Knowledge and Perceptions on Mother to Child Transmission of HIV/AIDS among Women and Community Health Workers in Nuwakot District, Nepal

Final Report

Submitted to:

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ABBREVIATIONS AND ACRONYMS

ACTG	AIDS Critical Trial Group
AHW	Auxiliary Health Worker
AIDS	Acquired Immune Deficiency Syndrome
ANM	Assistant Nurse Midwife
CBHV	Community Based Health Volunteers
CHV	Community Heath Volunteer
CREHPA	Center for Research on Environment Health and Population Activities
CSW	Commercial Sex Worker
FP	Family Planning
HA	Health Assistant
HIV	Human Immunodeficiency Virus
MCHW	Maternal and Child Health Worker
NCASC	National Centre for AIDS and STDs Control
NFE	Non-Formal Education
NFHS	Nepal Family Health Survey
RH	Reproductive Health
SPSS	Statistical Package for Social Science
STD	Sexually Transmitted Diseases
TB	Tuberculosis
TBA	Traditional Birth Attendant
TH	Traditional Healer
TV	Television
UN	United Nations
UNAIDS	Joint United Nations Program on AIDS
UNDP	United Nations Development Program
UNICEF	United Nations Children's Fund
VDC	Village Development Committee
VHW	Village Health Worker
WHO	World Health Organization
WOREC	Women's Rehabilitation Center

EXECUTIVE SUMMARY

The objective of the study is to understand the pre- and post-training knowledge, and perceptions of married women of reproductive ages, and community based health service providers on mother to child transmission of HIV/AIDS. Initial and follow-up studies were conducted among married women, community based health volunteers (CBHV) and Health Workers (HW) in two villages of Nuwakot district in January and March 1999. The analysis is based on the samples of 116 women, 31 CBHVs and 9 HWs.

A high proportion of the respondents had already heard of HIV/AIDS. Following the training intervention, all the respondents came to know the disease. Yet, they were less aware about other types of STDs.

Most participants of the training were able to memorize and mention three major routes of transmission of HIV spontaneously: through sex, through blood transfusion, and through needle/syringe. Similarly, knowledge of preventive measures of HIV/AIDS widely increased after the training.

Relatively, HW were already well-informed about the conditions which are most likely to pose the risk of contracting HIV/AIDS and conditions which are "safe" from transmission. During the pre-training study, a large majority of women and a sizeable proportion of CBHV had misconceptions that HIV/AIDS can be transmitted through handshakes, sharing beds, sitting together, or sharing clothes. Almost all of them did not have such misconception at the time of the post-training study.

Almost all of the women (78-96%) and CBHV (85-100%) and all the HW perceived that HIV/AIDS might transmit from mother to her child. Majorities of the respondents perceived that possibility of mother to child transmission of HIV/AIDS could be very high during pregnancy and through breast-feeding. Whereas, 35 to 44 percent of women and CBHV thought that transmission of HIV during delivery is very likely and almost the same proportion opined it to be less likely.

Majority of the respondents perceived that transmission of HIV/AIDS from the mother to her child can be prevented. Most of them opined that HIV infected women should not give births and also should not breast feed.

Almost all the participants highly appreciated and liked the educational training on HIV/AIDS. They found the training useful and interesting. They also explicitly desired such training to be held in the future.

CONTENT

CHAPTER I

INTRODUCTION

The human immunodeficiency virus (HIV), the virus that causes AIDS, was identified in early 1980s. Since then it has been continuously spreading around the world. Estimates by the UNAIDS/ WHO (1998) indicate that by the beginning of 1998 over 30 million people were infected with HIV and that 11.7 million people around the world had lost their lives to the disease.

AIDS has several implications from individual and family level to community and national and international level. The repercussions of AIDS do not stop with the deaths of those infected. The children and other survivors of HIV-infected individuals are the first of many to be affected. AIDS has deep and grave implications to the society because it affects people during their most productive years in which they are typically responsible for the care and support of both children and elderly parents; transmission of the virus generally goes unrecognized; and no cure is available (Lyons, 1992). HIV/AIDS can be transmitted in three ways: through sexual intercourse; through exposure to infected blood and blood products, semen, tissue, organs and HIV-infected skin-piercing instruments; and through perinatal transmission. However, behind these three major forms of transmission are many different sub factors that, in different combinations, affect the actual transmission of the HIV from one person to another (Thant, 1992). This complication rules out generalizations of pattern and nature of spreading of AIDS and calls for specific consideration within and among countries.

1.1 Background

HIV/AIDS has become a significant public health concern in Nepal. The major transmission route of this disease in this country is through heterosexual relations with non-regular partners and commercial sex workers (CSW) (Karki, 1998). However, other transmission routes such as intravenous drug use and perinatal transmission are also increasing. On the basis of sentinel surveillance, the National Center for AIDS and STD Control (NCASC, 1998) has identified 1189 HIV/AIDS cases (393 females and 796 males) in Nepal by December 31, 1998. Housewives account 19 percent among a total of 393 HIV infected females. Number of HIV-infected children (under 14 years) has reached 13. Given the hidden nature of the problem, the actual size of the infected population is likely to be quite large. According to indirect estimates, as many as 26,000 people were supposed to be living with HIV/AIDS at the beginning of 1998 in the country (UNAIDS/WHO, 1998).

With the growing HIV positive cases among housewives and young women, mother to child transmission has become an issue of special concern. The fetuses or infants can acquire the infection from their mother before, during, shortly after birth, or through breast-feeding (WHO, 1991). There are a multiplicity of cofactors that may influence such transmission. Major factors that have been associated with increased perinatal transmission include a high maternal virus load, decreased CD4+ count, lack of HIV neutralizing antibody, advanced clinical disease, primary infection, and obstetric factors like pre-term delivery, low birth weight, birth order in twin pregnancies and more than four hours of ruptured membranes

(Hira, 1997). A pregnant woman infected with HIV has an approximately 30 percent chance of passing the virus to her fetus or newborn baby (WHO, 1991).

About a million of children world wide were estimated to be living with HIV/AIDS at the end of 1997 and the overwhelming majority of them had acquired the infection from their mothers before or around the time of birth, or through breast milk (UNAIDS/WHO, 1998).

Mother to child transmission of HIV/AIDS poses risks to the lives of the newborn as well as the mother. This is a growing problem but it is less known to general women and community level health workers in Nepal. Recent studies (CREHPA, 1997a; 1997b; NFHS, 1996) showed that village communities linked HIV/AIDS transmission to unsafe sex and infected blood transfusion but mother to child transmission of this disease was not mentioned.

Concern on prevention of mother to child transmission of HIV is growing worldwide. Several therapeutic and non-therapeutic preventive approaches are under trail. A regimen called *ACTG 076* has been proven effective in reducing the risk of mother to child transmission in the absence of breast-feeding (UNAIDS, 1997b). This is, however, not suitable for less developed countries with very limited health resources and where breast-feeding is essential for the sake of infant survival. There are arguments that deny possibility of reducing the infection by introducing the regimen. For example, Annas and Grodin (1998) argue that even universal use of ACTG 076 regimen which would lower the over all newborn infection rate by 16 percent, would only likely serve to reduce the incidence of HIV infection in infants by about the same amount that it is increased by breast-feeding (8%-18%). They suggest seeking alternative public health intervention such as providing clean water and sanitation to improve the health of women and their children.

Increasingly, developing countries are providing information about infant feeding to HIV-infected pregnant women. However, in many countries, the critical first step remains to provide counseling, voluntary HIV testing and information about safe feeding to all women considering pregnancy or already pregnant (UNAIDS/WHO, 1998). The first step in this regard is to promote awareness at the community level about HIV/AIDS in general and mother to child transmission of HIV in particular.

To-date, educational programs focussed on preventive measures of mother to child transmission of HIV/AIDS has not been conducted in the country. Such training is highly essential to educate both pregnant and non-pregnant women of reproductive age, and community health workers such as ANM, HA, AHW, MCHW, VHW, CHV, TBA and traditional healers (TH). The training could have important implications in the prevention of mother to child transmission of HIV/AIDS. Moreover, it may have significant contributions in increasing community awareness on risk factors associated with mother to child transmission of HIV/AIDS and approaches to minimize such risks.

With this consideration, community level educational training was organized in Kaule and Tupche VDCs of Nuwakot District at the end of January 1999. The training was provided to pregnant and non-pregnant women, community based health volunteers (TBA, CHV, TH) and health workers working in the Health Posts/Sub Health Posts located in these and

neighboring VDCs. The training imparted educational messages and information on STDs/HIV/AIDS in general, and mother to child transmission of HIV/AIDS in particular.

1.2 Objectives of the Study

The main objectives of the study are to understand the pre- and post-training knowledge, and perceptions of married women of reproductive age, and community based health service providers on mother to child transmission of HIV/AIDS.

The study attempted to address the following topics:

- Knowledge about STDs and HIV/AIDS
- Perception on transmission of HIV/AIDS
- Perceived routes of transmission of HIV/AIDS
- Extent of knowledge on mother to child transmission of HIV/AIDS
- Knowledge on ways of preventing HIV/AIDS
- Perceived ways for prevention of mother to child transmission of HIV/AIDS
- Perceptions regarding conception if a woman is HIV-infected
- Perceptions regarding breast-feeding if a woman is HIV-infected

1.3 Methodology

The survey was launched in two phases: initial survey and follow-up survey. Initial survey was carried out at mid January 1999 - a few days before the training intervention that was conducted at the end of January 1999. The follow-up survey was carried out after one and a half months of the training intervention, i.e., at the mid-March.

Study area

The study was conducted in Kaule and Tupche VDCs of Nuwakot district. Nuwakot is a hilly district lying at the northwest from Kathmandu Valley. The study area is at the distance of about 100 kilometers from Kathmandu. Incidence of STDs in Nuwakot district is one of the highest in the country, i.e. above 100 new cases per 100,000 population (Department of Health Services, 1998). In addition, this district experiences a high prevalence of women's trafficking for commercial sex work in India. These women return to their villages after they are identified with HIV/AIDS and many of them stay with their family and marry (Bhandari and Bhandari 1997).

Sample size and sampling

The initial phase of the survey was conducted among 201 respondents comprising of Health Workers (HW) from Health Posts and Sub Health Posts, Community Based Health Volunteers (CBHV), pregnant women and other married women of reproductive age. The Health Workers interviewed included AHW, VHW and MCHW. The term Community Based Health Volunteers was functionally defined as including female community health volunteers (CHV), traditional birth attendants (TBA) and traditional healers (TH). Overall, 9 Health Workers (HW), 39 Community Based Health Volunteers (CBHV) and 153 women

were interviewed in the survey. During the follow-up survey, 132 women, 33 CBHV and all 9 HW were interviewed.

Of the respondents interviewed in the follow-up survey, 116 women, 31 CBHV and only 2 HW were the participants of the training. Seven HW could not participate in the training. Some of the HW were out of station and did not receive invitation while others could not manage their time.

The sample size of the respondents of different categories covered in the initial and follow-up survey is presented in Table 1.1.

Table 1.1 Sample Performance in initial and follow-up Survey

Categories	Initial Survey	Follow-up Survey	Follow-up loss		Training participants out of total interviewed in follow-up Survey
	N	N	N	%	
Women	**153**	**132**	**21**	**13.7**	**116**
Kaule	75	62	13	17.3	60
Tupche	78	70	8	10.3	56
CBHV	**39**	**33**	**6**	**15.4**	**31**
Kaule	20	17	3	15.0	16
Tupche	19	16	3	15.8	15
HW*	**9**	**9**	-	-	**2**
Total	***201***	***174***	***27***	***13.4***	***169***

*From Kaule, Tupche, Phikuri, Valche and Manakamana VDCs

During the follow-up survey, 14 percent of women and 15 percent of CBHV could not be contacted for interview. The field team could not meet some women even in three visits. Some respondents were absent from the village for the reasons such as medical check-up, visit to maternal home, business purposes, participation in some training.

During the initial survey, samples of Community Based Health Volunteers (CBHV) and women were obtained only from the two VDCs - Kaule and Tupche. However, Health Workers were interviewed from five different Health Posts and Sub Health Posts - three of them are located in the neighboring VDCs.

All currently pregnant women identified in the study area were interviewed. They were identified with the help of CHV or TBAs in their respective locality. Sample of non-pregnant women was selected by using systematic random sampling technique from amongst young (under 30 years) and low-parity (0-2 living children) married women. The same respondents interviewed in the initial survey were approached during the follow-up survey.

Fieldwork

Fieldwork for the initial survey was carried out from 18 to 25 January 1999 and the fieldwork for the follow-up survey was carried out from 17 to 25 March 1999. Each respondent was interviewed individually. Structured questionnaire was used for soliciting information.

The field team members received orientation training on 15 and 17 January 1999 for the initial survey and on 16 March 1999 for the follow-up survey.

In each phase of the fieldwork, four female enumerators (two in each site) were responsible for conducting individual interviews. A female Research Assistant was responsible for fieldwork supervision. The Study Coordinator also accompanied the study team at the beginning of the fieldwork for the initial survey.

Analysis and reporting

All completed questionnaires were entered into the computers immediately after they were manually edited and validated. Data entry validity check was performed on 10 percent of randomly selected questionnaires. After cleaning (range and consistency checks of data entry), data were transferred into SPSS statistical software package for further processing and analysis. Frequencies and cross-tabulations are the main output for analysis.

The report presents the results of both the initial and follow-up surveys. In case of CBHV and women, the analysis has been confined to those respondents who had participated in the training and interviewed in both the initial and the follow-up survey. Accordingly, the analysis is based on information from 116 women and 31 CBHVs. On the other hand, in view of small size, information from all the nine HW has been analyzed irrespective of their participation in the training.

The report is divided into seven chapters. Introduction of the study is presented in this first chapter. Chapter two provides information on background characteristics of the respondents. Awareness about STDs and HIV/AIDS is presented in chapter three while chapter four discusses the respondent's knowledge and perceptions on mother to child transmission of HIV/AIDS. Chapter five presents the perceptions of the participants' about orientation training on HIV/AIDS. Knowledge and perception of Health Workers on mother to child transmission of HIV is summarized in chapter six. Finally, chapter seven concludes the study findings.

CHAPTER II

BACKGROUND CHARACTERISTICS

This chapter provides information on background characteristics of two categories of respondents - women and CBHV. Ethnic characteristics, age composition and level of education of the respondents and their exposure to radio and TV are presented in this chapter. The women were married and low parity (less than two children) and mostly young. The category of CBHV included female community health volunteers, traditional birth attendants and traditional healers.

2.1 Ethnicity

Ethnic composition of the respondents is presented in Table 2.1. Majority of the women (54%) and CBHV (61%) belonged to Tamang ethnic community. Other caste/ethnic groups represented in the sample of women and CBHV included Brahmin (17% and 23%), Chhetri (14% and 10%) and low caste (9% and 6%).

Table 2.1 Percentage distribution of respondents by caste/ethnicity

Caste/ethnicity	Women	CBHV
Tamang	54.3	61.3
Brahmin	17.2	22.6
Chhetri	13.8	9.7
Kami/Damai/Sarki	9.5	6.5
Other	5.2	-
Total percent	*100.0*	*100.0*
N	*116*	*31*

2.2 Age

Among the women respondents, 40 percent belonged to age group 25 to 29 years and 35 percent in the age group 20-24 years. Nearly one in five women was an adolescent (15-19 years). Only 6 percent of the women respondent was aged 30 years or over and all of them were pregnant. Among CBHV, a large majority (74%) was over 30 years of age. Median age of the women was 24 years and that of CBHV was 38 years.

Table 2.2 Percentage distribution of respondents by age group and sex

	Women	CBHV
Sex		
Female	100.0	87.1
Male	-	12.9
Age (years)		
15-19	18.1	3.2
20-24	35.3	16.1
25-29	40.5	6.5
30+	6.0	74.2
Total percent	*100.0*	*100.0*
N	*116*	*31*
Median age	*24*	*38*

2.3 Education

Level of educational attainment of the respondents was quite low. Forty five percent of the women were illiterate. Nearly one in three women (32%) had obtained non-formal education. Only 22 percent of women had received formal education. Among CBHV, slightly over one-third were illiterate (35%) and nearly two-thirds were literate (65%). A significant proportion of CBHV has received non-formal education (45%).

Table 2.3 Percentage distribution of respondents by level of education

Education	Women	CBHV
Illiterate	44.8	35.5
NFE	31.9	45.2
Primary (1-5 grade)	12.9	9.7
Secondary (6-10 grade)	6.9	9.7
SLC and above	3.5	-
Total percent	*100.0*	*100.0*
N	*116*	*31*

2.4 Exposure to Electronic Media

Exposure to electronic media, especially radio, was quite high among the respondents. Roughly two-thirds of women and, over four-fifths of CBHV used to listen to radio. Similarly, majority of CBHV (65%) had access to TV. However, only 28 percent of women used to watch TV.

Table 2.4 Percentage distribution of respondents by exposure to radio and TV

	Women	CBHV
Listens to Radio?		
Yes	62.9	80.6
No	37.1	19.4
Watches TV?		
Yes	28.4	64.5
No	71.6	35.5
Total percent	100.0	100.0
N	116	31

CHAPTER III

KNOWLEDGE AND PERCEPTIONS OF STD/HIV/AIDS

Sexually transmitted diseases including HIV/AIDS pose serious health risks to all sections of the society. As the HIV/AIDS epidemic is spreading rapidly in the developing countries (World Bank, 1997), it may have further grave consequences to the society unless all possible preventive measures are undertaken. In the absence of cure or vaccine, the best way of preventing the spread of the disease is to try to change risky behaviors by disseminating information on HIV/AIDS. Knowledge about the ways of transmission of HIV/AIDS and preventive measures is the pre-requisite for behavioral changes. The nature and consequences of STDs and HIV/AIDS ought to be known and understood well by everybody. This chapter examines the extent of knowledge and perception about STDs and HIV/AIDS among general women and CBHV. It also discusses the changes in knowledge of HIV/AIDS brought by the educational training provided to the community.

3.1 Knowledge of STDs

Following the orientation training, all the women and CBHV came to know about the STDs. Before the training, 84 percent of CBHV and only 39 percent of women had heard of STDs (Table 3.1).

Those respondents who had heard of STDs were asked to name the different forms of STDs they knew. As the result shows, almost all women and CBHV thought of HIV/AIDS as the STD and they were less aware about other types of STDs. Following the training intervention, about one third to nearly half of the women and CBHV became aware of STDs such as *Bhirengee* (syphilis) and *Dhatu rog* (gonorrhoea). Before the training, a few women had misconception that TB and leprosy were STDs.

Table 3.1 Percentage distribution of respondents by awareness of STDs and percentage who mentioned specific STDs

	Women		CBHV	
	Initial	Follow-up	Initial	Follow-up
Whether heard of STDs				
Yes	38.8	100.0	83.9	100.0
No	61.2	-	16.1	-
Total	100.0	100.0	100.0	100.0
N	116	116	31	31
If yes, STDs mentioned				
Bhirengee	8.9	29.3	34.6	45.2
Dhatu rog	2.2	25.0	23.1	48.4
HIV/AIDS	97.8	97.4	88.5	100.0
Leprosy	2.2	0.9	3.8	-
TB	2.2	-	-	-
N*	45	116	26	31

**Percentage total exceeds 100 due to multiple responses.*

3.2 Knowledge of HIV/AIDS

HIV/AIDS was widely known to the study community. Most of the CBHV (87%) and a large majority of women (64%) had heard of HIV/AIDS even before the training. Following the training, all of them became aware of HIV/AIDS. (Table 3.2)

Table 3.2 Percentage distribution of respondents by awareness of HIV/AIDS

Heard of HIV/AIDS?	Women		CBHV	
	Initial	Follow-up	Initial	Follow-up
Yes	63.8	100.0	87.1	100.0
No	36.2	-	12.9	-
Total	100.0	100.0	100.0	100.0
N	116	116	31	31

3.3 Knowledge about Transmission and Prevention of HIV/AIDS

The respondents who had heard of HIV/AIDS were asked to mention what they knew about routes of transmission and preventive measures of HIV/AIDS. As shown in Table 3.3, the respondents were generally aware of sexual transmission of HIV/AIDS. For example, during the initial study, "HIV/AIDS is transmitted through sexual intercourse" was mentioned by most of the women (77%) and CBHV (89%); whereas less than one fifth of women and less than half of CBHV talked about other routes such as "through blood transfusion" and "through needle/syringe". Very few respondents cited perinatal transmission of HIV.

At the time of post-training study, a large majority of CBHV as well as women mentioned about three major routes of transmission of HIV/AIDS viz. "through sexual intercourse", "through blood transmission", and "through needle syringe". A considerable proportion of women and CBHV spontaneously talked about transmission of HIV/AIDS from infected mother to her fetus (12% and 19% respectively) and transmission of the virus through breast-feeding (17% and 29% respectively).

Table 3.3 Percentage of respondents by perceived transmission routes of HIV/AIDS

Routes of transmission	Women		CBHV	
	Initial	Follow- up	Initial	Follow- up
Through sexual intercourse	77.0	95.7	88.9	100.0
Through blood transfusion	18.9	78.4	48.1	74.2
Through needle/syringe	12.2	69.0	40.7	74.2
Through breast feeding	-	17.2	7.4	29.0
From infected mother to her fetus	2.7	12.1	7.4	19.4
Through unsafe sex	-	1.7	-	-
Sitting together/sharing food/sharing comb	4.1	1.7	7.4	3.2
Through tears/cough	-	2.6	-	3.2
Through skin piercing instruments/blades	-	4.3	-	-
Don't know	18.9	1.7	7.4	-
N	*74*	*116*	*27*	*31*

Table 3.4 shows that knowledge of preventive measures of HIV/AIDS among CBHV as well as the women markedly increased after the training intervention. Before the training, the respondents generally mentioned only two preventive approaches: "avoiding sex with CSW" and using condoms" and the proportions of respondents citing these measures were also quite small especially in case of women (46% and 32% respectively). During the post-training study, majority of the women and CBHV could mention a range of preventive measures: avoiding sex with prostitutes, using sterilized syringe/needles, using tested blood for transfusion, and using condoms. In addition, a considerable number of the women and CBHV also talked about "avoiding breast-feeding" and "avoiding conception by an infected mother" for prevention of HIV/AIDS.

Table 3.4 Percentage of respondents by perceived preventive measures of HIV/AIDS

Preventive measures	Women		CBHV	
	Initial	Follow- up	Initial	Follow- up
Avoiding sex with CSWs	45.9	59.5	70.4	61.3
Using sterilized syringe/needles	5.4	62.9	25.9	64.5
Using tested blood for transfusion	5.4	58.6	11.1	54.8
Using condoms	32.4	68.1	66.7	80.6
Avoiding breast feeding	-	17.2	7.4	32.3
Avoiding conception by infected mother	1.4	9.5	3.7	6.5
Avoiding multiple sex partners	8.1	13.8	-	19.4
Avoiding sex with infected person	5.4	6.0	-	-
Avoiding sharing of food with infected	2.7	2.6	-	3.2
Genitals should be kept clean	-	.9	-	-
Having sex with spouse only	-	.9	-	-
Using sterilized skin-piercing instruments	-	3.4	-	-
Through traditional healing	-	-	-	3.2
Don't know	24.3	5.2	7.4	-
N	*74*	*116*	*27*	*31*

Percentage totals exceed 100 due to multiple responses.

3.4 Perception on Behaviors Leading to HIV Transmission

The respondents were asked if they considered certain actions or behaviors to be safe or increase the risk of HIV/AIDS transmission. As the Table 3.5 shows, after the training intervention, the respondents became well aware about conditions or behaviors which are "safe" and those which are not. Before the training, a large majority of women (63-65%) had misconceptions that they would contract HIV/AIDS by shaking hands, sharing beds, sitting together, or sharing clothes with an HIV/AIDS infected person. A sizeable proportion of CBHV also had similar misconception that they would contract HIV/AIDS by shaking hand (44%), sharing beds (52%), sitting together (37%) or sharing clothes (56%).

On the other hand, it was observed during the post-training study that most of the women and CBHV considered sharing needles, having sex or sharing bloods with an infected person would transmit the disease to them. They were also confident that hand shaking, having bed together, sitting together, or sharing clothes with an infected person would not lead to HIV/AIDS transmission.

Table 3.5 Percentage distribution of respondents by their perception of fear of HIV infected people in specific conditions

	Initial			Follow-up		
	Yes	No	Don't Know	Yes	No	Don't Know
Women						
Hand shaking	63.5	23.0	13.5	17.2	78.4	4.3
Having bed together	64.9	21.6	13.5	21.6	75.9	2.6
Sitting together	63.5	23.0	13.5	21.6	76.7	1.7
Sharing clothes	64.9	21.6	13.5	19.8	77.6	2.6
Sharing needles	86.5	-	13.5	96.6	1.7	1.7
Having sex	86.5	-	13.5	98.3	-	1.7
Sharing bloods	86.5	-	13.5	97.4	.9	1.7
CBHV						
Hand shaking	44.4	48.1	7.4	9.7	90.3	-
Having bed together	51.9	40.7	7.4	16.1	83.9	-
Sitting together	37.0	55.6	7.4	12.9	87.1	-
Sharing clothes	55.6	37.0	7.4	9.7	87.1	3.2
Sharing needles	74.1	18.5	7.4	100.0	-	-
Having sex	74.1	18.5	7.4	100.0	-	-
Sharing bloods	74.1	18.5	7.4	100.0	-	-

CHAPTER IV

PERCEPTIONS ON MOTHER TO CHILD TRANSMISSION OF HIV/AIDS

Over the last half century, health of infants and children has been improved considerably all over the world. However, the AIDS pandemic presents a tragic setback in the progress made on child welfare and survival (UNAIDS, 1997a). Millions of infants have been born infected with HIV since the beginning of the pandemic. Mother to child transmission of HIV is the overwhelming source of HIV infection in young children and it virtually the only source in those countries where blood products are regularly screened and clean syringes and needles are widely available (UNAIDS, 1997b). Basic knowledge on mother to child transmission of HIV/AIDS is essential to make an informed choice regarding childbearing and breast-feeding. This chapter analyzes the extent to which women and community based health volunteers have access to information on HIV/AIDS. It also discusses the extent of knowledge about likelihood of mother to child transmission of HIV, ways of transmission and prevention of the disease.

4.1 Current Sources of Information on HIV/AIDS Transmission

Table 4.1 presents the respondents' status of current exposure to the educational messages or information on HIV/AIDS at the time of pre- and post-training study. At the time of pre-training study, slightly over half of CBHV (52%) and only one in five women had received educational messages on HIV/AIDS lately. Table 4.1 shows that, before the training intervention, only a small proportion of the general women in the study area had exposure to educational messages on HIV/AIDS that was mainly from radio. The training contributed to provide educational messages on HIV/AIDS to the community. It was known from the fact that all CBHV and the women mentioned that they received education on HIV/AIDS from the training they participated.

Table 4.1 **Percentage of respondents by exposure to educational messages on HIV/AIDS currently and mean number of sources of information on AIDS**

	Women		CBHV	
	Initial	Follow-up	Initial	Follow-up
Exposure to educational messages on AIDS				
Yes	20.3	96.6	51.9	100.0
No	79.7	3.4	48.1	-
Total	100.0	100.0	100.0	100.0
N	74	116	27	31
Current sources of information				
Radio	80.0	32.1	57.1	45.2
TV	26.7	10.7	14.3	16.1
Newspaper/magazine	6.7	3.6	21.4	3.2
Workshop	-	0.9	28.6	-
Training	-	95.5	35.7	93.5
Health worker	6.7	2.7	-	9.7
*Other**	-	*2.7*	*7.1*	*3.2*
N	*15*	*112*	*14*	*31*
Mean no. of sources	***1.2***	***1.5***	***1.6***	***1.7***

Percentage totals exceed 100 due to multiple responses.

**Meeting, adult literacy class, friends.*

4.2 Perception on Mother to Child Transmission of HIV/AIDS

The respondents who had heard of HIV/AIDS were asked "Do you think that HIV/AIDS transmit from the mother to her child?" All the CBHV and almost all the women (96%), at the time of post-training study, perceived that HIV/AIDS could transmit from mother to her child. The most commonly mentioned transmission routes of HIV/AIDS from the infected mother to the child were "through breast-feeding" (93% CBHV and 88% women) followed by "when the mother is pregnant" (68% CBHV and 59% women). (Table 4.2)

Table 4.2 Percentage distribution of respondents by their perception on possibility of mother to child transmission of HIV/AIDS and percentage who mentioned ways HIV transmits from mother to child

	Women		CBHV	
	Initial	Follow-up	Initial	Follow-up
Whether *HIV Transmits from mother to child?*				
Yes	79.7	95.7	85.2	100.0
No	8.1	.9	7.4	-
Don't know	12.2	3.4	7.4	-
Total	100.0	100.0	100.0	100.0
N	74	116	27	31
Ways of Mother to child transmission				
When she is pregnant	57.6	59.5	87.0	67.7
While giving birth	1.7	27.0	4.3	22.6
Through breast feeding	44.1	88.3	43.5	93.5
Through blood	1.7	1.8	4.3	-
Sitting/sleeping mother & child together	11.9	1.8	-	9.7
Sharing food	8.5	.9	-	-
Don't know	5.1	-	-	-
N*	59	111	23	31

**Percentage totals exceed 100 due to multiple responses.*

4.3 Perception on Extent of Mother to Child Transmission of HIV/AIDS

The study solicited respondents' perception on the likelihood of mother to child transmission of HIV/AIDS during pregnancy, while giving birth, and through breast-feeding. Table 4.3 shows that majority of respondents perceived that possibility of mother to child transmission of HIV/AIDS could be very high during pregnancy and through breast-feeding. During the post-training study, only 35 percent of the women and 44 percent of CBHV opined that HIV/AIDS is very likely to transmit from mother to the child while giving birth; almost the same proportion of the respondents perceived that HIV transmission is less likely during childbirth (46% women and 34% CBHV). (Table 4.3)

Table 4.3 **Percentage distribution of respondents by their perception on the likelihood of mother to child transmission of HIV/AIDS during pregnancy, childbirth, and breast-feeding**

Conditions	Initial				Follow-up			
	Very likely	Less likely	Rare	Don't Know	Very likely	Less likely	Rare	Don't Know
Women								
Transmission during pregnancy	65.8	16.5	-	17.7	56.3	34.9	7.1	1.6
Transmission while giving birth	41.8	17.7	5.1	35.4	34.9	46.0	13.5	5.6
Transmission through breast feeding	63.3	13.9	6.3	16.5	55.6	37.3	4.8	2.4
CBHV								
Transmission during pregnancy	63.0	25.9	3.7	7.4	50.0	34.4	12.5	3.1
Transmission while giving birth	51.9	18.5	7.4	22.2	43.8	34.4	21.9	-
Transmission through breast feeding	55.6	11.1	14.8	18.5	71.9	21.9	6.3	-

4.4 Prevention of Mother to Child Transmission

During the follow-up study, a large majority of the women (82%) and CBHV (84%) perceived that transmission of HIV/AIDS from the mother to her child could be prevented. Only around half of the respondents had held the same opinion during the initial study.

Most of the respondents solely perceived that infected woman should not breast-feed to avoid HIV transmission to the child. Some respondents also mentioned other approaches like avoiding conception, keeping baby away from the contact of mother, bathing the newborn immediately after birth. (Table 4.4)

Table 4.4 **Percentage distribution of respondents by their perception on prevention of mother to child transmission of HIV/AIDS and percentage who mentioned specific way of prevention**

	Women		CBHV	
	Initial	Follow-up	Initial	Follow-up
Whether mother-to-child transmission can be prevented?				
Yes	49.2	82.0	52.2	83.9
No	30.5	15.3	34.8	16.1
Don't know	20.3	2.7	13.0	-
Total	100.0	100.0	100.0	100.0
N	59	111	23	31
Preventive measures				
Infected woman should not breast feed	72.4	94.5	58.3	84.6
Infected woman should not conceive	13.8	18.7	41.7	38.5
Keep baby away from mother/avoid contact	31.0	17.6	8.3	15.4
Bath the newborn immediately	-	14.3	8.3	3.8
Other*	3.4	7.7	8.3	7.6
Don't know	3.4	-	-	7.7
N	29	91	12	26

Percentage totals exceed 100 due to multiple responses.
**Check up while getting infection; Avoid sharing needle between mother & child; Substitute breast milk with cattle milk; Caesarian delivery; Give birth at the Hospital*

4.5 Childbearing and Breast-Feeding by HIV-Infected Women

Both in the initial and follow-up surveys, very high proportions of women (78%-90%) and CBHV (85%-90%) opined that HIV infected woman should not give births. They did not want an infected woman to give birth because child would get infection, he/she would be ailing and he/she would die ultimately (Table 4.5).

Likewise, large majorities of women as well as CBHV (74% in initial and 97% in follow-up) perceived that HIV infected women should not breast feed. Almost all of them thought so because child would contract HIV/AIDS through breast-feeding (Table 4.5).

Table 4.5 **Percentage distribution of respondents by their perception on childbirth and breast-feeding by HIV infected women**

	Women		CBHV	
	Initial	Follow-up	Initial	Follow-up
Should infected mother give birth?				
Yes	-	1.7	7.4	6.5
No	78.4	89.7	85.2	90.3
Don't know	21.6	8.6	7.4	3.2
Total	100.0	100.0	100.0	100.0
N	74	116	27	31
If no, reasons				
Child gets infection	62.1	72.1	73.9	75.0
Child will be unhealthy	19.0	24.0	17.4	14.3
Child dies	13.8	17.3	13.0	7.1
Hard to give birth	3.4	1.0	4.3	3.6
Mother dies and baby suffers	8.6	2.9	-	3.6
Baby borns with illness	1.7	4.8	-	-
Infected woman should not conceive at all	-	-	-	3.6
HIV transmits through blood	-	-	-	3.6
Being a communicable disease	1.7	-	4.3	-
Fetus is infected while in the womb	-	1.0	-	-
N	58	104	23	28
Should infected mother breast-feed?				
Yes	1.4	.9	7.4	3.2
No	74.3	96.6	74.1	96.8
Don't know	24.3	2.6	18.5	-
Total	100.0	100.0	100.0	100.0
N	74	116	27	31
If no, reasons				
Contracts AIDS	96.4	88.4	95.0	86.7
Child will be ailing	1.8	5.4	5.0	3.3
Child dies	1.8	2.7	-	-
Virus transmits through breast milk	-	8.0	-	13.3
N	55	112	20	30

CHAPTER V

PERCEPTIONS ON ORIENTATION TRAINING ON HIV/AIDS

Following the initial study, a one-day educational training was provided to the respondents covered in the study. The training discussed several issues concerning STDs/HIV/AIDS in general and mother to child transmission of HIV/AIDS in particular. Perception of the participants towards the training is assessed in this chapter.

5.1 Perception on Content of the Training

Both the women and CBHV who participated in the orientation training on HIV/AIDS highly appreciated it. For example, large majorities of the women (66%) and CBHV (77%) said that the training was useful to them. Nineteen percent of women and 13 percent of CBHV found the training interesting while about one in ten respondents termed it as a good training (Table 5.1).

Table 5.1 Percentage distribution of respondents by their perception on content of the training

	Women	CBHV
Useful	66.4	77.4
Interesting	19.0	12.9
A good training	12.1	9.7
Average	0.9	-
Can't say	1.7	-
Total	100.0	100.0
N	116	31

The respondents were asked whether they did not like any topics in the training. Ninety-three percent of the women and 97 percent of CBHV said that there was nothing to dislike in the training. Only 2 to 3 percent of respondents did not like the demonstration of condom use.

Table 5.2 Percentage of respondents by their opinion on whether they disliked anything of the training

	Women	CBHV
Disliked nothing	93.1	96.8
Demonstration of condom use	1.7	3.2
Information stating "AIDS has no cure"	0.9	-
Avoid sex at all	1.7	-
Can't say	2.6	-
Total	100.0	100.0
N	116	31

5.2 Memorable Matter of the Training

The participants discussed a range of topics relating to STDs and HIV/AIDS in the training. During the post-training study, the respondents were asked what topics or activities were memorable to them. As the Table 5.3 shows, the information on HIV/AIDS in general was memorable to nearly one in two women and over two in five CBHV. Information on condom use was memorable to 23 percent of CBHV and 9 percent of women. Nineteen percent of women and 16 percent of CBHV mentioned that the demonstration of penis module was a memorable activity of the training.

Table 5.3 Percentage of respondents by the topics of training memorable to them

	Women	CBHV
Information about HIV/AIDS	48.3	41.9
Information on condom use	8.6	22.6
Information on STDs/*Dhatu rog*	12.9	19.4
Demonstration of penis module	19.0	16.1
Education on STDs and AIDS	3.4	16.1
Use condom while having sex	12.9	12.9
AIDS is fatal/no cure of AIDS	1.7	9.7
Breast-feed only for 3 months	.9	6.5
Use only tested blood for transfusion	3.4	6.5
Use only sterilized needles	0.9	6.5
STDs could be cured if treated	-	6.5
Infected mother should not breast-feed	4.3	3.2
Avoid sex to prevent contracting HIV/AIDS	1.7	3.2
Ways of mother to child transmission of AIDS	-	3.2
HIV infected woman should not give birth	-	3.2
Poster/pamphlet/flip chart	7.8	-
Other*	11.3	-
Don't know	2.6	-
N	*116*	*31*

Percentage totals exceed 100 due to multiple responses.

**Restrict to single partner; Avoid multiple partners; Film/Video/Projector; Precautions to be taken while having sex; Keep genitals clean; Always maintain cleanliness*

5.3 Need of Additional Training

A large majority of women (66%) as well as CBHV (61%) urged that such training should be held in the future, too. Nearly half of the CBHV and 43 percent of the women wanted the content of the training to be included in other training. One in four respondents felt the need of additional training for more information on HIV/AIDS.

Table 5.4 Percentage of respondents on whether such training should also be held in future

	Women	CBHV
The training should be held in future	66.4	61.3
Include in other training	43.1	48.4
Additional training needed for more information	25.0	25.8
Unable to understand from only one training	17.2	9.7
Removed shyness	0.9	6.5
Every one should understand this issue	1.7	3.2
Other*	5.0	9.7
Can't say	1.7	-
N	116	31

Percentage totals exceed 100 due to multiple responses

**Separate training for educated and uneducated; Training in local language would be better; Helps to control carelessness in the future; Helps to promote family planning.*

CHAPTER VI

HEALTH WORKERS' PERCEPTIONS ON MOTHER TO CHILD TRANSMISSION OF HIV/AIDS

Nine health workers working in the health post and sub health post in the study area were also interviewed in both the initial and follow-up study. Out of them, only two health workers attended the educational training on HIV/AIDS. Among these nine HW, three were females and six were males. Information obtained from all the nine HW is presented in this chapter.

All of the HW were already aware of STDs and HIV/AIDS. They were also aware that HIV/AIDS is fatal and it has no treatment yet.

The HW were well informed about the conditions or behaviors which are "safe" and those which are not. For example, all of them considered sharing needles, having sex, or sharing bloods with infected person would transmit the disease to them. They were also confident that hand shaking, having bed together, sitting together, or sharing clothes with an infected person would not put a person at the risk of contracting the virus (Table 6.1).

Table 6.1 Percentage distribution of HWs by their perception of fear of HIV infected people in specific conditions

	Initial			Follow-up	
(N=9)	Yes	No	Don't Know	Yes	No
Hand shaking	-	100.0 (9)	- -	- -	100.0 (9)
Having bed together	11.1 (1)	88.9 (8)	- -	- -	100.0 (9)
Sitting together	- -	100.0 (9)	- -	- -	100.0 (9)
Sharing clothes	- -	88.9 (8)	11.1 (1)	- -	100.0 (9)
Sharing needles	100.0 (9)	- -	- -	100.0 (9)	- -
Having sex	100.0 (9)	- -	- -	100.0 (9)	- -
Sharing bloods	100.0 (9)	- -	- -	100.0 (9)	- -

Note: figures in parentheses indicate number of respondents.

All of the HW perceived that HIV could transmit from mother to her child. Eight out of nine HW thought that likelihood of transmission of HIV during pregnancy is very high. Majority of the HW also opined that HIV is very likely to pass from mother to her child while giving birth. On the other hand, majority of them believed that there is less chance of mother to child transmission of HIV through breast-feeding (Table 6.2).

Table 6.2 **Percentage distribution of HW by their perception on the likelihood of mother to child transmission of HIV/AIDS during pregnancy, childbirth, and breast-feeding**

	Initial			Follow up			
	Very likely	Less likely	Rare	Very likely	Less likely	Rare	Don't know
Transmission during pregnancy	88.9 (8)	11.1 (1)	- -	88.9 (8)	11.1 (1)	- -	- -
Transmission while giving birth	66.7 (6)	22.2 (2)	11.1 (1)	55.6 (5)	33.3 (3)	11.1 (1)	-
Transmission through breast feeding	22.2 (2)	66.7 (1)	22.2 (6)	11.1 (2)	55.6 (1)	11.1 (5)	- (1)

Note: figures in parentheses indicate number of respondents.

Majority of the HW perceived that transmission of HIV from mother to her child could be prevented. For the prevention, they opined that infected woman should not conceive at all. They also suggested avoiding breast-feeding if a woman is infected with HIV (Table 6.3).

All the HW held the view that HIV-infected women should not give births. Similarly, majority of them opined that HIV-infected women should not breast-feed their children.

Table 6.3 **Percentage distribution of HW by their perception on transmission and prevention of HIV from mother to child, and perception on childbearing and breast-feeding by HIV-infected women**

	Initial		Follow-up	
	N	%	N	%
Whether mother-to-child transmission can be prevented?				
Yes	5	55.6	8	88.9
No	4	44.4	1	11.1
Total	9	100.0	9	100.0
Ways of preventing mother to child transmission				
Infected woman should not conceive	3	60.0	5	62.5
Infected woman should not breast feed	2	40.0	6	75.0
Bath the newborn immediately	2	40.0	1	12.5
Keep baby away from mother/avoid contact	-	-	1	12.5
Give birth at the hospital	-	-	1	12.5
Total	5	100.0	8	100.0
Should infected mother give birth?				
Yes	-	-	-	-
No	9	100.0	9	100.0
Should infected mother breast-feed?				
Yes	2	22.2	4	44.4
No	7	77.8	5	55.6
Total	9	100.0	9	100.0

CHAPTER VII

DISCUSSIONS AND CONCLUSIONS

Until recently there was no means of preventing mother to child transmission of HIV during pregnancy, labor and delivery for HIV-positive women who wished to give birth. Now, several interventions are being studied. The use of antiretroviral drugs has already been proven effective. However, it is not well suited to widespread use in many developing countries for cost and logistic reasons. The other interventions under exploration include: Vitamin 'A' supplements to pregnant women's diet, cleaning the birth canal during labor and delivery, delivery of caesarean section, and immunization. (UNAIDS, 1997b). Whatever be the interventions for reducing mother to child transmission of HIV, awareness is essential to make them acceptable and effective.

HIV/AIDS is new but a rapidly spreading public health problem. It is surrounded with several rumors and misconceptions. The issue of mother to child transmission of HIV is further tangled with several dilemmas- ranging from women's reproductive rights to health benefits of breast-feeding. The study shows that community people can understand the issue if they are well informed.

Before the educational training intervention, the women and community based health volunteers were aware mainly about sexual transmission of HIV/AIDS. After the training, they became aware of other modes of HIV transmission such as through blood transfusion, through infected needles and syringes and from mother to children.

It is encouraging to observe that the educational training helped to remove several misconceptions associated with HIV/AIDS. After the training intervention, the respondents became well aware of conditions or behaviors which are "safe" and those which are not. Before the training, a large majority of women and a sizeable proportion of CBHV had misconceptions that they would contract HIV/AIDS by shaking hands, sharing beds, sitting together, or sharing clothes with an HIV/AIDS infected person. During the post-training study, most of the women and CBHV were found confident that such activities would not lead to HIV/AIDS transmission.

From the human right perspectives, HIV-infected women could not be deprived from their rights to bear children. However, UNAIDS/WHO/UNICEF has come up with the policy statement that where the welfare of children is concerned, decisions should be made that are in keeping with children's best interest (UNAIDS, 1997a). The community people also had similar views suggesting HIV-infected woman to avoid childbirth. They were concerned with the possible infection to the baby leading to ill health and untimely death.

The women, CBHV and HW perceived that HIV infected women should not breast-feed their children. Newborns of HIV-infected mothers who escape infection at birth may nonetheless be infected through breast-feeding (World bank, 1997). Accordingly, avoiding of breast-feeding may seem reasonable. However, in countries like Nepal where there is high infant morbidity and mortality due to malnutrition and infectious diseases, the advantages of breast-feeding for child health needs to be weighed against possibility of HIV transmission. Kuhn and Stein (1997) argues that early cessation of breast-feeding may be a

more realistic or desirable alternative in many settings. They add that early cessation of breast-feeding at three months of age for known HIV-seropositive mothers results in fewer adverse outcomes than from prolonged breast-feeding even in settings with high infant mortality rates. In view of such dilemmas, UN Joint Programs on AIDS has recommended that where the primary cause of infant deaths are infections and malnutrition, breast-feeding should be universal (UNAIDS, 1997b). Community people and health workers need to be educated accordingly and mothers need to be empowered to make informed choice.

As the mass media and educational opportunities are not accessible to all communities, short-term educational training could be good sources of information on HIV/AIDS. The educational training provided to the study population was a major source of information on HIV/AIDS to most of the community people. Furthermore, the community highly appreciated the training and found it useful to them. They have recommended organizing such training programs in the future in their and other communities too.

Community based health service providers have important roles in educating community men and women in the rural settings. Their roles in creating public awareness on HIV/AIDS can be further enhanced by organizing educational training. In view of the sensitivity of the subject and changes in research findings and policy issues, it would be desirable to organize such training programs from time to time.

Educational training intervention among women and grass-root health service providers can be expected to help raising community awareness on HIV/AIDS through diffusion of the message. It also enhances persons' self esteem and sense of self worth. The more confidence a woman has, the more she will be able to communicate about her needs, about sex, and her feelings, even in cultures where such communication is considered a taboo (Keller, 1996). A study in Udaypur and Kailali has also documented effectiveness of HIV/AIDS prevention education intervention in women's groups at creating awareness of HIV/AIDS and enhancing inter-personal communication skill (CREHPA, 1998).

The issue of HIV/AIDS is associated with sexuality and hence it is culturally sensitive to talk openly in the society. However, the study has shown that awareness about the issue can be raised through educational intervention and women can be empowered to talk about it without hesitation.

Interpersonal diffusion most frequently and effectively occurs between sources and recipients who are alike, since similar individuals share common meanings, mutual sub-cultural language and personal and social characteristics (Lamptey and Coates, 1994). As the most community based health volunteers are also women and they also share almost similar characteristics with general women, it is likely that the training intervention could also be equally effective even if was to provide jointly for these two categories. Further research is, however, desirable to confirm it.

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ID ☐☐☐

KAP SURVEY ON MOTHER TO CHILD TRANSMISSION OF HIV/AIDS

CREHPA
January 1999

Individual Questionnaire for Initial Study

[Section A to C will be administered to MWRA (Pregnant & Non-pregnant), TBA, CHV. Section A to D will be administered to Health Workers (HA/AHW/VHW/ANM/MCHW)]

Section A: Background Characteristics

Name of the Respondent: Name of HH Head:

Q.no.	Questions	Code	Go to...
A.1	Name of the VDC :	☐	
A.2	Ward # :	☐	
A.3	Type of the respondent	Pregnant women ..... 1 Non-pregnant women .....2 HP/SHP staff (HA/AHW/VHW/MCHW/ANM)...3 CHV .....4 TBA .....5 Traditional healer.....6	
A.4	Sex of the respondent	Female .....1 Male 2	
A5	What caste/ethnicity do you belong to?	Tamang .....1 Brahmin .....2 Chhetri .....3 Newar .....4 Kami/Damai/Sarki.....5 Other (specify) 6	
A.6	How old are you?	Years..... ☐☐	

A.7	What is the level of your education?	Never been to school .....1 Non-formal education .....2 Primary (1-5 class) .....3 Secondary (6-10 class).....4 SLC.....5 I. A. and above..... 6	
A.8	Do you listen to Radio or watch TV? A. 8.1 Radio A. 8.2 TV	Yes No 1 2 1 2	

Section B: Awareness and Perception on STD & HIV/AIDS

Now, I would like to ask you some questions regarding sexually transmitted diseases and HIV/AIDS.

Q.no.	Questions	Code	Go to .....
B.1	Do you know about sexually transmitted diseases?	Yes .....1 No 2	B.3
B.2	If yes, please name the diseases which are sexually transmitted. *(Multiple responses possible)*	*Bhirengee*.....1 *Dhatu rog* .....2 HIV/AIDS .....3 Other (specify) 4	
B.3	Have you ever heard about HIV/AIDS?	Yes .....1 No 2	End of Interview
B.4	If yes, where did you first hear about HIV/AIDS?	Radio.....1 TV.....2 Newspaper/magazine.....3 Family members .....4 Friends/Relatives.....5 Teacher.....6 Health worker .....7 Other (specify).....8	
B.5	What do you know about HIV/AIDS? 1..... 2..... 3.....		

B.6	In your opinion, how does HIV/AIDS spread from one person to another? *(Multiple responses possible)*	Through sexual intercourse.....1 Through blood transfusions.....2 Through needle/syringe.....3 From infected mother to her fetus ..4 Through breast feeding..... ...5 Others (specify).....6 Don't know.....88	
B.7	How can a person prevent getting HIV/AIDS? *(Multiple responses possible)*	Avoiding sexual intercourse with prostitutes.....1 Using sterilized syringe/needles.....2 Using tested blood for transfusions.....3 Using condoms.....4 Avoiding conception by an infected mother .....5 Avoiding breast feeding. .....6 Others (specify).....7	
B.8	In which of the following conditions, you will be afraid of people with HIV/AIDS? Yes No Dk B.8.1 Hand shake ..... 1 2 8 B.8.2 Having bed together ..... 1 2 8 B.8.3 Sitting together .....1 2 8 B.8.4 Sharing clothes .....1 2 8 B.8.5 Sharing needles .....1 2 8 B.8.6 Having sex .....1 2 8 B.8.7 Sharing bloods 1 2 8		
B.9	Do you know any one in the village infected with HIV/AIDS?	Yes .....1 No 2	

Section C: Knowledge and Attitude towards Mother to Child Transmission of HIV/AIDS

Now, I would like to ask you some questions regarding mother to child transmission of HIV/AIDS.

Q.no.	Questions	Code	Go to .....
C.1	Have you seen, read or heard any educational messages on HIV/AIDS lately?	Yes.....1 No 2	 C.3
C.2	If yes, from which media you have seen/read/ heard about HIV/AIDS? *(Multiple responses possible)*	Radio.....1 TV.....2 Newspaper/magazine.....3 Workshop.....4 Training .....5 Health worker .....6 School teacher .....7 Other (specify).....9	
C.3	Do you think that HIV/AIDS transmits from the mother to her child?	Yes.....1 No .....2 Don't Know.....8	 C.8 C.8
C.4	In your opinion, how does HIV/AIDS spread from the mother to her child ? *(Multiple responses possible)*	When she is pregnant.....1 While giving birth.....2 Through breast feeding.....3 Others (Specify).....4 Don't know 88	
C.5	In your opinion, to what extent HIV/AIDS is like to transmit from the mother to her child? When she is pregnant..... While giving birth..... Through breast feeding..... ...	Very likely Less likely Rare DK 1 2 3 8 1 2 3 8 1 2 3 8	
C.6	Do you think, transmission of HIV/AIDS from a mother to her child can be prevented?	Yes.....1 No.....2 Don't know.....8	 C.8 C.8
C.7	If yes, how can mother to child transmission of HIV/AIDS be prevented? *(Multiple responses possible)*	Infected woman should not conceive.....1 Newborn baby should be bathed immediately after birth.....2 Infected women should not breast feed ....3 Others (specify).....4 Don't know 88	

C.8	In your opinion, should HIV/AIDS infected mother give birth to a child or not?	Yes .....1 No .....2 Don't know.....8	C.10
C.9	Why do you say so?	☐☐	
C.10	In your opinion, should an HIV/AIDS infected mother breast-feed her child or not?	Yes .....1 No .....2 Don't know.....8	Sec. D
C.11	Why do you say so?		

Section D: Health Workers' Awareness and Perception on HIV/AIDS

[This Section is additional for Health workers only]

Q.no.	Questions	Code	Go to .....
D.1	What is the difference between HIV and AIDS?		
D.2	What are the sign/symptoms of HIV and AIDS?		
D.3	How does HIV/AIDS affect on immunity power of a person infected with the virus?		

D.4	Do you think AIDS is fatal? If yes, why?		
D.5	What do you know about treatment of HIV/AIDS?		
D.6	In your opinion, how can mother to child transmission of HIV/AIDS be minimized at the community level?		
D.7	Have you ever received any orientation training on HIV/AIDS?	Yes .....1 No 2	
D.8	Do any of the training you attended specifically focus on mother to child transmission of HIV/AIDS?	Yes .....1 No 2	

Thank you for the time. This is the end of the interview.

ID ☐☐☐

KAP SURVEY ON MOTHER TO CHILD TRANSMISSION OF HIV/AIDS

CREHPA
March 1999

Individual Questionnaire for Follow-up study

[Section A, B, C and E will be administered to MWRA (Pregnant & Non-pregnant), TBA, CHV. Section A to E will be administered to Health Workers (HA/AHW/VHW/ANM/MCHW)]

Section A: Background Characteristics

Name of the Respondent: Name of HH Head: .....

Q.no.	Questions	Code	Go to...
A.1	Name of the VDC:	☐	
A.2	Ward # :	☐	
A.3	Type of the respondent	Pregnant women ..... 1 Non-pregnant women .....2 HP/SHP staff (HA/AHW/VHW/MCHW/ANM)...3 CHV .....4 TBA .....5 Traditional healer.....6	
A.4	Sex of the respondent	Female .....1 Male 2	

Section B: Awareness and Perception on STD & HIV/AIDS

Now, I would like to ask you some questions regarding sexually transmitted diseases and HIV/AIDS.

Q.no.	Questions	Code	Go to .....
B.1	Do you know about sexually transmitted diseases?	Yes .....1 No 2	 B.3
B.2	If yes, please name the diseases which are sexually transmitted. *(Multiple responses possible)*	*Bhirengee*.....1 *Dhatu rog* .....2 HIV/AIDS .....3 Other (specify) 4	
B.3	Have you ever heard about HIV/AIDS?	Yes .....1 No 2	 End of Interview
B.4	If yes, where did you first hear about HIV/AIDS?	Radio.....1 TV.....2 Newspaper/magazine.....3 Family members .....4 Friends/Relatives.....5 Teacher..... ....6 Health worker .....7 Other (specify).....8	
B.5	What do you know about HIV/AIDS? 1..... 2..... 3.	☐ ☐ ☐	
B.6	In your opinion, how does HIV/AIDS spread from one person to another? *(Multiple responses possible)*	Through sexual intercourse.....1 Through blood transfusions.....2 Through needle/syringe.....3 From infected mother to her fetus ..4 Through breast feeding..... ...5 Others (specify).....6 Don't know.....88	
B.7	How can a person prevent getting HIV/AIDS? *(Multiple responses possible)*	Avoiding sexual intercourse with prostitutes.....1 Using sterilized syringe/needles.....2 Using tested blood for transfusions.....3 Using condoms.....4 Avoiding conception by an infected mother .....5 Avoiding breast feeding. .....6 Others (specify).....7	

B.8	In which of the following conditions, you will be afraid of people with HIV/AIDS? Yes No Dk B.8.1 Hand shake ..... 1 2 8 B.8.2 Having bed together .... 1 2 8 B.8.3 Sitting together .....1 2 8 B.8.4 Sharing clothes .....1 2 8 B.8.5 Sharing needles.....1 2 8 B.8.6 Having sex .....1 2 8 B.8.7 Sharing bloods.....1 2 8		
B.9	Do you know any one in the village infected with HIV/AIDS?	Yes .....1 No 2	

Section C: Knowledge and Attitude towards Mother to Child Transmission of HIV/AIDS

Now, I would like to ask you some questions regarding mother to child transmission of HIV/AIDS.

Q.no.	Questions	Code	Go to .....
C.1	Have you seen, read or heard any educational messages on HIV/AIDS lately?	Yes.....1 No 2	C.3
C.2	If yes, from which media you have seen/read/ heard about HIV/AIDS? *(Multiple responses possible)*	Radio.....1 TV.....2 Newspaper/magazine.....3 Workshop.....4 Training .....5 Health worker .....6 School teacher .....7 Other (specify).....9	
C.3	Do you think that HIV/AIDS transmits from the mother to her child?	Yes.....1 No .....2 Don't Know.....8	C.8 C.8
C.4	In your opinion, how does HIV/AIDS spread from the mother to her child ? *(Multiple responses possible)*	When she is pregnant.....1 While giving birth.....2 Through breast feeding.....3 Others (Specify).....4 Don't know 88	

C.5	In your opinion, to what extent HIV/AIDS is like to transmit from the mother to her child? When she is pregnant..... While giving birth..... Through breast feeding.....	Very likely Less likely Rare DK 1 2 3 8 1 2 3 8 1 2 3 8	
C.6	Do you think, transmission of HIV/AIDS from a mother to her child can be prevented?	Yes.....1 No.....2 Don't know.....8	
C.7	If yes, how can mother to child transmission of HIV/AIDS be prevented? *(Multiple responses possible)*	Infected woman should not conceive.....1 Newborn baby should be bathed immediately after birth.....2 Infected women should not breast feed .....3 Others (specify).....4 Don't know 88	
C.8	In your opinion, should HIV/AIDS infected mother give birth to a child or not?	Yes .....1 No .....2 Don't know.....8	C.10
C.9	Why do you say so?	☐☐	
C.10	In your opinion, should an HIV/AIDS infected mother breast-feed her child or not?	Yes .....1 No .....2 Don't know.....8	Sec D
C.11	Why do you say so?		

Section D: Health Workers' Awareness and Perception on HIV/AIDS

[This Section is additional for Health workers only]

Q.no.	Questions	Code	Go to .....
D.1	What is the difference between HIV and AIDS?		
D.2	What are the sign/symptoms of HIV and AIDS?		
D.3	How does HIV/AIDS affect on immunity power of a person infected with the virus?		
D.4	Do you think AIDS is fatal? If yes, why?		
D.5	What do you know about treatment of HIV/AIDS?		
D.6	In your opinion, how can mother to child transmission of HIV/AIDS be minimized at the community level?		

Section E: Perception about Orientation Training on HIV/AIDS

[For All Respondents]

E.1	Did you participate in the orientation training on HIV/AIDS?	Yes .....1 No 2	End of interview
E.2	How did you find the content of the training?	Useful .....1 Interesting .....2 Other (specify) 3	
E.3	What topics in the training did you like most?		
E.4	What topics in the training you did not like?		
E.5	What things you learned from the training were memorable?		
E.6	Do you think such training should be held in the future?		
E.7	Do you recommend this kind of training in other VDCs ?	Yes .....1 No .....2 Don't know 8	

Thank you for the time. This is the end of the interview.

Section E: Perception about Orientation Training on HIV/AIDS

[For All Respondents]

E.1	Did you participate in the orientation training on HIV/AIDS?	Yes .....1 No 2	End of interview
E.2	How did you find the content of the training?	Useful .....1 Interesting .....2 Other (specify) 3	
E.3	What things you learned from the training were memorable?		
E.4	Do you think such training should be held in the future?		

Thank you for the time. This is the end of the interview.

Educational Training on HIV/AIDS Prevention and Control
January 1999, Nuwakot

Contents of the Training and Specific Learning Objectives:

SN	Topics	Learning Objectives	Methods	Materials	Time	Assessment
01	Introduction and registration	* All the participants will register their name and introduce each other		Record register, stationery	30 min	
02	Objectives of the training	* To provide the basic knowledge on STD, HIV/AIDS to the participants on prevention and control, and to explore their role and responsibilities. * To measure the knowledge of the participants after the training on HIV/AIDS	Mini-lecture	News print paper, marker	15 min	Question/Answer
03.	Introduction to STDs	* Name different types of STDs, such as: **<u>Major STDs</u>** Gonorrhea, Syphilis, Chancroids, Lymphogranuloma, Venerum, Granuloma inguinale, Non-gonococal urethritis, HIV/AIDS **<u>Minor STDs</u>** Herpes genitals, Veneral wart, Candidiasis, Trichomoniasis vaginities, Scabies, Molluscum contagiosum, Hepatitis B * Explain the preventative measures on STDs * Explain STDs are curable diseases.	Story telling, Mini-lecture	Posters, pamphlets, leaflets	45 min	
04	Introduction to HIV/AIDS	* Explain HIV/AIDS is a fetal disease. * Explain how STDs and HIV/AIDS is interlinked.	Story telling, discussion	Posters, pamphlets, flash cards	30 min.	Question/ Answer
05	Current problems of HIV/AIDS in the world and Nepal.	* Explain why HIV/AIDS is a issue of public concern in the world and Nepal. * Explain how the numbers of HIV/AIDS transmission	Story telling, discussion	Graphs and epidemic charts	30 min.	Question/Answer

06	Route of HIV/AIDS transmission	* Explain following four routes of HIV/AIDS transmission a. Sexual contact (Homo and hetero) b. Special focus on mother to child transmission (trans-placental) c. Use of Non sterilized materials (syringe and needles) d. Blood transfusion e. Breast feeding * Explain HIV/AIDS does not transfer except the above mentioned routes. * Explain the following high risk behavior for HIV transmission a. Persons with many sex partners b. Injecting drug users c. Migrating population d. Persons with STDs	Story telling, discussion mini-lecture	Flash cards, posters	60 min.	Question/Answer
07	Policy of HMG on breast feeding from HIV infected mother	* Explain the policy of HMG/National Center for STD and HIV/AIDS control on breast feeding from HIV infected mothers	Mini-lecture	Hands out	15 min	Question/Answer
08	Preventive measures from HIV/AIDS	* To explain the following methods to control and prevent HIV/AIDS. a. Use of condom during sexual intercourse except spouses. b. Avoid use of non-sterilized equipment. c. Use tested blood. d. Do not get pregnant if infected with HIV/AIDS. e. Explain condom is only one way to be safe from STDs, HIV/AIDS f. Demonstration of proper uses condom.	Story telling, discussion and role play	Flash cards, models, posters	30 min.	Question/Answer

09	Role of participants to control and prevent HIV/AIDS	* Explain how girls traffickers take girls to brothels from the villages. a. By formal marriage b. Assuring to get job in cities. c. Assuring for delicious food, good clothing and happy Life. d. Making artificial relation in families e. Supporting their families in cash and kind f. Making unconscious by offering meal * Negative impact of prostitution to cause STDs, HIV/AIDS. * Explain how they can work together with local government. a. Inspect the behavior of outsiders to the village. b. Inquiry the activities of new comers c. Aware community people on STDs, HIV/AIDS d. Explain the preventive measures of HIV/AIDS to the Community people e. Inform local government on suspected persons	Story telling, Group discussion	News print paper	30 min.	Question/Answer
10	Closing	* Perception of the participants towards the training. * Expectation of the trainers' from the participants after the training.	Mini-lecture	-	30 min	