

CHAPTER II: ESSAY

OUTREACH FOR HIV PREVENTION COUNSELLING: AN INTERVENTION TO PROMOTE SAFER SEX AMONG TRANSPORT WORKERS IN NEPAL

2.1 INTRODUCTION

In Nepal, the National AIDS policy- 1996, has provisioned the formation of a District AIDS Coordination Committee (DACC) in each of the 75 districts, aiming at larger community mobilization for the prevention of Human Immunodeficiency Virus (HIV). Kailali in the far end of Western Nepal, is one of the pioneer districts to form and successfully bring the committee in to a prominent leadership role regarding HIV/AIDS prevention. A meeting of DACC in Kailali, held on September 20 last year, discussed four important strategies for the prevention of HIV/AIDS, which include Counselling for risk groups; promotion of safer sex practice; educating commercial sex workers (CSWs) and HIV antibody testing before transfusion (Thapa, 1997). The first and last strategies are directed at high-risk groups and are mandatory measures of Acquired Immuno Deficiency Syndrome (AIDS) control. In general other strategies also raise important debate in the absence of specific definition, about what the committee meant by the terms it used there.

Epidemiologists have determined mobility among others as an important risk factor for HIV and other STDs infection. Mobile or transient people are of two types: migrants who change residence for a significant duration and the people in mobile occupation who are not changing their formal residence. Both are vulnerable to HIV/STDs (Chin, 1994) due to lack of adequate access to quality prevention services and social disruption of moving. However, people with mobile occupation such as transport workers are particularly important to HIV prevention because of their role in fueling the epidemic (FHI and UNAIDS, 1998).

Studies with truckers in east Africa, India and Thailand have reported HIV prevalence rate of 27%, 7.4% and 2.3% respectively (Gordon, 1995; Rao et.al.,1995). Transport workers are seen as the bridge population for transmitting HIV from the 'core groups' such as CSWs to the 'non-core groups' such as monogamous women, in many countries (Rao et.al.,1993; Podshita, 1995; Garret, 1996; New era, 1997).

In Nepal data on transport workers is not available but several factors indicate a ten times higher HIV prevalence rate than in the general population, which is more than one percent (NCASC and FHI, 1997). Similarly STD as a marker of high-risk behavior also indicates a high risk of HIV infection. About 18 percent of the clients of commercial sex workers (CSWs), most of which were transport workers, had a past history of STDs infection (New Era, 1997). The possibility of bridging the virus is very high for this population in Nepal due to additional factors such as high mobility, lack of circumcision, multi-partner sexual relation including visits to CSWs and unprotected

penetrative sex. As most of the transport workers are married in line with universal marriage in Nepal, their wives become exposed to a high risk of HIV transmission.

The issue I am raising here is what intervention or combination of interventions should we launch to promote safer sexual behaviors among transport workers in Kailali? My conclusion is that HIV prevention counselling should be provided through outreach workers on the highway routes to promote safer sexual practices among them. This argument is based on the following reasons:

- i) Because of low access to information transport workers have many false beliefs and low self risk perception. Counselling through provision of information and risk assessment can ensure correct information and acceptance of self-risk.
- ii) Mental stress, low self-esteem and aversive emotions among transport workers are obstacles to safer sex. Counselling through emotive influence can provide considerable help in coping with those.
- iii) Transport workers have to face a risky environment and peer pressure. Goal setting and assertive communication skills can help them to deal with that.
- iv) Life skill training such as condom use and non-penetrative sex, and proper referral can increase self-efficacy as well as response efficacy to support enactment.

Kailali district is very important strategically for vehicular transportation due to being located on the national east-west highway route and the road to far-western hill districts. Some link roads in the district connect the national highways directly to the large Indian road network, which increases the potential for traffic pressure. Existence

of traditional sex workers' settlements, emergence of other transient sex workers and economic pressure on the low income women near the highways or border towns, has increased the possibility of high sexual contacts for the transport workers. As the vehicles can cross the border without any restriction, the extent of sexual networking increases many fold both for Nepalese and Indian transport workers.

Since 1993, Save the Children provides technical and financial support to the partnering non governmental organizations (NGOs) for implementing HIV prevention programs in 10 districts of Nepal with a major concentration in the far western region. Realizing the high vulnerability of transport workers and their role in the spread of the virus, the NGOs include this group as one of their key target populations.

Sexual contact is the main route of HIV transmission in Nepal (NCASC, 1998). The sexual risk of HIV transmission increases for the transport workers due to various cofactors such as biological, psychological, social/situational and accessibility. Mobility and entry into a risky environment with an abundance of alcohol and sex workers, and peer support work as stimulus for risky sexual practice (FHI, 1996; Rao et al., 1995; ARFI; Podshita, 1991). Presence of mental health stress or due to loneliness and economic pressure, and the feeling of lack of control due to low self-esteem are reasons for unsafe sexual behaviors.

Various interventions based on voluntary, mandatory and passive strategies have been tried for AIDS and STDs control (Over and Piot, 1991). Mandatory strategies such as legal restrictions on CSWs or compulsory HIV testing and quarantine

have internationally proven to be counterproductive and not appropriate on ethical grounds. Passive strategies, requiring policy changes are very effective in the long run but beyond the direct scope of NGOs. Other passive strategies such as literacy classes and income generation skills for low income women are slow to produce effect. So voluntary measures are the primary strategy for HIV prevention.

In the absence of traditional disease control measures such as vaccine and antibiotics, behavior change is the only available means. Despite considerable development in the field of behavioral science, it has been less applied in the primary prevention of infectious diseases. However it is not easy to totally change deep-rooted behavior. Kaplan (1993) has suggested that the most practical solution is to substitute them with lower risk behaviors. This has given rise to the concept of safer sex and risk reduction. According to stages of change models such as the transtheoretical model and the AIDS Risk Reduction Model (ARRM), risk reduction effort is incremental. ARRM consists of three major stages: labeling, commitment and enactment. Movement from one to another stage is influenced by various social, cognitive and emotive factors such as knowledge, aversive emotions, cost-benefit perception, self efficacy and sexual communication.

The interventions suggested by DACC can be grouped for clarity as, increasing accessibility, AIDS education, HIV antibody testing and Counselling. NGOs of Kailali were relatively unsuccessful in promoting safer sex among transport workers compared to other populations. Various interventions such as condom distribution, STDs

treatment and social marketing has been launched to increase the accessibility and have been successful. However transport workers were found to use these services the least.

Similar to experience in other countries, in Nepal also, interventions such as mass media or IEC materials increased the knowledge but could not bring a significant behavioral change (AIDSCAP, 1997; SCUS, 1997; New Era, 1996; VaRG, 1997). Some NGOs tried the network approach by selecting peer educators from CSWs and truck-stop people as it was not possible to recruit directly from transport workers because of their time unavailability for the training time (ICH, 1998; NNSWA, 1995). Static information booths also could not get enough time from them.

The counselling and HIV antibody testing program has shown encouraging results for behavioral change in some countries. However many researchers think it is largely due to the counselling and not due to the testing (Kelly and Murphy, 1991). Due to limited HIV antibody test sites in Nepal, there is not much opportunity to apply antibody testing at present. Counselling has been successfully used for HIV risk reduction in many countries. WHO recommends that it should be provided for prevention to a wide range of people at risk (WHO, 1998). The risk reduction counselling or prevention counselling can successfully apply the important cognitive and emotional elements of the behavioral theories. In Kailali counselling services are provided in STD clinic and the blood banks but they could not reach the transport workers adequately.

Outreach workers selected from indigenous people are found to be more effective than professionals in discussing sensitive issues. They are also more likely to influence the perceived norms of the people. A study has shown that counselling provided by paraprofessionals was equally effective (Cabral, 1996). Hence, HIV prevention counselling provided by indigenous outreach workers can successfully promote safer sex among the transport workers.

2.2 HIV/AIDS TRANSMISSION

In this section, the HIV/AIDS situation in Nepal, mode of transmission, risk groups for infection and the core transmitters, are presented. This will help in understanding the importance of transport workers in the transmission of HIV in Nepal and Kailali district.

2.2.1 HIV/AIDS situation in Nepal:

According to UNAIDS, 2.3 million people died of AIDS in 1997. At present there are 30 million people living with HIV/AIDS (PHA). On the basis of predominant transmission mode, WHO has identified four patterns of HIV Epidemic. Pattern I includes countries of North America, Western Europe, Australia and New Zealand, where the majority of HIV positive people were infected through homosexual transmission or by sharing needles. At present, Pattern II countries of sub Saharan Africa are the hardest hit region, with 14 million PHAs.

Latin America and Caribbean countries, which have both types of transmission: homosexual as well as heterosexual contact, fall in pattern I/II. Asia falls in pattern III, where HIV began much later in the mid 1980s. At the end of 1996, an estimated 5.3 million people were infected there. However current trends suggest Asia might have surpassed Africa in terms of new infections per year. Thailand and India, from the South and South East Asia have largest number of HIV positive people in the world.

In Nepal the first cases were only identified in 1988. In 1993, WHO warned that the preconditions existed for a serious AIDS epidemic in Nepal. Nepal has all the elements necessary for an Indian-style HIV epidemic where prevalence is about 4 million nation-wide and rates in some suburban populations approach 40%. These elements include low levels of knowledge concerning HIV/STDs; a moderate to high prevalence of STDs; a substantial and geographically dispersed population of commercial sex workers; a population of migrant laborers measured in the hundreds of thousands and transport workers who have a significant number of extra-marital partners; a group of IDUs in Kathmandu estimated at 1,500; and nascent cohorts of IDUs in other urban areas (Marseille, 1997). So it is only a matter of time before Nepal will jump to a high prevalence after the early stage of the epidemic.

The number of people tested HIV positive has gradually increased from 11 in 1990 to 235 in 1994 and 1067 in 1998 (DHS, 1996; NCASC, 1998). Given the limited surveillance system in place, the actual number of AIDS cases may be 5 to 10 times and actual number of HIV infected people may be 20 to 30 times higher than the reported figure. Different projections have shown that prevalence has started to rise at a faster

rate recently. At present Nepal has estimated 26,000 HIV infected people with a 0.24 prevalence rate (UCLA et al., 1998), fourth after Thailand, Myanmar and India in the ten countries of the South Asian region.

2.2.2 Human Immunodeficiency Virus (HIV)

AIDS is caused by a retrovirus known as Human Immunodeficiency Virus (HIV), which breaks down the body's immune system, leaving the victim vulnerable to life threatening opportunistic infections, neurological disorders or unusual malignancies. Once infected HIV lasts life long in a person. HIV mutates rapidly and new strains are continually developing. There are main two types of HIV. The most common is HIV 1 and more recently HIV-2 is recognized in West Africa. In Nepal, only HIV 1 has been detected so far.

The virus has been found in the greatest concentration in blood and semen. Lower concentration of virus has also been detected in tears, saliva, breast milk, urine and cervical/vaginal secretions. However till date only blood and semen has the confirmed ability to transmit the virus.

HIV makes an infected individual develop antibodies within a short period of time (6-24 weeks). HIV infected people are most infectious to others in the "window period" in which antibodies are yet not produced. Similarly in the stage of well-advanced infection, people are more infectious because the level of the virus in the body is very high. The incubation period is very long, for years no symptoms may

appear. On an average, it takes eleven years from the time of infection, to develop AIDS.

2.2.3 Mode of transmission

HIV is not transmitted by casual social contact with infected person or by food and water. Spreading by non-human vectors such as mosquitoes, other insects or any other animals, have not been found anywhere. HIV is only directly transmitted from an infected person to another person through three basic routes: sexual, blood and perinatal. In Asia, sexual transmission accounts for around 85-90 percent of HIV infections. The following table shows the role of different routes in the transmission of HIV in Asia and Nepal:

Table 2.1 Percent age of HIV transmission through different routes out of the total infection

Route of transmission	Asia	Nepal
Sexual intercourse	85-90	85.1
Blood transfusion	3-5	0.1
Injecting drug use	3-5	14
Medical equipment/needles	0-1	----
Peri-natal	2-5	0.8

Source: NGO and AIDS Jai P Narain and A. Jha, WHO, SEARO, 1997, pp.6 and Cumulative HIV/AIDS situation of Nepal, NCASC, 1998.

1. Sexual contact:

HIV/AIDS is primarily a sexually transmitted disease. It is transmitted by any form of penetrative sex: anal or vaginal. There is some uncertainty about the degree of risk in oral sex (mouth comes in contact with semen or vaginal secretions). Oral sex is particularly risky, where partner has sores in the sex organs or bleeding or sores in the mouth. Anal sex has a higher risk than vaginal because it is more likely to injure the tissue of the receptive partner.

Women are more vulnerable to HIV infection than men because of a larger surface that is exposed, and semen contains higher concentration of HIV than vaginal or cervical fluids. The chance of infection is twice as likely as from female to male. Age wise, adolescent girls and women above 45 are more prone to get HIV infection. In adolescents the cervix is not mature enough to pose efficient barrier to HIV. Similarly the thinning of mucosa at menopause is believed to lessen the protective effect.

2. Blood contact:

HIV is transmitted by blood and blood products. The risk of contracting HIV from the transmission of a unit of infected blood is estimated to be very high; over 95 percent. The likelihood of transmission via blood depends on the dose of infected blood. Hence the risk of getting infected through a contaminated needle, syringe or any other skin-piercing instrument is much lower compared to blood transfusion. However

because of several repeated exposures in a day, injecting drug users have a very high infection rate. After an almost 100 percent screening of blood, it has played a minor role in the spread of HIV in developed country. In Nepal also the risk of infection from blood transfusion is almost zero because almost all blood is screened for HIV (Chin et al., 1994).

3. Perinatal transmission:

HIV may pass from an infected mother to her fetus through the placenta or to her infant during delivery or through breast feeding. About one third of children born to HIV-positive mothers get infected through this route. The risk of infection is higher if the mother is newly infected or she has already developed AIDS. Vaginal delivery is more risky than caesarian section.

There is only a handful of documented cases in which HIV was transmitted through breast-feeding. Researchers now think that even those results can not be generalized because each of the mothers had received infected blood immediately following birth. WHO strongly advocates for developing countries, “particularly where safe and effective use of alternatives is not possible, breast feeding by the biological mother should continue to be feeding method of choice irrespective of HIV infection status”.

2.2.4 The core Groups:

In the late 1970s, a key distinction between STDs and other epidemics was realized and that is heterogeneity of sexual behavior (Over and Piot, 1990). In 1978 WHO scientific working group admitted the concept of core transmitters the need to concentrate the prevention effort on them. Two separate groups 'core' and 'non-core' differentiate between highly sexually active and much less sexually active individuals (Over and Piot, 1991). More than a decade of experience in HIV surveillance has shown that the infection first appears in the core groups and continue to rise before entering into the general population. Averting one case into the core group is likely to save ten times more lives than averting one case in general population (Marseille et.al., 1997).

There is difference of opinion among experts regarding the use of term 'high risk group' in HIV/AIDS context. Many think that it is " what behavior you do and not who you are' that determines risk of HIV. So it is better to use the term high risk behavior group rather than high risk group. Despite tremendous benefits from targeting the high risk or core groups, there are two potential dangers. The first is that the targeted person or group may feel or be stigmatized and secondly those not targeted may hold a false sense of security that they are immune to the infection. In Nepal due to the effect of earlier extrovert programs targeting so called high risk groups, mainly the CSWs and IDUs and to some extent the transport workers also were highly stigmatized with the label of "AIDS Carrier" by society at large.

Though, there is some difference among the groups, the general agreement is that average HIV prevalence rate among them is higher than one percent (Chin 1994, Acharya 1994, NCASC 1998). The following table presents an estimate of different population size and the prevalence of HIV and STDs among them. The exact number of some of the populations could not be obtained, so I have estimated on the basis of different sources.

Table 2.2 Number of the core, the non core and the bridge population and the prevalence of HIV and STDs

Groups	Kailali #	Nepal #	HIV %	STD %
Core population:				
Nep. CSWs in India	----	100 -200,000	40-50	47-80
CSWs return Nepal	----	500-1,000	60-70	47-80
Other CSWs	300	20-40,000	1	29
CSWs Badi	120	1,750	0-2	7.7-70
CSWs Dewaki	----	500-1,000	1-5	----
CSW clients/STDs	25 -50,000	570 -1,140,000	0.8	25
IDUs	9	5-25,000	1-20	----
Non-core population				
Wives of CSW client	19 -38,000	300-550,000	0.2	4.7
Bridge population				
Transport workers	5,200-7,200	98-147,000	0.8	18-46
Army	800	250,000	0.8	18-46
Migrant	10-25,000	300-500,000	0.8	18-46

- Source:** 1. Acharya et al. (1994). Current HIV/AIDS situation and future projections for Nepal.
2. Chin et al. (1994). The HIV/AIDS situation in Nepal. SAIPH division, the World bank. Washington DC.
3. DTM (1998). Vehicle registration number. Kathmandu.

1. Commercial Sex workers

Commercial sex work is the exchange of sex for money or any other perceived benefits. In Nepal 26.5 percent of documented HIV positives are CSWs (NCASC, 1998). The sentinel surveillance and projections by epidemiologists both have estimated a high prevalence rate of 1 percent among CSWs inside Nepal. This has increased compared to a 0.72 percent HIV prevalence in this group in 1992 (NCASC and AIDSCAP, 1997). The STDs infection rate is also very high at about 29 percent (New Era, 1997).

About 50 percent of prostitutes in Bombay are from Nepal and the HIV prevalence rate has dramatically increased there from 0.6 percent in 1986 to 60 percent in 1995 (Gilada, 1995). Out of the 218 Nepalese girls, rescued last February in a Bombay police raid in brothels, nearly 60 to 70 percent were revealed to be HIV Positive (McGirk, 1997). Some experts believe that more than 200,000 Nepalese women and girls are involved in the Indian sex trade (HRW/Asia, 1995). Poverty and economic dependence on India makes recruiting women and girls in Nepal's rural

villages easy and profitable. Because of torture, rape and threats applied to break in Nepalese girls their self-esteem is very low and they service a large number of clients every day engaging also in risky sexual acts.

In Nepal, the total CSWs population is estimated at 20 to 40 thousand. There are traditional sex workers also such as Badi (1750) and Dewaki (500-1000). Reasons for joining prostitution include the lack of alternative employment, low status, lack of decision making power, being destitute and ignorance (Poudel, 1998; Cox and Subedi, 1994). In Nepal, CSWs have an average of 13 clients per month, much lower compared to brothel CSWs in India (New Era, 1997). CSWs in general practice unsafe sex. Safe sex is an economic compromise when paying sex partners offer more goods for unprotected sex (Shayne and Kaplan, 1991). With the exception of the Badi sex workers, other sex workers have a lower condom use rate in Nepal (New Era, 1997; VaRG 1997)

Unlike some countries in South East Asia, where prostitution is concentrated in well-known red light areas, in Nepal they are scattered. Most CSWs lead a very transient life due to harassment by police and local residents (Cox and Subedi, 1994). The availability of sex workers for the transport workers in the highway routes of Nepal is similar to India. There, in some locations sex workers visit the Dhabas and some small scale brothels are established nearby, with Dhaba owners acting as brokers (Rao et al., 1995). In other areas, sex workers wait on the highways and sexual activities takes place within the trucks or on the roadside (Gordon 1995). The highway sex

workers are preferred because of their easier availability and cheaper price compared to those in red light districts (Ro et al., 1995; Sawaengdee, 1991).

In Nepal CSWs coming and boarding trucks at night does not sound possible. However, in most of the highway stop points CSWs are available for service to the truckers, in the restaurants and in the traditional brothels or low income women of nearby settlement occasionally sell sex to the drivers. The brothel areas of traditional (Badi) sex workers in three major stops: Mudha, Nepalgunj and Dang, along western highway are quite popular both for Nepalese and Indian truckers (ICH, 1998). Similarly other brothels in major highways junctions in east and central region of Nepal such as Muglin, Narayanghat, Pathalaiya, Dhalkebar, Itahari and Kakarvita are favorite stops for the truckers. Border towns on both India and Nepal sides are areas for lucrative sex business (Rao et.al. 1995).

2. CSW Clients

The CSW clients are mostly men away from home. Cox and Subedi (1993) studied some of the clients of CSWs and found they were drivers, conductors, college students, laborers, civil servants, businessmen, and other workers of all levels. Many of the clients in border towns were Indians. Sixty-one percent of the clients were married.

The number of clients has been estimated by assuming 10 percent of the male population above 15 to visit sex workers. The higher estimate is based on 20 percent. The figure obtained is 570 and 1,140 thousand (Acharya et al., 1994). These figures

are conservative estimate, if we consider the total number of CSWs in Nepal (22,000) and average clients per month (13). The estimated number of CSWs clients in Kailali is between 25 and 50 thousands.

Clients of CSWs have a very high STDs rate and having an STD is taken as a marker of visiting CSWs. In Nepal HIV prevalence for this group is estimated on the basis of surveillance of STDs clients. In 1992 the prevalence was only 0.56 in STD clients. It has fluctuated in each sentinel surveillance but since 1993 the prevalence is higher than one percent (Chin, 1994). Of the total HIV positives, this group represents about 52 percent (NCASC, 1998).

3. Injecting drug users

Generally, any substance abuse increases the risk of HIV infection by impairing judgement. However, for the injecting drug users, a very high rate of HIV infection has been documented throughout the world. In Nepal also a relatively high rate of infection of 1.6 percent has been found for the IDUs (LALS, 1997). Of the total reported HIV positives, 14 percent are IDUs but their mode of transmission is not known.

In Nepal there are about 25,000 IDUs and the phenomena is predominantly urban (Chin, 1994). Majority of the IDUs are men in their twenties. In Kathmandu 3.82 percent of the students admitted that they are on hard drugs (Majpuria 1997). Heroin is the most commonly used drug, however shooting galleries do not exist in Nepal (Chin et. al. 1994). Despite a high infection rate among the IDUs themselves, at

Nepal (Chin et. al. 1994). Despite a high infection rate among the IDUs themselves, at present, they are not a strong bridge to transmit the virus to other populations because heroin use suppresses their sex drive (Chin,1994). In Kailali, injecting drug is still new. But some urban areas like Dhangadhi, have sizable IDUs populations. Officially only 9 cases of drug use have been recorded, of which the proportion of IDUs is not known (CBS 1996).

2.2.5 Bridge population:

Two important elements; the human contact and the mobility or change of environment are important to the spread of HIV in a country. Contact is necessary but not a sufficient condition for the epidemic. If a group of individuals had always had sexual contact amongst themselves, then irrespective of frequency of the sexual act, the virus would neither enter the group nor spread among them. Mobility breaks this isolation as a form of protection.

This has introduced the concept of the bridge population. In the context of the HIV epidemic, the “bridge” in question is the connection between people with very high risk behavior and those with lower risk through a group of individuals who have sex with both types of partners. The men in Thailand do sexual mixing by visiting commercial sex workers both before and after marriage and then having sexual relations with spouses (ARO/FHI, 1996).

1. Transport workers

Transmission of HIV/AIDS by workers engaged in long distance truck driving, has now become an established fact. Truckers are suspected of being at risk of contracting and transporting the virus because of their high risk lifestyles, their extended periods away from home, their reported use of alcohol and other drugs and their sexual promiscuity (Sawaengdee and Isarpakdee, 1991). In a survey with 330 truckers in Thailand, 25 percent were found to be bridging HIV because 87 percent had contact with CSWs and 35 percent had two or more partners (Podhishita et al 1996). In Africa, the link between the truck routes and spread of HIV by long distance truck drivers, via brothels and female sex partners along roadsides, has been thoroughly documented (Garret, 1996; O'Connor et al., 1992). HIV infection in India also, has been transmitted mainly by long distance truck drivers, who have high frequency of heterosexual intercourse with CSWs and who carry it to the rural areas because 60 percent are married (Pais, 1996; Rao et al., 1995; Jain et al.1994).

In Nepal the extent of bridging by transport workers, as shown in the table, has not been documented but several factors like the high rate of visits to CSWs, some risky sexual acts, high alcohol consumption and high mobility increase the possibility of high bridging. In line with almost universal marriage in Nepal, most of the transport workers are married, creating a potential for large sexual mixing in the interior of the country.

The number of transport workers in Nepal has been estimated on the basis of long distance vehicles registered in Nepal because no information on their exact number could be obtained from any source. In total, about 49 thousands bus, truck/tankers and tractors are registered. If only two crew members are assumed in each of these vehicles there would be around 98 thousands transport workers. The number will be 147 thousands if three crew members in each vehicle is assumed.

2. Other bridge populations

In other parts of the world such as Africa, the army has been identified as an important force transmitting the virus (Garret, 1995). The tiny kingdom of Nepal is not only affected by the army of Nepalese government but more so by the legendary Gurkha soldiers. Gurkhas were first discovered by the British in the early 19th century and over the past 182 years, they have reached virtually every corner of the world as Gurkha soldiers (Chene and Thapa, 1997). In the First World War, 250 thousand Gurkhas fought for the British. The soldiers of the Nepalese army are not only exposed to local CSWs but others receive opportunities to visit commercial or non commercial girls abroad also, while being stationed as UN Peace Keeping Forces in Lebanon or Bosnia. In line with universal marriage to Nepal, most of the soldiers are married. The spouse, children and parents left in Nepal pull them back to Nepalese villages frequently during service time or permanently after their retirement. Obtaining the number of this population is not possible. However, the number of men fit for military service is 2,888,628 (CIA, 1997).

Another group with potential for high sexual mixing is the migrant workers. Every year more than 300,000 Nepalese men come down to India to work as watchmen, hotel boys, kitchen help and unskilled labor in construction (HRW/Asia 1995; Dixit, 1997). This migration for work has evolved from a long history of settlement of Gurkhas in the hills of Darjeeling and the plains of Asam, which was encouraged by the British for tea plantation and clearing of forest lands. The migrants who have not permanently settled down in India or other parts of Nepal return back to the hills occasionally (Dixit 1997).

In Kailali, more than 88 percent of the 417,891 population have to live on subsistence agriculture. Due to inadequate earning, reduced land holding size and growing family members, people have to migrate to India or other places for higher earnings (Red Cross, 1996; Dixit, 1997). Linked with an open border to India, most of male population seasonally migrates there. It is likely that they visit brothels and engage in unsafe sex. During their occasional return to home, there is ample possibility of the transmission of HIV or STDs to their sexual partners (NRCS, 1997).

Within Nepal there is yet another pattern of population movement. A number of people, especially men are away from home as government civil servants, policemen, businessmen or students. Many of them move out to new places, usually in urban or semi urban areas without their families. In the environment free of pressure from community values and norms, there is ample chance of sexual contact with commercial/ non-commercial partners.

2.2.6 The non-core population:

Low risk population defined as “non core” group, includes individuals with less sexually active behaviors. The non transient men staying with their families and the women and children at large not falling into the core group categories can be considered as the low risk population in Nepal.

Prevalence in the voluntary blood donors can be taken as a rate for the low risk population. Among them a HIV prevalence of 0.01 percent was found which is a threefold increase compared to 1995 (NCASC and AIDSCAP, 1997). In Kailali, the blood bank based in Dhangadhi town has recorded an unusually high rate of infection 3.37 percent out of the total 208 donors in the three month period from April to June 1998 (Red Cross, 1998). For other sexually active (20-49) general population a relatively low prevalence at about 0.1 percent has been suggested (NCASC and AIDSCAP, 1997).

The non-core population, that is most vulnerable to HIV infection are the wives of CSWs clients. The estimated number is between three to five hundred and fifty thousand, assuming a 50 percent marriage rate. For the first time in 1993, an HIV infection was found in 605 ante-natal women tested. This prevalence is also on rise as 0.2 percent of HIV positive people were found in a serological screening conducted in four urban areas in Nepal (Kapuan and Bista, 1997).

The women and girls, in the highway area and border zones, specially from the poor income families are vulnerable to pressure from transient men including transport workers. There, the women who are not engaged directly in sex profession are involved in work requiring regular contact with men such as tea or alcohol sales and it is very likely that they develop sexual relationship along with business and social (Rao et al., 1995).

Women are vulnerable to HIV biologically as well as because of socio cultural norms. Biologically, because of large surface area of the vagina compared with penis and high presence of untreated STDs. The double standard of sexual morality in Nepal is an important factor for spread of HIV. Women are expected to retain virginity and be faithful, while men due to less strict social code for them and due to peer pressure visit CSWs. The male female power imbalance has constrained the women to negotiate safer sex with her partners. An extensive qualitative research on gender and AIDS found that even women with knowledge about STDs, AIDS and condom are generally unable to actualize protective behavior (Weeden, 1997).

2.3 HIV PREVENTION:

Once the HIV infection has occurred, the immune system is unable to eradicate the virus from the body. Since there is no cure or vaccine for AIDS, a large effort must be placed on behavioral intervention for the prevention of this disease. Infection with HIV requires exposure to bodily fluid containing the virus. All routes of contact with those fluids involve behavior patterns and hence are modifiable (Kaplan et.al.1993).

Therefore, behavior changes are essential for the prevention of HIV infection even after vaccine and treatments have been developed because medical science alone can not control the disease.

It is important to define prevention clearly before deciding what we should do to prevent HIV in the transport workers. There are three levels of prevention for any disease which are equally applicable to HIV. Primary prevention refers to maintaining health by removing the precipitating causes and determinants of departure from good health. Secondary prevention is early detection of disease before it has time to do irreversible damage. Tertiary prevention means to prevent deterioration and complications from occurring when disease or disability are established. While other two are also important, for the operational purpose of this essay, my definition only includes the primary prevention.

Most of the HIV prevention efforts throughout the world have focussed on the primary prevention, which is preventing HIV infection among susceptible individuals in the general population or groups considered to be at risk. However, some experts do not agree with the little attention given to secondary prevention of HIV. For them secondary prevention of HIV means preventing transmission from infected people to their uninfected contacts (Temoshok and Frerich, 1998). While for others, it means preventing disease progression from asymptomatic HIV infection to AIDS. The center for Disease control, USA (CDC), however, calls both these kinds of interventions as primary prevention. In the absence of an HIV antibody testing facility for the transport workers in Kailali, the distinction between these two concepts is not very important.

Hence, in my definition primary prevention means both preventing infection to the transport workers and from them to other groups.

Prevention of HIV is important because of social and economic costs, society and individuals have to endure because of HIV/AIDS. "Preventing one case of HIV often prevents transmission to many other individuals, which is the dynamic benefits that accrue to others than immediately affected individuals. When the dynamic benefit was analyzed, Disability Adjusted Life Years (DALY) saved increased to 430 from averting one case of infection in core group" (Over and Piot 1991).

2.3.1 Basic Prevention messages:

Every disease has a weak point and the approach to prevention is to identify and break the weakest links in the chain of transmission. WHO has the following simple guidelines for the primary prevention of HIV:

1. To prevent the sexual spread: limit the number of sexual partners; avoid sexual relations with people at risk and who have many sexual partners; avoid anal intercourse; use a condom, which may help reduce the risk of spread during both homosexual and heterosexual intercourse.
2. To prevent spread by contact with blood or blood products: test donations of blood for transfusion; do not use HIV positive bloods for patients; use transfusion only when medically necessary; treat special blood products to destroy HIV, ensure needles and other instruments that pierce skin, whether medically or for other

reasons (e.g. tattooing), are clean and sterile; take particular care to sterilize when needles must be reused.

3. To reduce vertical transmission: advise infected women about the risks for themselves and for their infants if they become pregnant.

As the main mode of HIV transmission in transport workers is through sexual route, I am focusing on only the first prevention message.

2.3.2 Primary prevention strategies:

Over and Piot (1991) has classified prevention strategies into three broad types according to the degree of control by the individual: voluntary, mandatory or passive. I am discussing these strategies in relation to the prevention of sexual transmission of HIV/AIDS in the transport workers in Kailali.

1. Voluntary behavior modification:

The strategies under voluntary behavior modification, are mostly based on education approach and involves IEC campaigns and individual Counselling. The IEC programs affect the individuals demand for protective voluntary behavior. There has been mixed results regarding the effectiveness of this group of strategies. Although the incidence of HIV infection dropped spectacularly in selected groups of homosexual men in North America and Europe, how much of this decline can be attributed to health education is unclear (Over and Piot, 1991).

2. Mandatory behavior modification:

Mandatory behavior modification requires the enactment and enforcement of government laws and regulations. In contrast to voluntary behavior modification, mandatory and passive behavior change both the focus on supply side that is availability and price of a protective behavior or product. For example prohibition of prostitution will raise the price and therefore reduce frequency of visits to CSWs. Experience world wide has shown that mandatory strategies are best suited only for short-term emergency control of certain behavior.

In Nepal, prohibition has discouraged neither CSWs nor their clients to engage in prostitution. If the law enforcing staff are not well paid, it will be beneficial for people to bribe them rather than strictly following the law. “The primacy of sex drive and privacy of sex practices make sexual behavior least suited for mandatory actions”. Further, because mandatory actions are likely to constrain the civil rights, it is not accepted for long in a democratic society.

3. Passive behavior modification

Passive programs are slow to start but can be profound in their long term influence on private decisions. If the government policies which support the passive program such as job opportunities for women are perceived to be permanent, they can induce individuals to choose different residential locations, careers and family sizes.

Too little attention has been given in Nepal like in other countries to passive methods of modification in comparison to those related to mandatory or voluntary ones. The possibility of taxing alcohol served in public places in order to increase the cost of sexual partner change has not been studied. The subsidies given to condoms, have kept the price within the reach of people, which is much lower compared to price in other countries. Other programs that could be started are to bring improvement in marriage, education, and job opportunities for women.

NGOs in Far Western Nepal have implemented literacy and income generation programs for the women at risk for prostitution or trafficking (SCUS, 1998). The immediate effect of income generation program for prostitutes or women at risk could be a reduction in supply and increase in price, which could discourage men from seeking commercial sex in the area (Over and Piot, 1991). However due to the lack of apparent effect on behavior and the problem of sustainability, their utility has been questioned by experts (Marseille, 1997). Treatment of STDs and other reproductive tract infections may help women regain fertility and thereby lessen discrimination and stigmatization, which may lead to prostitution. It also can increase her bargaining power in sexual relation by having a stable family.

2.3.3 Safer sex:

Changing high risk sexual behavior is the only means of preventing the sexual transmission of HIV. Traditionally for the prevention of STDs also safe sex has been emphasized. Safe sex means to prevent semen, vaginal secretion and blood to come

into direct contact with bodily parts during sexual acts. Safe sex can basically be achieved only by abstinence and self-gratification. All other forms of sexual contacts besides this pose higher or lower degree of risk. However, safe sex has rarely been followed completely by any population because of its impracticality. Considering the situation and behaviors of the transport workers, it does not seem feasible that they will adopt safe sex.

Safer sex on the other hand is more practical and can be achieved by practicing non-penetrative sex or using condom. In the sense that certain degree of risk is still present such as condom breakage or sores/cuts in body parts coming in contact during non-penetrative sex, it is safer and not safe sex. Another practical approach which is used a lot internationally, is risk reduction, which occurs through simply moving from higher to lower risk category behaviors than through its elimination (Baker and Joseph, 1988).

Safer sex has been the focus of the AIDS prevention campaigns around the world. However, it has been much criticized on cultural ground for not emphasizing enough on chastity and fidelity. Sex is a major theme in all societies. In contrast the legal and moral taboo restricts people to discuss or display openly. The legal and moral dilemmas regarding harm reduction can play a major barrier. Promoting the use of condom is taken as encouraging sexual promiscuity. In Nepal also, safer sex messages have been objected to on the same ground and until recently condom commercials were not allowed in mass media.

For the purpose of clarity in this essay, I have broadened the traditional definition of safer sex to include the following components:

1. Limiting the Number of sex partners

Limiting the number of partners is important for safer sex. Generally people who have sex with multiple partners are at greater risk of HIV infection than those who have a single partner because the probability of contact with an infected individual increases as the number of partners increases (Catania et al.,1992). Premarital and extramarital sex is not uncommon in Nepal. One study has shown that 23.2 percent of men had premarital and 20.5 percent of men had extra-marital sex (Guruvacharya and Suvedi 1992). In Nepal the transport workers were found to have between 3.5 and 6 sex partners (VaRG, 1997; New Era, 1997).

Visiting commercial sex workers has more risk because through that one connects to a large sexual network. Transport workers are among the main clients of sex workers both in Africa and Thailand (Podhisita, 19996; Araoye, 1996). In Nepal, an AIDSCAP survey in 1996, found that 39 percent of the CSWs clients were transport workers.

2. Sexual act:

In general transport workers are reported to indulge in risky sexual acts. A study from Tanzania revealed that anal sex was far more common than previously

thought (O'Connor et. Al., 1992). Vaginal sex is common with wives and CSWs, while oral and anal sex are common with other truckers or assistants (Gordon; Rao et al., 1995). In Nepal also, more than 6 percent of the transport workers had sex with men, a high proportion of 21 percent had sex during menstruation, 9 percent had anal sex and 7 percent had oral sex (VaRG, 1997).

Relative risk indicates how risky one act is compared to another. A committee of experts in San Fransisco reviewed various studies and choose the relative risks as follows. It simply estimates how much more or less risky one sex act is compared to another. Infectivity rate on the other hand is defined as the percent age chance of becoming infected with HIV per episode per partnership. A great deal of individual difference in infectivity exists and the probability varies depending on how infectious the partner is. Hence, relative risk is considered less complex.

Table 2.3 Infectivity rates, relative risk of sex acts and prevalence in transport workers, Nepal

Sex Act	Infectivity rate	Relative risk	Rate in TWs	Product
Sharing unsterile needles	.0029	12	----	---
Anal receptive intercourse	.006	9	8.9	72.8
Vagina receptive intercourse	.004	3	100	300
Vagina insertive during menstruation	.002	2	21.1	42.2
Anal insertive intercourse	.002	2	8.9	17.8
Vaginal insertive intercourse	.002	1.5	100	150
Giving fellatio	.0001	1	7	7
Giving cunnilingus during menstruation	.0001	1	--	---
Giving cunnilingus	.0001	0.5	7	3.5
Blood to blood transmission	----	0.5	-	--
Receiving cunnilingus	0	0.1	7	0.7
Receiving fellatio	0	0.1	7	0.7
Sharing unclean sex toys	0	0.1	--	--
Vagina to vagina during menstruation	0	0.002	--	--
Vagina to vagina contact	0	0.001	--	--

Source: CDC (1997). HIV prevention plan. San Fransisco. Pp. 472 and 514 and Mid-term survey of DGIS enhanced support for HIV/AIDS prevention project, VaRG, 1997.

3. Condom use:

The effectiveness of condom in protection during intercourse with an HIV/STDs infected person is nearly 100 percent if properly used and there is no breakage. Spermicides and water based lubricants are important components of HIV prevention strategies. They increase the reliability of condoms by reducing friction during sexual intercourse. They also provide an additional margin of safety if the condom leaks or breaks.

Most of the transport workers are familiar with condoms because they carry them to use as an effective barrier against oil, water or air leaks in the engine (ARFI). However most of them do not use condoms during sexual intercourse for the common reason that it interferes with the pleasure of sex (Sawaengdee et al., 1991; Rao et al., 1995). In Nepal, sixty percent of the CSWs mentioned transport workers as their clients and the condom use rate among them was only 59 percent (New Era, 1997).

Often people are found to use condoms only with a secondary partner (casual) and not with their primary partner (steady). In Thailand only 25 percent of the transport workers were using condoms with CSWs and use with non-commercial partners was only 1 percent (Podhisita et al, 1996). Similarly 60 percent of Nigerian transport workers reported unwillingness to use condoms (Araoye et al, 1996). The negative perception of some CSWs to condom use has been found because of the longer duration of intercourse caused by a condom (Gordon 1995). The same pattern can be assumed

for Nepal as the overall condom use among married women was found to be lower than one percent (DHS, 1995).

An equivalent of the traditional condom for women is the female condom, which has been around for less than a decade. Most couples dislike the male condom because it interrupts sex and up to eight percent are allergic to latex, which is the main ingredient in most condoms (UNAIDS, 1997). Women have little control over whether her partner uses the traditional condom or not. The invention of the 'female condom' offers a new barrier method, which gives women more control over safer sex. First proposed by a Danish doctor, Lasse Hessel in the mid 1980s, the female condom is a soft sheath made of polyurethane plastic. The major advantage is that it can be inserted anytime from hours ahead to immediately before sex and it does not have to be removed immediately after sex. Unlike the male condom, it does not have any allergic reaction

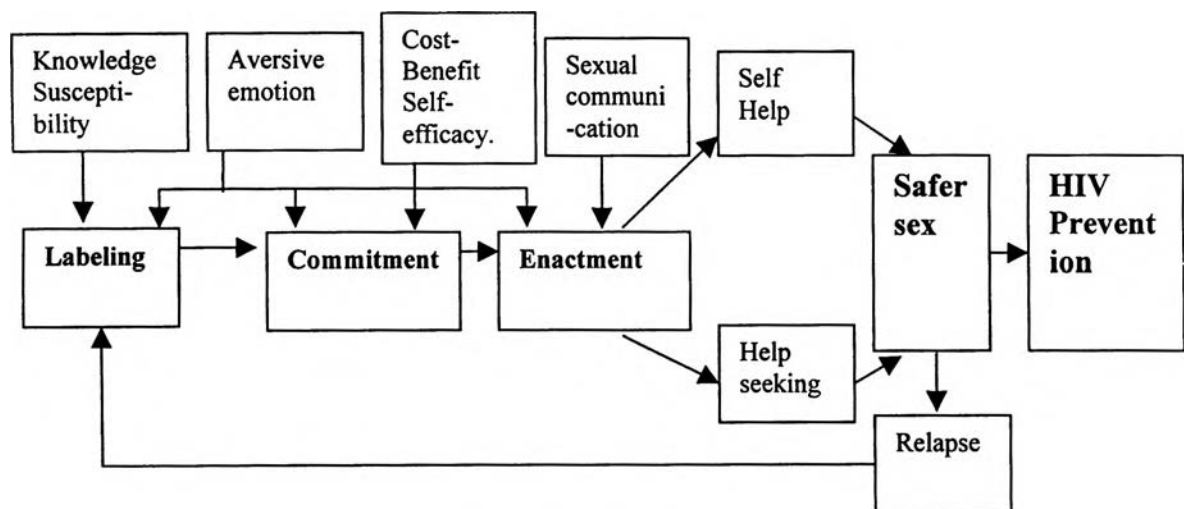
4. Treatment of STDs :

Treating STDs is very important for safer sex. As untreated STDs increases the risk of HIV transmission it should be treated as soon as possible. In order to prevent re-infection, treatment to all sex partners is essential. The treatment seeking among transport workers is very low in Nepal. Thirty percent had no treatment and 17 percent tried self-treatment (New Era, 1997).

2.4 FACTORS AFFECTING SAFER SEX:

The model I am using here is the AIDS risk reduction model (ARRM), developed by Catania, Kegeles and Coates (1990). I selected this model because it clearly explains the psychological factors, which are more important in changing sexual behaviors. ARRM is composed of three stages: labeling, commitment and enactment, which are influenced by other cognitive, emotive and behavioral factors. Although presented in sequential stages, people may move along stages in any order.

Figure 2.1: Stages of change towards safer sex



Source: Adapted from AIDS Risk Reduction Model (ARRM) by Catania, Kegeles and Coates (1990), *Towards an Understanding of risk reduction: ARRM*, Health education quarterly, Vol.17(1), pp.54-55.

2.4.1 Stage One, Problem perception (Labeling):

This is the first step in changing sexual behavior. Unless transport workers perceive their behavior as risky, they will not try to adopt safer sex. Two factors influence labeling: knowledge and perceived susceptibility.

1. Knowledge of HIV transmission:

Knowledge of the risk factors involved in HIV transmission and about its consequences is necessary to perceive personal risk accurately. Knowledge of safer sex guidelines and HIV risk behavior is important to change sexual behavior from high to low risk. The transport workers in Kailali have shown a much lower level of knowledge regarding HIV transmission. Similarly, many misconceptions have been found among transport workers of Nepal regarding the transmission of HIV and STDs.

2. Perceived susceptibility:

Although knowledge of behavior that transmits HIV is important, some individuals, despite high levels of transmission knowledge, feel themselves invulnerable to HIV infection. They are unlikely to change their high-risk behavior. People who do not feel threatened by HIV are less likely to take precautionary measures. In a study, truckers in India were found to have a 'devil may care' attitude and an 'it can not happen to me' delusion (Rao et al, 1994). In Nepal also transport workers do not perceive themselves at risk due to many misconceptions.

2.4.2 Stage two, Commitment to change:

All the psychological models related to health behavior have mentioned an intermediate stage between perceiving self-risk and taking action. The second stage in the process of behavioral change is decision and strong commitment to that decision. The decision may not always be to practice safer sex. It can be remaining undecided, waiting for the problem to rectify itself and resigning oneself to the problem situation. This stage is mainly influenced by perceived cost-benefits, which is determined by response efficacy and enjoyment, and self efficacy, which is the perceived ability to perform safer sex.

1. Response efficacy:

It is the central component of both the health belief model and Bandura's efficacy theory. Perceived effectiveness of safer sex in preventing HIV is the benefit one would think of before making the decision to adopt safer sex. Suspecting a tiny piece of a condom as being capable to prevent the virus from entering the body is an example of concern one would have regarding the response efficacy. In Nepal, transport workers have little faith over any public HIV prevention program and the measures suggested by them.

2. Enjoyment:

For safer sex transport workers are being asked to avoid behaviors perceived as most pleasurable and to increase less enjoyable activities. This is the cost of adopting safer sex. The transport workers may not view non penetrative sex as real sex and condom is perceived as a barrier of sexual pleasure.

3. Self efficacy:

It refers to people's perceptions of their ability to perform the measures of safer sex such as confidence to use a condom. Belief in one's capability to act upon measures of safer sex, has been found to be associated with intention to change behavior. Demonstration and practice sessions or presenting real life examples of people from same target population will help in enhancing their self efficacy.

2.4.3 Stage three: Enactment

Once a person is committed to achieve the goal of safer sex, he or she will begin to take steps in that direction. This stage will again have three phases i.e. information seeking, obtaining remedies and enacting solution. After acquiring information some transport workers may decide to opt for self-help while others will seek assistance from friends or professionals. Enacting the decided solution is complicated because it involves the persons sex partner/s.

1. Help-seeking:

Help-seeking patterns of people are not predictable and differ according to the type of problem and help desired. For other health problem people may go to physicians but for sex related problems they may seek informal social support such as from close friends. In some parts of India, STDs are the most common illness for which medical care is sought. However many transport workers still self medicate or rely upon friends for treatment advice (Gordon, 1995).

2. Sexual communication:

Ability to communicate verbally about sexual issues and to show assertive skills is important to encourage one's partner/s also in safer sex. It is important to ensure that the CSWs or other women at risk along the highway routes and boarder towns are capable to negotiate safer sex. Similar skill is also warranted for the cleaning boys or the assistant drivers. The transport workers at large may require assertive communication to cope with peer pressure.

2.4.4 Movement to higher stage:

There are some factors, which are important in all the stages of behavioral change. They help to move up from lower to higher stages of change.

1. Aversive emotions:

People move to a higher stage if the goals of the prior stage are achieved. There are many external and internal cofactors factors influencing each of the stages. However, an internal factor influencing movement is emotional states. Distress has been found to motivate going to a higher stage. For example fear and anxiety may increase the perceived seriousness of a problem and also influence help seeking. High level of distress may decrease self-efficacy. Consumption of alcohol or drugs among the transport workers facilitate high risk behavior by lessening aversive emotions. Both the low or the high level of anxiety is not conducive to adopt safer sex practices. However a moderate level may be helpful in motivating people for that.

Alcohol drinking and visits to CSWs have been linked together by many studies in Thailand, India and Nepal (Sawaengdee, 1991; Rao, 1993). In Nepal alcohol use is very common and drinking is almost socially accepted. Consumption of Bhang and marijuana has religious and cultural roots (Majpuria 1997). Many of the drivers drink because of their "need to relax muscles" and some even chew hash balls to keep themselves awake and alert while driving (Ro et al., 1995).

2.5 COFACTORS OF HIV TRANSMISSION

The cofactors are conditions that can increase the risk of HIV exposure, increase susceptibility or decrease ability to receive or act upon prevention messages

(San Francisco plan, 1997). The cofactors, discussed in international literature are presented here for analyzing the risk of transmission to the transport workers in Nepal.

2.5.1 Biological cofactors

1. Sexually transmitted diseases:

STDs have both biological and behavioral links to HIV. Genital ulcers caused by STDs infections provide an open door for HIV to pass from one to another sex partner. Many other STDs are relatively free of symptoms in women, despite internal sores or inflammation. Inflammation can increase the risk of HIV infection.

STDs are very common among truckers. In Nigeria 44 percent were estimated to have a history of STDs. A national pilot study of STD prevalence and incidence among truckers in India reported an overall incidence of 51.4 percent (Gordon). In Nepal, in an interview with 100 clients of CSWs (most of them were transport workers), 46 percent reported a history of STD infection (Cox and Subedi, 1993).

2. Circumcision:

There is no evidence linking female circumcision as a risk factor to HIV infection. However there is some evidence that uncircumcised men are relatively more at risk to contact and transmit HIV and other STDs. Researchers think that foreskin traps vaginal fluids, provides a larger surface area for virus uptake and more likely to

cause tiny tears during intercourse. In Nepal, except in the case of the minority Muslim population, the tradition of circumcision does not exist. So most of the transport workers are uncircumcised, which increases their susceptibility to HIV if exposed.

2.5.2 Social cofactors

1. Social networks and norm:

Social support is essential to change behavior. However, social support does not reduce risk in all populations. Social networks can increase risk in groups where the norm encourages risk-taking or ignores risk. In Thailand, peer pressure and social expectation may force men as young as 15 years of age to visit brothels frequently. Among transport workers the sense of community is very strong and peer pressure is an important factor to encourage the use of alcohol and CSWs (Rao et al., 1995; Gordon).

2. High risk environment:

Mobility gives people a high degree of anonymity and disrupts the 'checks and balances' that might influence behavior within more stable communities. People may go through a (temporary) personality transformation (towards high-risk behavior) when they travel away from their home environment to a new setting. However it may not be the mobility as per say but entry into a risk environment that shapes the behavior of the transport workers.

For the transport workers, the environment in highways and border towns with the easy availability of sex workers and alcohol, and away from their own community, works as a stimulus for risky sexual contact. Most border crossings are remote from central and provincial law enforcement head quarters. In addition, the transport workers by virtue of their profession, have the opportunity to meet many travelling women daily. The option of casual, commercial and marital/extramarital sex are perhaps greater for this group.

3. Economic factors:

Poverty increases the risk of HIV infection through limited access not only to health information, but also to health services such as STD treatment and condom supplies. However in the case of transport worker the economic factor has worked other way round. Truckers have a relatively high disposable income and are more prosperous as they have sizable extra income (Rao et al., 1995; Gordon). They spend this disposable income on consuming alcohol or on visits to CSWs. Further, the charge of CSW is only 93 Rupees, which is easily affordable by the transport workers (New Era, 1997).

4. Discrimination:

Discrimination or stigmatization refers to socially defined patterns of prejudice or rejection. The transport workers are taken as a subset with illicit behavior in many

countries. This discrimination alienates them from other people in the society and transport workers hesitate to come forward to accept services in public outlets.

2.5.3 Psychological factors

1. Mental health stressor:

Stresses on mental health functioning influences thought and decision-making processes and can hinder physical functioning as well. Economic pressure to complete as many trips as possible encourages risk-taking behavior among truckers. Although drivers have a constant companion such as an apprentice or friends, many feel lonesome and are stressed (Sawaengdee, 1991). So they try to cope with the monotony and the harsh all male environment by visiting sex workers (Gorden, 1995). This may be the case in Nepal also.

2. Self-esteem:

Low self-esteem leads to participation in HIV risk behavior. Those with low self-esteem are also unlikely to value their health. Studies have shown truckers as having low self-esteem and its role on HIV transmission (Gordon, 1995). The low self-esteem may be a product of continuous harsh and hazardous condition which truckers endure while on road. Similarly the drivers consider themselves as a bad section of the society, which commit wrong things such as visit CSWs. They also have a guilt feeling of guilt for passing the infection on to their wives (Rao et al.,1993)

3. Sex Abuse:

Another psychological factor is related to sexual abuse. Studies have found that those who suffered sexual abuse during childhood are more likely to commit it themselves when they become adults (CDC, 1997). Some cases of sexual abuse or coercion sex with the assistant driver or cleaning boy has been documented in India and other parts of the world (Rao et al.1995). Cleaners, who are apprentices to their driver-tutors obey any right or wrong commands.

2.5.4 Accessibility

1. Language and literacy:

Less educated clients such as transport workers, have limited access to AIDS education messages. The language barrier and low literacy skills limit access to preventive message and services. As the message in radio about AIDS was very indirect until recently in Nepal, less educated clients of CSWs such as transport workers could not fully understand it. The average education level of drivers is 6th grade in Nepal and some transport workers' mother tongue is not the Nepali language, in which most of the messages are delivered.

2. Availability of prevention services:

The outlets for condom distribution was reported to be inadequate in relation to distance and timing in Nepal (DHS, 1995). The mobile population often does not have

the knowledge or means to access the services that exist. Inadequate number of outlets to sell condoms has been suggested as a reason for the low use of condoms. (Rao et al., 1995; New Era, 1996). Similarly in Nepal, the programs designed for other populations could not reach the transport workers. As a result they have limited access to AIDS education and prevention services like STDs treatment, Counselling or condoms.

2.6 ALTERNATIVE INTERVENTIONS FOR HIV PREVENTION

The interventions suggested by DACC, Kailali can be analyzed in four major groups I) increasing accessibility of prevention services; ii) AIDS education; iii) HIV antibody testing; and iv) Counselling services. I am analyzing here effectiveness of these interventions and their applicability for promoting safer sex among transport workers in Nepal.

2.6.1 Increasing accessibility of prevention services

1. Condom promotion:

Increasing the number of people using condoms during penetrative sex has been a major goal of the AIDS prevention program for the last four years. The third day after the national Dasain festival has been celebrated as condom day Raising awareness alone could not increase condom use and the importance of availability was realized. In Nepal, the Ministry of Health makes condoms freely available to people through its

health institutions and field workers. However, due to several factors, in the health post level, condom logistics, similar to other medicines and supplies, suffer from irregular supply and chronic shortage. Further, the public condom distribution is designed for family planning program, so the system may not be effective for high risk people who require far larger quantities of condoms compared to ordinary couples. For the sake of anonymity of the users, for the last four years, the Ministry of Health has started to distribute condoms through condom boxes in each of the public health institutions. However they also suffer from the problem of acute shortage and staff are not comfortable to let condoms be openly taken for sex outside of marriage.

A number of NGOs have been involved in distributing condoms to the hard-to-reach groups such as sex workers, policemen, soldiers, prisoners or transport workers. They have been more successful in their effort to reach the high risk groups with condom supplies. However, the transport workers are not accessed much by this service because of their mobility and lack of distribution outlets suitable for them. They have shown only a negligible increase in condom use.

2. Social marketing:

Based on the concept of using traditional marketing tools to sell consumer products, many countries started social marketing to 'sell' healthy behavior to consumers. Nepal contraceptive retail sales company (CRS) started marketing condoms along with other contraceptives in the early 1980s. Compared to many other countries, condoms are highly subsidized in Nepal. Subsidizing condoms or distributing them

freely has been accepted as an effective strategy to promote safer sex among the high-risk groups because they require a larger number of condoms than a monogamous couple (Over and Piot 1991).

Compared to free public distribution system, social marketing has been successful in increasing accessibility in Nepal. In 1996, more than 65 percent of CSWs and 70 percent of clients, reported obtaining condoms from commercial outlets, whereas only 25 percent obtained condoms from health posts or health workers (New Era, 1997). Although condom marketing by the CRS company is nationwide, it does not have any outlets in the interior and the promotion campaign for high risk group is limited to only the Central and the Eastern region highway routes. Further, social marketing has limitations in reaching marginalized groups and people with highest risk behavior groups (HPC, 1997).

3. Early treatment of STDs:

Treating STDs has been accepted as an important intervention to prevent HIV infection. Treating 100 STD cases prevents more than 2000 cases as a dynamic effect (Over and Piot, 1992). It is cost effective also and the cost per Disability Adjusted Life Years (DALY) through this intervention can range from \$0.56 to \$50 depending upon the success in reaching core groups and the level of HIV prevalence. The cost can be expected to be even less for developing countries.

In Nepal STDs are managed through skin and venereal disease sections in national and regional hospitals. The service, though planned, has not been started yet in the Seti Zonal hospital located in the Kailali district. Since 1993 a separate STD control program, supported by the Commission of European Communities (CEC), operates within the framework of NCASC (Burathoki, 1993). However a large number of people with STDs do not visit health posts or hospitals for treatment.

The major initiative in Nepal was taken by AIDSCAP, with its training of pharmacists on STD case management following WHO's syndromic approach. It aimed to increase the access of women and men at risk to improved services. As pharmacists play an important role in health service delivery and they are the first point of contact for medical care, it has proved to be a very successful approach (New Era, 1996). Many transport workers are found to use these services.

STD treatment services of NGOs of the far-western region has been mainly targeted at the high risk groups. Two NGOs; Institute of Community Health (ICH) and Nepal National Services Welfare Association (NNSWA) are operating STD services both through fixed and routine mobile clinics. These camps have been successful in reaching the hard to reach population with STD diagnosis and treatment. However very low attendance of male clients (10 %) in these clinics suggest low access of this service to the transport workers.

2.6.2 AIDS education:

1. Media campaign:

Mass Media is a form of communication that can reach a large number of people with messages and can provide correct information or reinforce what people already know. Mass media often requires a substantial amount of funds and therefore many grassroots organizations can not afford to run it. Other small media such as brochures, posters, cards and videos are cost effective and affordable.

In Nepal, the first multi-media campaign “Dhale Dai” was launched by AIDSCAP in mid 1995 through to 1997. As the main focus of the AIDSCAP program in Nepal is highway-routes, the transport workers were among the intended audience. This campaign has been very successful in desensitizing people about condoms and HIV/AIDS. In total 42,000 people were educated and a high percent of transport workers cited this campaign as the first source of information (New Era, 1996). Because of the single focus, the message is straight-forward and clear. However, messages delivered through media are too impersonal to address deeply held beliefs and to bring a change in behavior (Freudenberg, 1989).

The second campaign SAFALATAM, very different from Dhale dai, was launched by Save the Children US for six months in 1997 and still continues now to a lesser extent. SAFALATAM literally means ‘super success’ and as an acronym it carries five separate messages targeting different groups, one of which targets sexually

active population including transport workers. However, there is enough possibility of confusion in the mind of people due to a number of messages in the same campaign. Despite a high coverage, because of low concentration, this campaign will have a limited effect in bringing behavioral change in the core groups (Marseille, 1997).

2. Peer education:

Peer education involves services by individuals who are recruited from a targeted population. People are more likely to adopt new behavior, if they are introduced by someone, who is similar to them and is perceived to be a role model (Coates and Frienblatt, 1990). Especially, the harsh condition and social characteristics of truckers' subculture, makes it difficult for outsiders to have empathy and credibility (Gordon, 1995). A study of 21 projects in Africa, Asia and Latin America has shown that 62 percent of the project managers believe that peer educators have been instrumental in helping their peers change behavior and 99 percent of the target audience believe that they are a good and comfortable source of information (Flanagan et al., 1996).

In Nepal, several NGOs are working with this intervention. In the Far west region ICH and NNSWA have trained peer educators from CSWs and Police personnel. Some attempts have been made to use peer education for transport workers, which could not succeed because of the denial of self-risk and inadequate free time to attend training. In Tanzania and Kenya peer educators for transport workers were selected not only from that population but from CSWs and people in the truck stops (Gordon, 1995).

3. Outreach education:

Outreach activities are done for groups or separately for individuals. The outreach site is usually fixed and may include street corners, bar, sex clubs or places of public events. It respects the operating condition and spirit of the venue or event. The group outreach is effective to promote safer sex as a community norm by building peer support for safe activities and to create peer pressure against risky activities. The functions carried during outreach activities are not only limited to education but includes services such as the distribution of appropriate prevention materials, assessment of a client's needs, and risk reduction information and referrals. It is more effective when implemented for a longer period of time and preferably by someone indigenous to the community targeted. This intervention may not be effective for population who are well informed but continue to show high risk behavior.

Outreach intervention has been proved very effective with the IDUs because of tangible, material for distribution which they value. In Nepal also, an NGO, LALS, has successfully used street outreach to reach the IDUs who lack access to any health service or information. The information booths in Kailali, established by ICH, were intended to provide outreach services to the mobile population such as transport workers and migrant workers. However, the recent survey of transport workers has indicated that the booths also were not fully able to reach this target group with information or other prevention services. AIDSCAP Nepal, which implemented a targeted intervention program in the central and eastern highway, has documented high cost of person to person outreach intervention as a lesson learned.

4. Speakers bureaus:

Speaker bureaus bring together individuals who have been impacted by the HIV epidemic to speak to groups or communities. Speakers can be service providers, friends, families and significant others affected by HIV/AIDS. It is better to involve speakers from the same target population. It is very effective in increasing sensitivity and destigmatization, and also in breaking denial for people who have a low perception of self-risk.

It, however, is not an activity sufficient to bring behavioral change. Similarly it is not appropriate for people with multiple issues and serious mental health stress. Due to heavy stigma attached to HIV positive it has not been tried in Nepal, except in a few closed circle events in Kathmandu. However, given the low risk perception among transport workers, this intervention can help to a great extent.

2.6.3 HIV antibody testing

1. Counselling and testing:

Counselling and testing provides a personalized, client centered encounter in which an individual can learn her/his sero status as well as obtain tools to assess risk and develop personal methods for behavior change. For gay men and IDUs it had an effect in lowering risky sexual behaviors but similar effects could not be found with STD patients. Holtgrave analyzed cost benefits with standard methods and suggested

that publicly funded Counselling and treatment services result in a net economic gain to the society. Benefit cost ratio is 20.09, assuming \$160 is spent on direct/indirect costs per case and that one HIV infection is averted if five sero-positives are identified.

“Counselling and testing have a place in risk reduction but are not sufficient for HIV reduction” (Choi and Coates, 1994). A significant proportion of those who test positive experience depression, isolation and serious anxiety and may be stigmatized. It may have limited benefits for people in a situation of total isolation and lack of social support. Some investigators have suggested that knowledge of HIV negative sero status may result in a small, net increase in risky behavior (CDC, 1997). Actually, the behavior change seen in testing programs is due to Counselling and not testing (Freudenberg, 1989).

Testing has its own value in helping individuals make important life decision related to marriage, pregnancy or work. But it has been encouraged by authorities to impose restrictions or legal sanctions and to isolate or quarantine the sero positive person/s. Due to an absence of known cures and a high degree of uncertainty in test results, screening of individuals or groups can not be used in the same way it was traditionally used for other diseases (Freudenberg, 1989).

Mandatory testing can send high risk behavior people underground and may also give a false sense of security to others. Still in some countries, testing without consent is done for certain group of people including pregnant women and hospitalized patients. For both groups it is counter productive because it may discourage attendance

of ante-natal services and encourage negligence of universal precaution in health care setting. Harvard University has set the following five criteria for starting a mandatory test, which are not easy to fulfil in any country:

1. The selected population have a reservoir of infection
2. The environment must pose a significant risk of spread
3. The knowledge from the testing should enable authorities to activate measures, which otherwise are not possible
4. The critical consequences of testing is lower than the benefits
5. There is no other less restrictive alternative to testing.

In Nepal, HIV antibody testing is offered through anonymous unlinked services. Testing is completely voluntary and done only after ensuring informed consent through pretest Counselling. However testing sites are limited only to big hospitals. Private physicians in major towns also provide testing in their clinics. In Kailali, the Red Cross blood bank has a testing facility but it used only for screening the donated blood. For reasons such as lack of appropriate Counselling and care service, voluntary testing has not been started yet.

Effectiveness of testing program for HIV prevention is linked with the availability of antiviral drugs. Unfortunately in developing countries, the price of AZT is extremely high. The current cost of AZT is \$8,000 per patient per year. The price may drop, still the annual cost exceeds the annual per capita GNP of almost all developing countries. The national long-term plan for HIV/AIDS prevention does not include the provision of AZT in Nepal.

2. Partner notification:

Partner notification, known also as contact tracing, has been an important element of classic STDs (CSTD) programs. Its advantage is that the sex contacts can be aware of their risks and protect themselves and infected contacts can be counseled for living positively. Partner notification can be through the patient referral or through provider referral. Notification through the provider is helpful when the partner is not currently in their life and who may have violent reaction. There can be mandatory notification also but that can be grossly counter productive and unjustifiable on moral grounds without the provision of antiviral drugs.

The voluntary partner notification is a cost effective approach to HIV prevention in terms of the cost per infection averted. The cost per individual partner notification is around \$33-65 in the US, which mainly includes the labor cost. For the developing countries, cost can be expected to be much lower. It would only be 0.5 percent of the GNP per capita, which is within the reach of resources available (Over and Piot, 1991).

However it is not easy to adopt partner notification in the HIV prevention program. In classical STDs (CSTDs) there is a cure, which acts as strong motivation for partners both to trace contacts and to visit the clinic for treatment. In the case of HIV there is no such motivation in the absence of any known cure. Further, in the developing countries, confidentiality is not respected and people know each other by face in a small community. This situation combined with strong stigma and

discrimination against HIV positives, may discourage the partners to participate in contact tracing.

In Nepal partner notification is not successful even for CSTDs. Because of lack of trained full time counselors, both Counselling and contact tracing is conducted by doctors. Due to heavy patient load, doctors have time only for a cursory investigation and may ignore contact tracing (Budathoki 1993). In a survey of transport workers in Kailai, only 13 percent could mention 'treatment of STDs for both partners' as important (VaRG, 1997). Partner notification for HIV has not been implemented aggressively in Nepal yet. The HIV infected person is simply advised to inform the partners if appropriate and bring them for testing.

2.6.4 Counselling

1. Individual Counselling:

The need for Counselling in AIDS arises immediately after detection of AIDS cases in 1981 to provide psychosocial support to the patients and families. After isolating HIV, the terminal nature of the disease became clear and Counselling became an essential part to bringing life adjustment in the PHAs. The start of antibody testing necessitated pre and post test Counselling to obtain informed consent and to prepare the client for the result. The Counselling and testing indicated success in changing behavior. However soon it became clear that behavior change was due to Counselling and not due to testing. It encouraged programs to provide Counselling for behavioral

change irrespective of the link with antibody testing, in the form of risk reduction or prevention Counselling.

An evaluation of multi-site individual risk reduction Counselling intervention with heterosexuals attending STD clinics, shown that in a three months period, the proportion reporting no condom use with a main partner decreased from 52 percent to 32 percent and with other partners from 33 percent to 16 percent. The main limitation of this strategy is that ongoing Counselling sessions may not be appropriate for clients, who are unable to keep appointments and one time Counselling sessions may not have an impact on behavior change. The peer model has been found very effective in the delivery of Counselling (HPC, 1996).

In Nepal, Counselling is mainly limited to HIV test related situations and psychosocial support to people living with AIDS. Save the Children US in collaboration with AIDSCAP, initiated prevention Counselling in 1994 by training some NGO staff. Because of the low priority assigned to Counselling and due to its time consuming nature, they were basically providing education only. Some NGOs such as ICH and NNSWA had planned to offer Counselling services through the information booth and STD clinics in Far western districts. Because of the limited time to stop near the booth and the inability to leave the vehicle, most of the transport workers could not attend the Counselling services.

2. Group workshop and Counselling:

Group workshop or Counselling can be a single session or a multiple session activity, focussing mostly on information about HIV, motivational activities and skill-building. It can take a variety of forms such as involving impromptu groups, using vans as session sites and groups in bars or restaurants. The HIV/AIDS issues can be linked to other life issues during Counselling. It is very helpful in learning sexual self-control, sexual communication and assertiveness.

Multiple sessions provide an opportunity to go into greater depth about HIV risk reduction issues and strategies and thus provide enhanced opportunity to sustain behavior change. However it is not feasible for people who have limited free time and who have difficulty in keeping the appointment. On the other hand a single session can be more effective to access higher-risk groups in their venues and reach those in denial stage. Both types of group Counselling require a hook other than HIV prevention alone, to approach the clients.

NGOs in far western Nepal have tried both single session and multiple session activities but in the form of training for the groups like policemen and army. This intervention was tried with transport workers also but mostly only those operating locally attended. Because of being more structured and of formal nature, NGOs were successful only in providing information but not in problem solving and raising sensitive issues.

3. Telephone hotline:

A telephone hotline has provided AIDS organizations with a direct link to people concerned about AIDS. It is a confidential telephone service, functioning as a Counselling, educational and referral helpline for anonymous callers. It has the advantage of targeting a wide geographical area and reaching diverse and sometimes isolated population. Studies have suggested that although knowledge alone is not sufficient cause, it is a necessary basis for change in behavior.

Some NGOs in Kathmandu have established a telephone hotline service on AIDS. As reported by these organizations, they receive many calls a day by people with concerns about the infection. Due to an absence of a proper recording system the impact in behavioral change can not be measured. The hotline service has not been started in Kailali, because of limited telephone connections. Further it has limited use for the mobile population such as transport workers.

2.7 THE INTERVENTION: HIV PREVENTION COUNSELLING

As discussed in the previous section, all four alternative interventions have limitations, either in terms of their efficacy for behavior change, their effectiveness with the transport workers, or feasibility in the context of a mobile target population and in an area with a limited health infrastructure. Educational interventions such as mass media was found to have little effect in changing sexual behavior because of

being too impersonal (Freudenberg, 1989) and having low concentration on transport workers (Marseille, 1997; Over and Piot, 1992) and peer educators could not be recruited from the transport worker population (ICH, 1998). Outreach activities have been relatively successful in reaching the Injecting Drug Users (IDUs) and transport workers in other areas (LALS, 1998; AIDSCAP, 1997). HIV antibody testing is not available in the Kailali district (Red Cross, 1998) and partner notification is not successful even for classic STDs (Budathoki, 1993).

Increasing accessibility of free condoms through public outlets is not effective for all high-risk behavior populations. Similarly, very few such men were found to visit the STDs clinics in Kailali (ICH, 1998). Social marketing of condoms and STD syndromic case management by pharmacists has achieved some success with transport workers in other parts of Nepal (AIDSCAP, 1997). However demand for these can come only after transport workers have realized their own risk and are committed to making changes in their risky behavior. Hence, HIV prevention Counselling has been proposed as the most appropriate intervention to promote safer sex among the transport workers

In order to establish the effectiveness of HIV prevention Counselling in reducing unsafe sex among transport workers, I am presenting here its definition and processes. Some implementation and evaluation issues are also discussed in order to analyze its applicability as an outreach services to the transport workers.

2.7.1 Introduction:

Counselling has always been a form of human interaction found in all cultures. Over the years, such functions were carried on by the elders within the kinship system or by community and religious leaders. Within the past 50 years, it has become a scientific discipline and art involving interpersonal communication skills. HIV prevention Counselling is a personalized client-centered process, which assists the client in the process of reducing risky behavior (DHR, 1997). The essential Counselling stages are rapport, risk assessment, decision, action and enactment. There is ample opportunity to apply behavioral theories in these Counselling stages because they are very similar to the stages of change shown in the conceptual framework: labeling, commitment and enactment (Catania, 1991).

HIV prevention Counselling can be very effective in helping transport workers reduce their unsafe sexual behaviors in Nepal. Through information giving and risk assessment, HIV prevention can help in perceiving self risk. To have strong commitment, reviewing past action/barriers and proper reinforcement enhances self-efficacy and perception of benefits. Similarly, Counselling can help transport workers enact safer sex by goal setting, action planning and life skill training.

As transport workers are mobile they are not likely to come to the clinic setting to receive Counselling. WHO (1993) has recommended that HIV/AIDS Counselling can be provided in other settings if the counselor is sensitive to the situation. Hence it is appropriate to provide this service to the transport workers as an outreach service.

Behavioral change is more effective if it is facilitated by members of the same community and it has been found that transport workers have a strong sense of community. Therefore the outreach counselors should be selected from the indigenous population. Studies have shown that paraprofessionals can effectively deliver theory based Counselling (Cabral, 1996).

Proper training and routine supervision to the counselors is very important to maintain the quality of the HIV/AIDS Counselling. Training content focuses on building qualities of counselor such as confidentiality, acceptance, non-judgemental, empathy, cultural sensitivity. Also skills such as reflective and active listening, proper questioning, and non-verbal communication are very important (WHO, 1995; Barry, 1997). For properly implementing the Counselling service in district level, it is crucial to mobilize health authorities and collaborating agencies, and also to establish proper coordination and linkages for information and referral (WHO, 1993).

It is not enough to evaluate the Counselling only on the basis of client satisfaction. All three types of evaluation, initial assessment, process evaluation and impact evaluation, are equally important. Initial assessment provides vital information required to design Counselling service, and it also provides a baseline against which achievements can be measured. Process evaluation focuses on input and output, in order to look at the efficiency. Impact evaluation on the other hand focuses on the eventual outcome of Counselling.

2.7.2 What is HIV prevention Counselling:

Counselling has been successfully used for behavioral change in many countries. The risk reduction Counselling or HIV prevention Counselling can successfully apply the important cognitive, emotional and behavioral influences of safer sex.

HIV Prevention or risk reduction Counselling is a personalized, client-centered encounter between an individual and trained counselor. "HIV Prevention Counselling" refers to the active interchange between the counselor and the client. It is a client centered process that focuses on behaviors which place an individual at an increased risk of infection and assists the client in addressing those issues through assessment, identification of options and support positive behavior changes (DHR, 1997). As it is a client-centered model, it is generally suitable for all populations.

2.7.3 Why is HIV/AIDS Counselling necessary:

WHO (1995) has recommended that HIV/AIDS Counselling should also be provided to those individuals with no known infection if they have high risk behaviors. Counselling should be provided to individuals with risky behavior even if they are not aware of it. The need arises not only for behavioral change but also to help them deal with the emotional disturbances arising because of HIV/AIDS. The number of communities where individuals can consider themselves not to be at risk of getting HIV is becoming smaller and smaller. Many people start to think of their personal risk when

they receive some information regarding the spread of HIV, which makes them doubt their own safety.

Transport workers also have concerns about HIV because of some reasons. As the reasons are related to sex and risk behaviors, these may be confidential and can not be discuss in public. The transport workers need an opportunity to discuss these reasons with well-informed people. The following are possible reasons why the transport workers need Counselling services:

1. Reduction of emotional stress:

When a person knows own personal risk of HIV, he/she often experiences profound psychological disturbances. They need assistance in going through the emotional and physical crisis, which can be reduced by Counselling (Barry, 1996). As infection with HIV is life-long and there is a stigma attached to it, transport workers become afraid and land in a stage of denial. Fear and anxiety are aversive emotions, which requires factual information and empathy. In the case of transport workers also, a dilemma between educational message and peer norm may arise, and they need Counselling to deal with that. Similarly they require Counselling to deal with the stress related to their occupation such as to complete as many trips as possible, being away from home or fear of accident.

2. Coping with changes in life brought about by HIV:

Most people feel limited in what they can do and make changes in their lives. Individuals need continued support to cope with new changes in life as a result of HIV (WHO, 1993). Counselling can help transport workers live with high self-esteem, face discrimination and fight social rejection. They have to make important decisions about the adoption of safer sex. Adoption of new sexual behavior may provoke a sexual/emotional crisis within the transport workers and with their partners. The provision of a continuous dialogue with them and their partner is essential for safer sex to be accepted and used on a sustained basis.

3. Making prevention messages personally relevant:

HIV is new and information regarding it is easily misunderstood. This has resulted in various myths among the transport workers, which are further strengthened by cultural values related to two important aspects of life: sexual life and reproduction. As talking about sex is taboo in many cultures, opportunities for dispelling these myths for the transport workers are rare in public education campaigns. Further, information has to be personally relevant before it is perceived as personal risk. Counselling adapts AIDS education to make information relevant to personal life and it also assist clients in weighing the preventive options in relation to their own personal values (WHO, 1993).

2.7.4 Implementing Counselling activities:

Some activities are critical for implementing HIV/AIDS Counselling in a district. Usually in countries in the early stage of the epidemic, Counselling services are available only in a few cities. The following are steps required to establish Counselling activities within the existing health or social services of a district (WHO, 1993):

1. Mobilizing health authorities and collaborating agencies:

It is essential to analyze the national and district level HIV/AIDS situation and Counselling policies as well as local circumstances and opportunities for further development. This information should be discussed with district level professionals and colleagues from NGOs /CBOs, primarily involved in Counselling activities. It is important to identify and find out the interest and cooperation of key people at all levels. The experiences of transport workers are especially valuable in establishing most accessible and relevant Counselling services. Planning of Counselling activities should involve all the above categories of people as a team, which may facilitate the integration of Counselling with ongoing activities.

2. Establishing coordination and linkages:

Carrying out Counselling activities requires links with other sectors of the AIDS control program and with other related organizations, such as blood transfusion centers,

HIV antibody testing centers, STD services, ante-natal clinics, primary health care facilities and hospitals. The collaborating agencies need to know the specific Counselling activities offered, the time schedule of the counselor and the referral procedure. Meetings may be held from time to time to reinforce these linkages. Counselors need up-to-date accurate information and this is best acquired by keeping active linkages with clinicians from relevant disciplines, health educators and epidemiologists. In addition, voluntary groups within the communities are resources of social service to the needy people

3. Management of Counselling service:

Management information systems, organization of staff and assignment of role and their supervision are components of managing Counselling services. Record keeping of case notes, statistics and daily activities are part of management information system (WHO, 1997). The underlying principle is that information flow should be timely, complete, simple, accurate and over and all confidential. A Counselling record consists of confidential client card, Counselling register and weekly or monthly reports by the counselors.

Providing job description to the counselors and task analysis is an important function of managing Counselling activity. The job description should be written clearly. After working for some time with that it is appraised with the counselor by the immediate supervisor in terms of issues related to duties and responsibilities; skills and qualifications; attitudes and personal qualities.

Supervision of counselors is another important aspect of management. A number of problems may arise after starting the Counselling services. Problems such as overwhelmed staff, staff being threatened, resources being stretched, inadequate referral services etc may arise. The supervision process should continually observe staff performance, progress toward the set target, day to day problems and support the counselors by making the solutions apparent.

4. Maintaining standards of Counselling:

Counselling procedures have to developed in order to ensure that accurate information is passed to the clients and that the standards of confidentiality has been maintained. Procedures are developed in the form of a protocol containing information regarding who is to carry which activity, where and how. It should also include information on days and hours that the Counselling service is available and how clients can make an appointment. However the procedures should be simple to apply and flexible.

In order to maintain quality, the supervisor has to search innovative methods to oversee the standard of Counselling session. However the main aim here is to provide support to the counselor and not to find fault. One method is audio recording done with the permission of client. The counselor reviews the tape with the help of other counselors. Next is the Counselling checklist, which is a list of items of Counselling to be checked mentally so that none are omitted. Another instrument for maintaining

standards is a Counselling record form. It is a simple record of the main items in the checklist. The supervisors can retrospectively go over this record to review quality.

2.7.5 Evaluation of Counselling services

Evaluation is done by measuring the actual achievements against the set performance targets for a specific time frame. Many Counselling programs are evaluated on the basis of client satisfaction alone, which is not a sufficient measure of effectiveness by itself (WHO, 1993). The absence of formal evaluation mechanisms while developing the Counselling programs, has been found as the major flaw in the improvement of services. There are some problems in the evaluation of Counselling programs. The lack of evaluation expertise related to Counselling and expertise related to research methodology both constrain the planning and carrying out of the evaluation. Other difficulties faced are the lack of time /resources, lack of objectivity in evaluation and no follow up on the evaluation findings (WHO, 1993).

There are three levels of evaluation for the Counselling service. Initial assessment is the first step in evaluation. In addition to providing vital information required for the Counselling initiation, it provides a baseline against which achievements can be measured. During this phase, information about client characteristics and their beliefs and attitudes are also collected to better design the service

Process evaluation focuses on the efficiency of the activities with regard to utilizing inputs. The outcome of Counselling alone, without looking at the input and output, is not sufficient to determine the effectiveness of Counselling services. End outcome will not highlight the actual meaning of success or failure without looking at the entire chain of events. Evaluation of input such as resources, time, personnel etc and output such as counselors trained, clients served, materials developed, are an important part of process evaluation.

Similarly measuring standard of Counselling is vital part of the process evaluation. Case discussions with supervisors and colleagues, have been found as an important method to assess the quality of Counselling. A counselor takes note of the interesting cases and gives a presentation of these cases outlining events and discussions that took place during the Counselling session.

Impact evaluation on the other hand focuses on the eventual outcome of the effect of the activities. To evaluate the effectiveness of Counselling program, one needs to know the impact it has on the preventive behaviors of the clients. This can be achieved by surveying the behavior of clients who have received Counselling. The study design can be before and after or measured in more than two points of time.

Another approach is pilot testing for the evaluation. The success of Counselling in certain programs can be contextual. So it is necessary to pilot test it as an intervention before widely promoting. Randomized controlled trials are scientifically the best to measure behavior change but there is an ethical problem to use it in

HIV/AIDS Counselling. As this study design denies the control groups of the advantages of Counselling, it appears as ignoring the infection to a particular group. Hence, many Counselling intervention trials do not have a control groups. However, the University of Illinois in USA evaluated efficacy through a multi-center randomized controlled trail, which compared three interventions; HIV education, HIV prevention Counselling and enhanced HIV prevention Counselling (Kamb, 1996).

2.8 CONCLUSION

AIDS is a real threat for Nepal and this is more so because it is in the South and South East Asia region, which has the potential to be the epicenter of the HIV/AIDS epidemic. The infection rate in certain populations is already high and through sexual bridging the epidemic can easily enter the low risk population. In line with many other countries, transport workers have the potential of bridging the virus to a high extent because of their risky sexual lifestyle, necessitated by mobility risk environment and stress. Safer sex attempts by NGOs have achieved lower success with transport workers compared to other groups. Educational or other preventive services were unable to reach them. Further limitation of educational approach in bringing behavior change, particularly related to sex, indicates that enhanced behavioral intervention is required.

Stages of Change models such as ARRM, suggest behavioral change is not a one time but rather an incremental process and it is influenced by different social, cognitive and emotive factors. Counselling has been found as an appropriate method to

apply these influences. HIV Prevention Counselling has been effectively applied to promote safer sex. Hence, this intervention can be implemented by NGOs in Kailali district for the transport workers program. A problem may arise again regarding accessibility. However, peers and outreach workers can also deliver Counselling services. Careful planning, regular monitoring and appropriate evaluation activities can ensure its success.

References:

- Acharya S., Swee F., Fredrick A.(1994). Current HIV/AIDS Situation and Future Projections for Nepal. Summer Seminar on Population. East-West Center. Hawai.
- AIDSCAP/FHI. (1997). Final Report for the AIDSCAP Program in Nepal, August 1993 to July 1997.
- AIDSCAP/FHI. (1996). A Regional Cross Border HIV/AIDS Prevention Response in East Asia: Seminar Proceedings. AIDS Prevention Monograph series Paper no.2. pp 6-23.
- Anderson J., Chenny R. (1996). High Risk Behaviors, Street Outreach and Condom Use in Eight High-Risk Population (Abstract). AIDS Education and Prevention. 8(3). pp. 191-204.
- ARFI. NACO Truckers AIDS Prevention Generic Tool, Process Manual. Madras.
- Asia Regional Office/FHI. (1996). Explaining HIV Differentials in Asia-The Need for a Differential Response. Position paper no.2.
- Ed. Burry J., Morrison V., Lachlan M. (1992). Working with Women and AIDS, Medical, Social and Counselling Issues. Tavistock/Rentledge, London/New York.
- Barry J. HIV/ AIDS Counselling: Workshop on Epidemiology and policy for Control of HIV/AIDS in Asia. College of Public Health. Bangkok. pp.2-6.
- Burathoki K. (1993). STD in Nepal- A country report submitted to SEARO. WHO. New Delhi.
- Burns J.(1996). Denial and Taboo Blinding India to the Horror of its AIDS scourage (Abstract). New York Times.
- Cabral R., Galavolti C., Gargiullo P., Armstrong K. (1996). Paraprofessional Delivery of a Theory Based HIV Prevention Counselling Intervention for Women. Public Health Reports. 111 suppl 1: pp.75-82.
- Central Bureau of Statistics, HMG/NPCS (1996). Statistical Pocket Book Nepal. pp. 33, 121-127.
- Catania J., Kegeles S., Coates T. (1990). Towards An Understanding of Risk Behavior: an AIDS Risk Reduction Model. Health Education Quarterly. Vol.17. pp. 53-72.

- Choi K., Lew S., Vitting E. (1996). The Efficacy of Brief Group Counselling. AIDS. 10; pp. 81-87.
- Cox T., Subedi B. (1994). Sexual Networking in Five Urban Areas in the Nepal Terai. Valley Research Group. Kathmandu.
- Chin J., Dunlop D., Pyne H. (1994). HIV/AIDS Situation in Nepal. SAIPH Division. World Bank. pp.1-13.
- Center for Disease Control. (1997). HIV prevention plan, San Fransisco. pp 284-366 and 470-472.
- Garrett L. (1995). The Coming Plague- Newly Emerging Diseases in a World Out of Balance. Penguin books, New York;
- Gibson R., Mitchel M. (1986). Introduction to Counselling and Guidance. Macmillan Publishing Company. New York
- Gordon P. Annotated Review of Literature on Truckers, HIV and STD
- Gorse R. (1996). A Method to Measure the Costs of Counselling for HIV Prevention. Public Health Reports. 3(suppl.1). pp.115-122.
- ICIMOD. (1997). Districts of Nepal- Indicators of Development. Nepal.
- Institute of Community Health, AIDS prevention Program (1998). SCUS/DGIS HIV Prevention Project NGO Core Grant. Annual Progress Report, Year II. pp. 2-14.
- Kanjilal B. (1995). Assessment of Economic Implications of HIV/AIDS Epidemic on Trucking Industry and Costs of an Intervention. HHMR. Jaipur; pp.1-10
- Kamb M., Dillon B., Fishbien M., Willis K. Quality Assurance of HIV Prevention Counselling in a Multiple Center Randomized Controlled Trial. Project RESPECT Group, Public Health Reports 111 suppl 1. pp 99-107.
- Kaplan R., Sallis J., Patterson T. (1993). Health and Human Behavior. McGraw-Hill Inc, New York.
- Kapuan A., Bista K. (1997). HIV/Syphilis Prevention in Pregnant Women in four Urban Areas of Nepal. NCASC/University of Hydelberg, STD/HIV Project. Kathmandu.
- Kelly J., Murphy D. (1991). Some Lessons Learned about Risk Reduction after ten years of the HIV/AIDS epidemic. AIDS Care, vol.3, No.3. pp 251-257.
- Lattam J. (1997). Peer Counselling Proceed with Caution (Abstract). Educational Leadership. Vol.5. pp.77-78

- Marseille E., Aryal P., Basnet I., Harringshaw V., Sharma J. (1997). DGIS/SCUS Enhanced support to HIV Prevention in Nepal, report of the Mid Evaluation Team.
- McGirk T. (1997). Nepal's lost daughters India's soiled goods. Time. USA.
- Morris M., Podhisita C., Wawer M., Handcock M. (1996). Bridge Population in the Spread of HIV/AIDS in Thailand. AIDS, 10(11). pp.1265-1271.
- Narain J., Jha A.(1997). NGO and AIDS: Responding to the Expanding Epidemic. WHO, SEARO. New Delhi.
- Nepal Red Cross Society. (1996). HIV/AIDS Prevention Project Proposal. pp.2-4.
- New Era. (1996). Rapid Qualitative Assessment of AIDSCAP: Effect on Behavior Change among CSWs and their Clients. Submitted to AIDSCAP/FHI. Kathmandu.
- New Era (1997). An Evaluation of Interventions Targeted to CSWs Sex Clients on the Land transportation Routes from Janakapur and Birgunj to Naubishe. Submitted to AIDSCAP/FHI. Kathmandu.
- O'Connor P., Leshabari M., Lwihula G. (1992). Ethnographic Study of the Truck Stop Environment in Tanzania. AIDSTECH/ FHI. USA. pp.10-26.
- Over M., Peter Piot. (1993). HIV Infection and Sexually Transmitted Diseases. Disease. Control Priorities in Developing Countries. Oxford Medical Publications. New York.
- Podhishita C., Wawer M., Pramualratana A., Kanungsukhasem U., and McNamara R. (1996). Multiple Sexual Partners and Condom Use Among Long-distance Truck Drivers in Thailand. AIDS Education Prevention. 8(6). pp.490-498.
- Rao., Mishra K., Roy S., Dey A. (1993). A study on Sexual Behavior Patterns of Truck Drivers and Helpers. Workshop on sexual Aspects of AIDS/STD Prevention in India, November 23-27,1993. TATA Institute of Social Sciences. Bombay.
- Rao A., Sundararaman R., Shrestha B. (1995). Report of the Study Team for the Assessment of the Situation of HIV/AIDS on the Trucking Routes Between Nepal, India and Bangladesh. AIDSCAP/FHI. Kathmandu.
- Swaengdee Y., Isarapakdee. (1991). Ethnographic Study of Long Haul Truck Drivers for Risk of HIV Infection. Institute for Population and Social Research. Mahidol University. Thailand. pp. 16-24.
- Thapa D., Chene M., Aryal M. (1997). Himalayan Treasure. Himal- the South-Asian Magazine. Kathmandu.

- VaRG. (1997). Mid-term Survey of DGIS Enhanced Support for HIV/AIDS Prevention Project. Submitted to SC/US. Nepal.
- Weeden L. (1997). Gender and STD/HIV Risk in Nine Population in Nepal. SC/US. Kathmandu.
- WHO. (1995). HIV/AIDS Counselling: A Key to Caring . For Policy-Makers, Planners and Implementers of Counselling Activities. WHO AIDS series 8. Geneva.
- WHO, SEARO. (1994). An Orientation to HIV/AIDS Counselling. A Guide for Trainers. New Delhi,
- WHO/ Global Program on AIDS. (1993). Guidelines for Implementing HIV AIDS Counselling. Geneva.
- WHO/ Global Program on AIDS. Statements from Consultation on testing and Counselling for HIV infection. Geneva.