents stressed that it is related to the physical part of our life whereas 4 students (1.86%) responded that it is a solely mental phenomenon.

Title: Safe from STD's if we have sex with young girls

The students were asked whether we could escape from the danger of STD's if we had sexual relations only with young girls and to this 37 students answered affirmatively (17% of the total), as shown in Table # 16 below. But the majority of students did not agree with this. The number of students not agreeing to this point was 175, in other words 181% of the total. Only a negligible number of the students could produce no opinion.

The respondents' responses have been given in Table #16.

TABLE #16
TITLE: safe from sex if we have sex with young girls

Question # 8: We are safe from STD's if we have sexual relations with young girls. true/false **School**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
TRUE	5	6	5	5	5	11	37	17.21%
FALSE	12	55	27	24	30	27	175	81.4%
no answer, don't know, unclear answer	1	-	1	-	1	-	3	1.39%

SOURCE: Field report

Title: Antibiotic use after sex

The students were asked whether they agreed that we could be safe from STD's by using antibiotics after sex as shown in Table # 17 below. 101 of the students said that this was a true statement, which was the majority or 46.05%, whereas 84 of the students or 40.93% answered negatively.

The respondents' responses have been given in Table #17.

TABLE #17
TITLE: Antibiotic use after sex

Question # 9: We are safe from STD's if we take antibiotics after sex. true/false **School**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
TRUE	4	28	20	14	19	15	100	46.05%
FALSE	12	23	10	11	12	20	88	40.93%
no answer, don't know, unclear answer	2	10	3	4	7	1	27	12.55%

SOURCE: Field report

27 respondents had no answer or did not know the answer. . This number counts for 12.55% of the total.

Title: STD's and Commercial Sex Workers

To a question whether STD's effect only commercial sex workers (prostitutes), as shown in Table #18 below, only 18 students answered positively, this number represents 8.37% of the total and expectantly 193 said that it was not true because STD's might effect all people involved in sexual activities. This number counts for 89.76% of the total.

The respondents' responses have been given in Table #18.

TABLE #18
TITLE STD's and Commercial Sex Workers

Question # 10: STD disease only effects commercial sex workers (prostitutes). true/false **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
TRUE	3	2	1	3	3	6	18	8.37%
FALSE	15	58	31	26	32	31	193	89.76%
no answer, don't know, unclear answer	0	1	1	0	1	1	4	1.86%

SOURCE: Field report

Only 4 students had no answer to the question.

Title: People with STD's also have HIV/AIDS

The students were given another question where they had to express agreement or disagreement as per if they thought people affected with STD's also had HIV/AIDS. As shown in Table #19 below. To this 200 students surprisingly were in the majority at 93% of the students answering affirmatively whereas only 12 students (or 5.58% of the total) were in the minority answering in the negative.

The respondents' responses have been given in Table #19.

TABLE #19
TITLE: People with STD's also have HIV/AIDS

Question # 11:People who are suffering from STD's are also victims of HIV/AIDS. true/false **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
TRUE	17	56	31	26	33	37	200	93.02%
FALSE	1	4	2	2	3	0	12	5.58%
no answer, don't know, unclear answer	0	1	0	1	0	1	3	1.4%

SOURCE: Field report

3 students did not have any idea.

Title: Cleansing as a means of STD prevention

The students were asked whether the use of dettol, soap or lemon juice for washing the vagina after sex could prevent a girl from getting infected with STD's as Table #20 shows below 28 students, or 13% of the total expressed their agreement but the majority of 179 or 83.25% of the total did not agree with the idea.

The respondents' responses have been given in Table #20.

TABLE #20

TITLE: Cleansing as a means of STD prevention

Question # 12: A girl can protect herself from STD's by cleansing the vagina with soap and water, lemon juice, or dettol after having sex. true/false **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
TRUE	2	7	6	3	3	7	28	13.02%
FALSE	14	48	27	26	33	31	179	83.25%
no answer, don't know, unclear answer	2	6	0	0	0	0	8	3.72%

SOURCE: Field report

Only 8 students, that is 3.72% of the total, could not produce an answer.

Title: Protection from STD's

The students were asked about whether we could protect ourselves from STD's in a general way. The respondents' responses have been given in Table #21.

TABLE #21
TITLE: Protection from Std's

Question # 13: We can protect ourselves from getting STD's. true/false **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
TRUE	15	53	29	25	33	37	192	89.3%
FALSE	2	7	4	1	3	1	18	8.37%
no answer, don't know, unclear answer	1	1	0	3	0	0	5	2.32%

SOURCE: Field report

192 students gave positive response that stands for 89.3%.of the total. Only 18 students which is 8.37% of the total thought that we could not prevent it. Other 5 other respondents or 2.32% of the total had no idea.

Title: Suffering and not know it

The students were questioned whether they felt it was possible someone could be suffering from STD's and not know it. As Table #22 below shows 182 answered affirmatively which is 84.65% of the total.

The respondents' responses have been given in Table #22.

TABLE #22
TITLE: Suffering and not know it

Question # 14: Somebody could be suffering from STD's and not know it. true/false **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
TRUE	15	54	27	22	30	34	182	84.65%
FALSE	2	6	5	5	6	4	28	13.02%
no answer, don't know, unclear answer	1	1	1	2	0	0	5	2.32%

SOURCE: Field report

Only 28 students or 13% of the total felt that they did not think so. 5 students (2.3%) did not have any idea.

Title: Married couple and STD's

To a question whether only one member of a married couple having STD's should be referred for treatment only 20 students gave the incorrect answer (9.3%) as shown in Table 23 below. Of the total respondents 188 students

The respondents' responses have been given in Table #23.

TABLE #23
TITLE: Married couple and STD's

Question # 15: If only one member of a married couple has symptoms of a STD, only that person needs to get treatment. true/false								
	school							
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
TRUE	1	3	0	0	11	5	20	9.3%
FALSE	16	57	31	28	25	31	188	87.44%
no answer, don't know, unclear answer	1	1	2	1	0	2	7	3.25%

SOURCE: Field report

or 87.4% of the total opined that even other members of the family (other member of married couple) should be sent for treatment and 7 students (or 3.25%) didn't have any idea.

Title: All STD's can be controlled

The students were asked whether they felt STD's could be controlled and as Table #24 shows below 103 students seemed positive that they could, which is 47.9% of the total whereas 107 students (50% of the total) felt that they could not.

The respondents' responses have been given in Table #24.

TABLE # 24
TITLE: All STD's can be controlled

Question # 16: All STD's can be controlled. true/false **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
TRUE	11	20	19	15	18	20	103	47.9%
FALSE	7	38	13	14	18	17	107	49.76%
no answer, don't know, unclear answer	0	3	1	0	0	1	5	2.32%

SOURCE: Field report

5 students or 2.32% of the total could not give any answer.

Title: How STD's are transmitted.

The students were further asked if STD's were transmitted only through sexual activity or if they could charge (cite) other types of activities/conditions responsible for them. As Table #25 below shows 89 students or 41% of the total answered stressing sexual activity as responsible for causing STD's. But a majority of 125 students said that other activities could equally be responsible to transmit diseases, which is 58% of the total.

The respondents' responses have been given in Table #25.

TABLE # 25
TITLE: How STD's are transmitted

Question # 17: STD's can only be transmitted by sexual activity. true/false **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
TRUE	10	22	10	13	17	17	89	41.4%
FALSE	8	38	23	16	19	21	125	58.14%
no answer, don't know, unclear answer	0	1	0	0	0	0	1	0.46%

SOURCE: Field report

Only a single student had no ideas on the subject.

Title: FP methods and STD prevention

The students were suggested to express their choice on the family planning methods they thought could best prevent STD's including HIV/AIDS as shown in Table 26 below. 205 students chose the condom as the best preventative methods, which was nearly 95.35% of the total.

The respondents' responses have been given in Table #26.

TABLE # 26
TITLE: FP methods and STD prevention

Question # 18: Which family planning method prevents STD's/HIV/AIDS? a) condom b) pills c)depo **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
a)condom	15	61	32	26	36	35	205	95.35%
b)pills	1	0	1	1	0	0	3	1.39%
c) depo	0	0	0	1	0	1	2	0.93%
don't know	1	0	0	1	0	2	4	1.86%
other	1	0	0	0	0	0	1	0.46%

SOURCE: Field report

only 3 thought that pills could prevent STD's (1.86%), 2 students chose Depo- Provera (0.93%) and 4 students in other words 1.86% of the total were unable to answer.

Title: Can tell if HIV/AIDS by looking

The respondents were asked if we could tell if someone has HIV/AIDS just by looking at them. The respondent's answers are given in Table #27 below. 9 students answered positively which is 4.81% of the total. But the majority of 201 students said that we could not. This number is 93.48% of the total.

The respondents' responses have been given in Table #27.

TABLE # 27
TITLE: Can tell if HIV/AIDS by looking

Question # 19: We can tell someone has HIV/AIDS just by looking at them. true/false School								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
TRUE	0	3	1	4	0	1	9	4.18%
FALSE	18	56	31	25	35	36	201	93.48%
no answer, don't know, unclear answer	0	2	1	0	1	1	5	2.32%

SOURCE: Field report

5 students or 2.32% of the total had no clear idea on the matter.

Title: Can have HIV and not know

To see what the students generally know about HIV/AIDS they were asked if someone could have HIV/AIDS and not know it. As Table # 28 below shows 189 students gave their agreement which was 88% of the total and only 22 students, which counts for 10% of the total did not agree to the matter.

The respondents' responses have been given in Table #28.

TABLE # 28
TITLE: Can have HIV and not know

Question # 20: Someone can have HIV/AIDS and not know it. true/false School								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
TRUE	17	56	27	26	30	33	189	88%
FALSE	1	3	6	3	6	3	22	10.23%
no answer, don't know, unclear answer	0	2	0	0	0	2	4	1.86%

SOURCE: Field report

Another 4 students did not know if this was true or false.

Title: IV drug users and homosexuals

In order to know what the students thought about drug users and homosexuals being HIV positive and if HIV/AIDS could affect anyone, they were asked whether drug users and homosexuals are only affected by HIV/AIDS as shown in Table #29 below. As the Table shows 28 students which was 13% of the total answered affirmatively whereas the majority of the students (177 or 82.32%) thought that anyone who was not involved in homosexual sex or IV drug use/addiction but in other types of unsafe sexual activity could impart HIV.
The respondents' responses have been given in Table #29.

TABLE # 29
TITLE: IV drug users and homosexuals

Question # 21: HIV/AIDS affects homosexuals and IV drug users only true/false **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
TRUE	3	8	3	5	7	2	28	13.02%
FALSE	14	53	28	21	27	34	177	82.32%
no answer, don't know, unclear answer	1	0	2	3	2	2	10	4.65%

SOURCE: Field report

10 Students in other words 4.65% of the total could not produce any answer.

Title: Vaccination

The students were asked if we could protect ourselves from HIV/AIDS by vaccination or not. As shown in Table 30 below, 17 students felt that there was in fact a vaccination for HIV/AIDS (this is 8% of the total). However, a large number of the students, a total of 198, felt there was not a vaccination available. The total of the number of the students who answered negatively counts for 92%.

The respondents' responses have been given in Table #30.

TABLE # 30
TITLE: Vaccination

Question # 22: We can be protected from HIV/AIDS by a vaccination. true/false **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
TRUE	4	5	0	2	3	3	17	8%
FALSE	14	56	33	27	33	35	198	92.1%
no answer, don't know, unclear answer	-	-	-	-	-	-	-	-

SOURCE: Field report

All students answered this question; there were no unsure answers.

Title: HIV negative

In order to mark the level of knowledge in the adolescents about HIV/AIDS a question was asked re: what they understood by HIV negative, that is whether a person who is diagnosed as HIV negative has AIDS or not. As Table #31 below shows, 92 students answered that an HIV negative person meant he had AIDS. The figure stands for 42.79% of the total. 107 students said that HIV negative meant the person did not have AIDS. The number ranges at 50% of the total.

The respondents' responses have been given in Table #31.

TABLE #31
TITLE: HIV negative

Question # 23: If someone is HIV negative it means he is infected with AIDS. true/false **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
TRUE	8	20	19	13	15	17	92	42.79%
FALSE	9	36	12	15	18	17	107	49.76%
no answer, don't know, unclear answer	1	5	2	1	3	4	16	7.44%

SOURCE: Field report

16 students (7.44%) did not have any answer.

Title: Protection from HIV/AIDS

They were asked whether they could protect themselves from HIV/AIDS or not. To this question, as shown in Table #32 below, 204 students answered affirmatively. The figure stands for 94.88% of the total. Only 7 students did not seem to have any positive hope in this regard and 4 students could not produce any answer.

The respondents' responses have been given in Table #32.

TABLE # 32

TITLE: Protection from HIV/AIDS

Question # 24: You can protect yourself from HIV/AIDS. true/false **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
TRUE	18	59	30	27	35	35	204	94.88%
FALSE	0	0	2	2	1	2	7	3.25%
no answer, don't know, unclear answer	0	2	1	0	0	1	4	1.86%

SOURCE: Field report

The students negative in their attitude and having no answer count for 5.12% of the total.

Title: Married people

The students were asked whether married people could be infected with HIV/AIDS as shown in Table # 33 below. 11 students answered positively, the figure stands for 5.11% of the total. The majority of the respondents, that is 202, answered this question negatively; this is 93.95% of the total.

The respondents' responses have been given in Table #33.

TABLE # 33
TITLE: Married people

Question # 25: Married people cannot get AIDS. true/false **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
TRUE	0	3	1	2	2	3	11	5.11%
FALSE	18	57	31	27	34	35	202	93.95%
no answer, don't know, unclear answer	0	1	1	0	0	0	2	0.93%

SOURCE: field report

2 students, in other words 0.93% of the total did not have any idea.

Title: AIDS eradication

The students were questioned whether AIDS could be eradicated or not. To this, as Table #34 shows below, 137 students thought that it could be whereas 73 students did not express any positive hope. Those who answered affirmatively count for 63.73% of the total and those who were negative count for 33.95% of the total number.

The respondents' responses have been given in Table #34.

TABLE # 34
TITLE: AIDS eradication

Question # 26: AIDS can be eradicated. true/false **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
TRUE	13	45	16	17	27	19	137	63.73%
FALSE	5	14	16	12	8	18	73	33.95%
no answer, don't know, unclear answer	0	2	1	0	1	1	5	2.32%

SOURCE: field report

Only 5 students could not produce any idea.

Title: Sex with a commercial sex worker

With a purpose to check what the adolescents knew about sex workers and their attitude on the potential chances of AIDS infection from them the students were asked whether we could get AIDS from commercial sex workers more easily and to this as Table #35 shows, 197 students, that is nearly 92% of the total number of the students answered positively whereas only 17 students seemed negative.

The respondents' responses have been given in Table #35.

TABLE # 35

TITLE: Sex with a commercial sex worker

Question # 27: If we have sex with a commercial sex worker we can get STD's/AIDS. true/false **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
TRUE	17	57	30	28	32	33	197	91.62%
FALSE	1	3	3	1	4	5	17	7.90%
no answer, don't know, unclear answer	0	1	0	0	0	0	1	0.46%

SOURCE: field report

The number of students answering negatively count for 7.90% of the total. Only one student could not give any idea.

Title: Society's attitudes

The students were asked whether HIV positive patients were being looked down on and driven away from society and in this regard, as Table #36 shows, 90 students seemed positive whereas 124 students did not agree to this. Those who agreed count for 41.86% of the total and disagreeing students range at 57.67% of the total number.

The respondents' responses have been given in Table #36.

TABLE # 36

TITLE: Society's attitudes

Question # 28: If a person has HIV/AIDS society looks down on him and he is driven from society. true/false **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
TRUE	7	31	9	12	20	11	90	41.86%
FALSE	11	29	24	17	16	27	124	57.67%
no answer, don't know, unclear answer	0	1	0	0	0	0	1	0.46%

SOURCE: field report

Only one student could not give any answer to this question.

Title: Standing position as FP

The respondents were questioned whether having sex standing could prevent a woman from getting pregnant. To this as Table #37 below shows 111 students in other words 51.62% of the total answered negatively, that is they believed having sex while standing could not prevent them from getting pregnant whereas 96 students thought that it could. This number counts for 44.65% of the total.

The respondents' responses have been given in Table #37.

TABLE # 37

TITLE: Standing position as FP

Question # 29: Can a woman get pregnant if she is standing while having sexual relations? Yes/no. **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
YES	5	36	15	16	18	21	111	51.62%
NO	13	24	17	10	15	17	96	44.65%
no answer	0	1	1	1	2	0	5	2.32%
don't know	0	0	0	2	1	0	3	1.4%

SOURCE: field report

Another 8 students could produce no idea.

Title: Passing urine as FP

The students were asked about what they believed about passing urine after sexual intercourse as a means of family planning. To this, as shown in Table # 38 below, 104 students opined that it could prevent pregnancy. The number was 48.37% of the total

The respondents' responses have been given in Table #38.

TABLE # 38

TITLE: Passing urine as FP

Question # 30: Can passing urine after sexual relations prevent pregnancy? Yes/no. **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
YES	8	31	16	23	11	15	104	48.37%
NO	9	23	12	6	24	22	96	44.65%
No answer	1	4	4	0	0	1	10	4.65%
don't know	0	3	1	0	1	0	5	2.32%

SOURCE: field report

96 students seemed negative to the idea, that is 44.65% of the students did not seem to agree that it could prevent a woman from getting pregnant. 15 students or 6.98% could produce no idea.

Title: Cleansing as a method of FP

With a purpose to understand what the students knew about the methods of family planning they were asked whether they agreed someone could have sex and then avoid pregnancy by washing the vagina after having sex. As the Table #39 shows 24 students answered that it could, which is 11.16% of the total students.

The respondents' responses have been given in Table #39.

TABLE # 39
TITLE: Cleansing as a method of FP

Question # 31: Can you prevent pregnancy by cleansing the vagina after sexual relations? Yes/no.								
	school							
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
YES	1	10	4	1	4	4	24	11.16%
NO	17	50	26	28	31	34	186	86.51%
no answer	-	-	-	-	-	-	-	-
Don't know	0	1	3	0	1	0	5	2.32%

SOURCE: field report

But a majority of students that is 186 students could not agree to the point. This figure is 86.51% of the total. 5 respondents had no clear idea, which is only 2.32% of the total.

Title: Pregnancy before MC

The students were asked whether a girl could get pregnant before MC (menses) as shown in Table # 40 below. 98 students answered affirmatively to the question, giving the technically correct answer, which is 45.58% of the total. But 101 students said that a girl could not get pregnant before MC, which makes 46.97% of the total students.

The respondents' responses have been given in Table #40.

TABLE # 40
TITLE: Pregnancy before MC

Question # 32: Can you get pregnant before MC? Yes/no.								
	school							
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
YES	2	30	16	15	14	21	98	45.58%
NO	10	29	15	11	21	15	101	46.97%
no answer	4	0	0	3	1	0	8	3.72%
don't know	2	2	2	0	0	2	8	3.72%

SOURCE: field report
16 students did not have any idea. This number counts as 7.44% of the total.

Title: First time sex

They were equally asked whether anyone could get pregnant the first time they had sexual relations. As shown in Table 41 a majority of 137 students answered affirmatively whereas 76 students did not agree. The percentage for the positive answers is 63.72% and the percentage of the negative answers is 35.4%.

The respondents' responses have been given in Table #41.

TABLE # 41

TITLE: First time sex

Question # 33: Can you get pregnant the first time you have sex? Yes/no. **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
YES	10	37	20	18	22	30	137	63.72%
NO	8	24	12	10	14	8	76	35.34%
no answer	0	0	1	1	0	0	2	0.93%
don't know	-	-	-	-	-	-	-	-

SOURCE: field report

2 students did not have any idea on this matter.

Title: "You can't get pregnant"

To discover the reality about the student's involvement and their encounters with people seducing them to have sex, they were asked if anyone could get pregnant or not even if the person seducing them said she could not get pregnant if she had sex with him. To this as Table #42 shows below, 25 students said she could get pregnant even if the man said "no" whereas 181 students seemed positive: that is they did believe that one would not get pregnant based only on the words of a person. Those who wouldn't trust the seducer were 11.62% of the total and who would trust the seducer were 84%.

The respondents' responses have been given in Table #42.

TABLE # 42

TITLE: "You can't get pregnant"

Question # 34 Can you get pregnant even if the man says "you can't get pregnant if you have sex with me"? Yes/no								
	school							
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
YES	4	9	3	3	3	3	25	11.62%
NO	14	49	25	26	33	34	181	84.2%
No answer	0	2	5	0	0	1	8	3.72%
don't know	-	1	-	-	-	-	1	0.46%

SOURCE: field report

9 students did not have any clear idea and that is 4.19% of the total. From this it is clear that the majority of the teenagers are still unsure about issues related to pregnancy.

Title: Condom

The students were asked if they knew what a condom was, and if so to give an explanation or definition. As Table # 43 below shows 80 students could not produce the correct answer but 115 students could. The students who gave a correct explanation were
53.48% of the total and those who did not know were 37.21% of the total.

The respondents' responses have been given in Table #43.

TABLE # 43
TITLE: Condom

Question # 35 Do you know what a condom is? yes/no. if yes explain								
	school							
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
YES with incorrect explanation	3	6	0	1	33	37	80	37.21%
YES with correct explanation	13	46	29	26	1	0	115	53.48%
NO	2	9	4	2	2	1	20	9.3%
don't know	-	-	-	-	-	-	-	-

SOURCE: field report

20 of the students did not give any answer, that is they responded that they did not know what a condom was. The figure stands at 9.3% of the total.

Title: 5 family planning methods

The students were suggested to mention 5 family planning methods. As Table 44 shows 154 out of 718 total responses named pills, this number is 21.44% of the total number.
The respondents' responses have been given in Table #44.

TABLE # 44
TITLE: 5 family planning method

Question # 36: Write the names of 5 family planning methods **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
pills	10	44	24	19	27	30	154	21.44%
condom	10	50	25	25	31	32	173	24.1%
depo	9	28	25	18	23	29	132	18.38%
permanent	3	28	9	10	20	8	78	10.86%
IUD	7	29	10	12	22	18	98	13.65%
Norplant	1	17	8	6	14	19	65	9%
other	-	6	1	7	3	1	18	2.5%

SOURCE: field report of 718 responses

173 responses, in other words 24.1% of the total named the condom. 132 responses ranging at 18.38% of the total named Depo-Provera. 78 responses (10.86%) chose permanent methods (male and female). 98 responses spelled out IUD as a method. It was 13.65% of the total number. 65 responses were Norplant, the number counts for 9% of the total. 5 responses, that is 0.69% of the total, mentioned female condom. One only thought that abortion could be one of the methods of family planning. 3 students that count for 0.41 percent of the total mentioned spermicidal tablets. Only one response said that breastfeeding could prevent one from getting pregnant. 5 students in other words 0.69% of the total cited abstinence as a method. One student mentioned remaining unmarried as a form of family planning.

Title: 3 male organs

To check whether the students knew anything about the male reproductive organs (basic anatomy) they were asked to pick out three male reproductive out of 6 choices for which as Table #45 below shows, 50 students or 23.25% of the total thought that the anus was a male reproductive organ. 33 students picked out the bladder; this number stands for 15.34% of the total. 110 students which is 51.16% of the total chose the urethra as a reproductive organ. 191 students thought that the vas deferens was a reproductive organ that is 88.84% of the total number.

The respondents' responses have been given in Table #45.

TABLE # 45

TITLE: 3 male organs

Question # 37: Check (tick) the 3 male reproductive organs. **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
Bladder	4	11	6	4	4	4	33	15.34%
Urethra	10	31	16	15	19	19	110	51.16%
Vas deferens	11	58	26	28	35	33	191	88.84%
Testes	16	56	29	28	34	35	198	92.1%
Penis	16	56	29	28	34	35	198	92.1%
Anus	5	10	9	9	6	11	50	23.25%
incorrect answers								30.86
correct answers								69.14%

SOURCE: field report Out of 780 responses

198 respondents picked the testes as a correct choice (or 92%), and additional 198 students (92%) chose the penis as a correct choice. These percentages are the segments of 780 responses, which is the gross total of 215 respondents giving three answers each. This means that 30.86% gave the incorrect answers, while 69.14% gave the correct answers.

Title: 3 female organs

They were also asked to check three female reproductive organs and these results are shown in Table # 46 below. To this question 204 students picked uterus as a correct choice, this stands for 94.88% of the total. . 29 students or 13.48% of the total number picked urethra as the reproductive organ. 167 respondents picked ovary as the reproductive organ; this number stands for 77.67% of the total. 9 students chose the outer folds as the reproductive organ, and this is 4.18% of the total.
The respondents' responses have been given in Table #46.

TABLE # 46

TITLE: 3 female organs

Question #38: Check the three female reproductive organs **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
Uterus	17	59	30	28	36	34	204	94.88%
Urethra	7	7	5	3	2	5	29	13.48%
Ovary	7	53	23	25	32	27	167	77.67%
outer folds	-	2	1	-	4	2	9	4.18%
Vagina	17	57	29	26	31	35	195	90.69%
Anus	3	1	2	1	-	4	11	5.11%
incorrect answer								13.18%
correct answer								86.82%

SOURCE: field report out of 615 responses

195 students knew the vagina as a reproductive organ, which is 90.69% of the total. , and 11 students, or 5.11%, chose the anus as a the correct answer. These percentages are the segments of 615 responses, which is the gross total of 215 respondents giving three answers each. Therefore 13.18% reflects the incorrect answers and 86.62% reflects the correct answers.

Title: <u>not a change in boys</u>

The students were asked which one amongst the others (i.e. one wrong answer) is not a change in boys during puberty. That is, among development of penis and testes, night falling, attraction to opposite sex, sometimes testes paining and swelling, and hips developing.
The respondents' responses have been given in Table #47.

TABLE # 47

TITLE: not a change in boys

Question # 39: Which one is not a change in boys during puberty? **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
development of penis/testes	6	7	9	5	4	4	35	16.28%
attraction to opposite sex	4	3	3	3	5	1	19	8.84%
night falling	3	5	5	4	6	14	37	17.21%
testes swell/painful	5	17	6	13	6	10	57	26.51%
Hips develop	8	30	11	10	16	19	94	43.72%
incorrect answers								82.8%
correct answer								17.20%

SOURCE: field report out of 242 responses

94 students picked the correct answer, that is they chose hips developing as not a change in boys during puberty. This number is 43.72% of the total. 121 students could not give the correct answer, and this represents 68.84%. These numbers reflect multiple answers given by some students, therefore the numbers reflect 242 responses. Thus 82.8% gave the incorrect answers while 17.20% gave the correct answer.

Title: <u>not a change in girls</u>

They were also asked to pick out the correct answer, that is which one is not a change in girls during puberty. The choices were breasts developing, hair under arms, on legs and pubic area, pain in the abdomen during MC, white discharge from the vagina and MC starting. The results are shown in Table # 48. 79 of the students gave the correct answer of white discharge from the vagina, and this number represents 36.74% of the total.

The respondents' responses have been given in Table #48.

TABLE # 48
TITLE: not a change in girls

Question # 40: Which one is not a change in girls during puberty? **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
breasts develop	6	4	4	3	5	1	23	10.70%
hair under arms,on legs & pubic	5	14	6	4	5	6	40	18.60%
pain during menstruation	5	14	5	5	7	15	51	23.72%
White discharge from vagina	7	21	10	10	17	14	79	36.74%
MC starts	2	11	10	12	6	7	48	22.33%

SOURCE: field report out of 241 responses
However, a total of 162 students or 75.35% of the total chose the wrong answers.

Title: <u>not a part of MC</u>

The students were asked which of the following choices were not a part of the physiology of MC (menses): bleeding, release of egg, cervix opens, lining of womb breaks down. As shown in Table # 49 below, 50 students were found choosing the right answer saying that the opening of the cervix is not a part of MC. This figure is 23.26% of the total.

The respondents' responses have been given in Table #49.

TABLE # 49
TITLE: not a part of MC

Question # 41: Which is not a part of MC? **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
bleeding	2	5	4	4	7	9	31	14.42%
release of egg	7	23	7	9	7	4	57	26.51%
cervix opens	5	15	8	2	11	9	50	23.26%
lining of womb breaks down	9	19	14	12	12	16	82	38.14%

SOURCE: field report

175 students could not understand what was indeed not a part of MC (this is 81.40% of the total number of students.

Title: Healthy mothers and babies

To check how much the adolescents knew about maternal-child health management they were asked what should be done to keep mothers and babies healthy. As Table # 50 shows, 178 students answered that babies should not be had too early or too late, too many babies and babies spaced too close together (i.e. "all"/ all choices given are correct).
The respondents' responses have been given in Table #50.

TABLE # 50

TITLE: Healthy mothers and babies

Question # 42: For healthy mothers and babies (a) **babies too early (b)babies too late (c)too many babies (d)babies too close together** **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
All	12	58	30	20	27	31	178	34.23%
a&b	11	45	19	18	24	29	146	28.08%
none	13	34	12	17	7	26	109	20.96%
d only	6	27	15	11	10	18	87	16.73%

SOURCE: field report of total 520 answers ticked

and this number stands for 34.23% of the total (of 520 answers ticked.) {In this question students often ticked more than one question}. 109 students answered none of these was true, and this is 16.73% of the total answers.

Title: Pregnancy

The students were asked a question about the duration of pregnancy, to which 121 students answered correctly, choosing 40 weeks (9 months, 7 days) which is 56.28% of the total.

The respondents' responses have been given in Table #51.

TABLE # 51
TITLE: Pregnancy

Question # 43: Pregnancy officially lasts: **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
9 months, 7 days (40 weeks)	12	38	20	12	23	16	121	56.28%
10 weeks	1	-	2	-	-	-	3	1.40%
10 months	5	24	11	16	13	22	91	42.33%
don't know	-	-	-	-	-	-	-	-

SOURCE: field report

However 94 students chose the incorrect answer which counts for 43.73% of the total. It must be noted that the vast majority of these chose an answer that was very close to the correct answer{i.e. 10 months}.

Title: Conception

The respondents were also asked what they knew about conception, as shown in Table # 52 below. To this 120 students answered correctly that it was the sperm fertilizing the egg. This counts for 55.81% of the total.

The respondents' responses have been given in Table #52.

TABLE # 52
TITLE: Conception

Question # 44: Conception means: **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
birth of a baby	10	19	18	14	11	18	90	41.86%
sperm fertilizes egg	6	39	18	16	22	19	120	55.81%
egg moves from ovary	-	2	2	-	-	2	6	2.79%
sperm in testes	-	1	-	-	3	1	4	1.86%
no answer	2	-	-	-	-	-	2	0.93%

SOURCE: field report

But 102 students chose the wrong answers, which stands for 47.44% of the total number of students. These percentages do not reflect the few students who picked more than one answer.

Title: Home remedies

To a question to what could be taken or are used as home remedies for STD's in the students society, as Table #53 below shows, 206 students did not have any ideas related to this which is 95.81% of the total 215 students.
The respondents' responses have been given in Table #53.

TABLE # 53

TITLE: Home remedies

Question # 45: What are some of the home remedies for STD's in your society? **school**								
	1	**2**	**3**	**4**	**5**	**6**	**total**	**percentage**
go to dhami or jhankre	-	1	-	1	-	1	3	1.40%
don't have sex	1	-	-	-	-	1	2	0.93%
use a condom	1	-	1	-	--	1	3	1.40%
sex education	1	-	-	-	-	-	1	0.47%

SOURCE: field report

Only 9 of the students had any opinions on this matter, to which 3 suggested going to a Dhami or Jhankre (village 'Faith Healer' or shaman) and this is 1.40% of the 215 students. 2 students suggested that not having sex itself is a home remedy (0.93%); another 3 students reported that using a condom is a home remedy in their society (an additional 1.40%). One student, at 0.47% of the total, suggested sex education as a remedy.

CHAPTER 4

4.1 SUMMARY OF FINDINGS

This research project was assigned to CICD under the principal investigator Bhanu Dev jaishi. The Project was accepted for the time period of 8 months with due conditions that it should not go beyond the problems & hypothesis about the topic stated in the proposal paper submitted to NHRC. CICD agreed to attempt the research project being concerned with the fact that STDs + HIV/AIDS in recent times is becoming a subject of catastrophic results. These unwanted problems have extended so much so that a great number of youths have been facing the doom before they get through their old age. o

CICD is the right place to do work in this research area because of its location and relevant filed .CICD considers it reasonable to deal with such hazards occurring in community because it has been previously doing with such projects as per its motto.

Thus, the project was granted with a view to collect data on the grave problems of ARH-crises, knowledge in young people upon the ARH components, their attitude and practices on this field.

Following studies & literature were reviewed and quoted to ensure the rationale of research on ARH in Nepal.

1. UN-(CAIRO, 1994) "The Population and development programme of action."
2. A Force for Change, Young people & HIV/AIDS in south Asia, Published by UNICEF_-cooperation & support among peers.
3. The Katmandu post (January 3, 2004) P.S.
4. The World Bank Regional Update Paper-2002 "HIV & AIDS, regional updates".

The researched areas and findings have been summarized below. From the answers given in the questionnaires completed by the adolescents it becomes obvious that adolescents in this area do not seem to be as aquainted with sex education on one hand, nor do they seem to possess adequate knowledge about reproductive health; even their awareness toward high priority campaigns with extensive media exposure such as HIV/AIDS is far lower than expected. For example, a majority of students could not differentiate between HIV positive and HIV negative status.

With regard to their attitude toward sex, it was found that often they took it as a means of physical pleasure no matter how catastrophic the results might be after unsafe practices. This can be illustrated by the 25% of students who reasoned that they had to make an agreement for sex for it to bring pleasure. From the first question it is obvious that the greater number of adolescents regard sex as a matter of sensual pleasure. A large number of students were unable to produce any answer to the questions: this was seen in a large number of cases. Thus it can be inferred that the adolescents lack necessary access to information about safe sex, family planning, standards of reproductive health as essential to their knowledge for building careers (and staying in school), safe mothering, and appropriate attitudes toward sex.

The major finding of this research addressing the above mentioned areas have been listed below.

- Many adolescents still don't know why agreement before sex is necessary.

- There is a common negative attitude among adolescents toward sex who mostly regard it only as a source of physical pleasure and therefore might become both victim and /or agent of sex abuse.

- A large number of students were markedly unsure about HIV/AIDS; for example 92 out of 215 students answered that to be HIV negative was to be infected with AIDS.

- In spite of the ample information through the media about AIDS as a persistent, pandemic and pervasive international health crisis adolescent's don't know that it can't be totally eradicated, which is evident from 137 students answering positively to the eradication of HIV/AIDS.

- A good number of students were found knowing that commercial sex workers are the main agents of STD's further indicates that they have had some exposure to health lessons either from their curriculum books or general sources.

- 90 students out of 215 reporting that society usually looks down on the HIV positive person signifies that the basic knowledge and attitude of the people toward AIDS education is not satisfactory.

- Only 43% of the sample of students knowing that having sex without condom and 57% having no clear idea as well as only 1.39% knowing that having sex with an HIV positive person as unsafe indicates that no education programs concerning sexuality, family planning, safe mothering, anatomy and physiology have been launched that could address the results of unsafe sex and to teach how to manage these sex-related practices among the teenagers.

- 48% of the respondents not having any clear idea about bearing the risk of STD's or inventing some techniques to avoid STD's show that no effective health education has been provided to this age group.

- Adolescents transformed in their attitude about frankness of sex and their relationship with the opposite sex as being normal in the present time indicates that they might not have good results from it unless they are fully educated in this sector: that is, reproductive health.

- Though adolescents seem to have gotten some exposure to health education classes their level of conscience, attitude toward sex and readiness for safe practices does not seem to be perfectly healthy due to insufficient campaigns targeting this age group.

- From the responses on the questions addressing the matter of family planning, the following findings were made:

- Only 104 students answering donot negatively about getting pregnant from having sex standing up shows that adolescents have still much information regarding sex and family planning, as well as basic anatomy/physiology.

- A majority of teenagers appeared misinformed that passing urine is a method of birth control.

- A few adolescents still lack in knowledge about the concept of washing after sex as a means of birth control.

- Even the majority of the teenagers did not have a clear idea about getting pregnant before MC (menses).

- 181 students who answered they would be ready to have sex if a man said they could not become pregnant if they had sex with him shows that there are large numbers of teenagers likely to fall prey to unwanted pregnancy, STD's, HIV/AIDS.

- 135 students not knowing what a condom is reflects how poorly they are exposed too reproductive health education.

- 357 out of 1075 or 33% not knowing about family planning methods indicates that sex and reproductive health education is not profoundly availed to the teenagers.

With regard to physiology 193 out of 645 respondents giving incorrect answers while identifying male sex organs and 7.60% of the respondents incorrectly identifying female reproductive organs shows that the teenagers utterly lack proper knowledge about sex, reproductive health and physiology.

- 121 (56.27%) respondents not knowing about boy's puberty changes and 138 (63.25%) not knowing girl's puberty changes indicates that health development education has been inefficiently given up to now. 80 students stated that a white discharge is a normal sign, which is in fact abnormal sign indicating possible disease. This further indicates a lack of basic health knowledge.

- It was expected that the teenagers must know bleeding as a part of menses but most of the teenagers stated that the cervix opening was a part of the cycle indicated that they had not the basic understanding of this process.

- 37 respondents not knowing anything about mother/child health shows that their knowledge of physiology and health is insufficient and that educational programs are not aimed toward them (not seen as a target group).

- 93 (44%) of the students not knowing the correct duration of pregnancy may indicate that the teenagers had not understood the importance of safer motherhood and reproductive health.

- 93 (44%) giving incorrect answers about conception shows that they are still not in touch with health education practices.

- 205 students not having any idea about home remedies for physiological problems shows that they now have begun to rely on medication; but still 3 students out of 9 responding to this question suggesting going to dhami or jhankhre implies that the remains of old folk remedies are still in the mind of this new generation.

4.2 CONCLUSIONS

From the analysis of data on the adolescent's attitude, knowledge and practices in the fields of sexuality and reproductive health, family planning, STD's, Human Reproductive anatomy and physiology it becomes obvious that the teenager's are still deprived of the proper exposure to the health programmes focusing on the above mentioned areas. Thus they have been living with confusions and have developed negative attitudes toward sex. They do not seem to have clear ideas about STD's and don't factually know how to tackle the issues of family planning or safe motherhood. Their level of knowledge about reproductive health is therefore unsatisfactory. Both rural as well as urban teenagers exhibit the same level of consensus about sex and other related areas which is a new finding because it is usually supposed that adolescents living in urban environments would know better about sex and relevant areas. But the findings show that the number of respondents from urban as well as rural schools giving correct and incorrect answers is similar without showing a big gap in their basic knowledge about reproductive health.

4.3 RECOMMENDATIONS

On the basis of literature review, Research (interaction with the adolescents in 6 high schools located within the municipality as well as outside in rural areas,) analysis of their knowledge, attitude and practices on components of ARH (Adolescent Reproductive Health) it seems justifiable to recommend that:
The teenagers while finding some access to the technocratic, social structures emerging rapidly even in the third world have not developed their full conscience toward ARH complications that are incorporated due to complications of STD's/HIV/AIDS and other health factors hence there is a genuine need of launching health education programmes, campaigns against early marriage, awareness programmes about family planning, and safe sex as well as educational programmes on anatomy and physiology that could aid the adolescents in their formal curriculum as well.

The initiatives required for the correction in the irregular knowledge, attitude and practices of unsafe sex, and ARH complications include the following activities needing immediately to be started.

- As school level teaching of health does not seem to be satisfactory and practical with regards to present status of awareness, knowledge and practices of adolescents over ARH; new programmes that aim at imparting healthy education on STD's/HIV/AIDS complications about which teenagers have not been satisfactorily exposed to seem to be indispensable in the near future.

- In order to enhance the virtues of ARH education, school teachers are required to be given refresher trainings because they often feel a hesitation, uncomfortableness or even fear of teaching and explaining sex related topics and don't seem to have the skills of teaching through doing (practical) thus the saying "*If I hear it I forget it, if I see it I remember it, if I do it (or discover it myself) I learn it"* needs to be made meaningful in this regard.

- Teaching aids, visual aids and resources are needed to be developed and supplied, not only to the teachers but also the students are in need of them equally. This information can encourage them to learn for themselves and empower them and help get rid of the stigma of having no knowledge about issues related to ARH.

- As formal education on health imparted by schools is clearly not satisfactory, the establishment of a good Adolescent Friendly Clinic and ARH resource center is essential in the rural areas as well as within the municipality. The center must operate throughout the day unlike the Adolescent Clinic at Bir Hospital that only operates at odd times (KTM Post, Saturday, and January 2004). The key is that the adolescent's have a resource center open to them as much of the day as possible.

- Informal literacy programs in the field of ARH (Adolescent Reproductive Health) would seem vital to impart education and develop awareness about sexuality, STD's, HIV/AIDS, family planning, anatomy & physiology, cultural and social aspects of ARH by organizing support groups and trainings.

- Some campaigns against STD's/AIDS, unsafe sex, abstinence before marriage as a choice, early marriage, women being neglected during pregnancy, gender issues, issues that concern safe mothering, rape, and suicide due to illegal or culturally unacceptable sex. Also issues of cultural practice that can have adverse health effects, such as restricting a woman outside the home during MC due to religious causes, poor nutrition after childbirth, and keeping a woman outside the home after childbirth.

- Since adolescents are found to be involved in unsafe sexual activities especially in their approach to commercial sex workers as reflected by their answers in which they have opined that commercial sex workers are also one certain cause of STD's, HIV and AIDS in their society. It is quite rational to recommend that some reliable income-generating programmes are needed to curtail the number of commercial sex workers and relieve the stress of STD"s, HIV & AIDS, as well as the social stigma of sex workers in society.

- Timely and focused group discussions among the teenage population of high schools are seen as a requirement for their education and empowering them to take charge of their own health. This may include the formation of peer support groups.

- Inter high school and college interaction and exchange programs such as debate and oratory contests or student literature/poetry/art publications focusing on issues of ARH and issues of social concern specific to this age group seem to be indispensable. These will raise the conscience level of teenagers and young people and enable them to acquire education relating to these issues without hesitation.

- Better training programs are needed for teachers to make them more comfortable and better educated themselves about ARH topics.

- Teaching aids and resources for both teachers and students need to be developed.

- Resource / clinic centers need to be created to help and teach adolescents in the areas of family planning and health areas, for both males and females. These centers should be designed and staffed with an aim to destigmatize issues of ARH and adolescents should feel these services are supportive and confidential.

- Support groups for specific issues should be prepared, as stated above.

- Focus group discussions need to be organized, not only for health issues but other issues such as gender awareness and leadership training.

BIBLIOGRAPHY / SOURCES

- UNICEF, 2002. *A Force for Change: Young People and HIV/AIDS in South Asia.*
- *Training Manual for Youth Leadership and Grassroots Organizational Capacity Development on Adolescent Reproductive Health* CICD/ICOMP Team Nepal 2000.
- *Population and Development* Programme of Action adopted at the International Conference on Population and Development. Cairo, 1994. Vol. 1, United Nations. ST/ESA/SER.A/149
- The World Bank Group, 2002 *Regional Updates* South Asia region (SAR)-Nepal,
- Pant, Suvecha *Adolescent Clinic at Bir Hospital fails to deliver efficient service* in The Kathmandu Post, Saturday, January 3, 2004
- Family Health International HIV*/AIDS in Nepal overview* 10 January, 2003, Kathmandu