



Graduate School of Development Studies

**Information, Education and Communication Strategy for  
Prevention and Control of HIV/AIDS among the truckers in India**

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# SOON

By Vikram Seth

I shall die soon, I know.  
This thing is in my blood.  
It will not let me go.  
It saps my cells for food.

It soaks my nights in sweat  
And breaks my days in pain.  
No hand or drug can treat  
These limbs for love or gain.

Love was the strange first cause  
That bred grief in its seed,  
And gain knew its own laws-  
To fix its place and breed.

He whom I love, thank God,  
Won't speak of hope or cure.  
It would not do me good.  
He sees that I am sure.

He knows what I have read  
And will not bring me lies.  
He sees that I am dead.  
I read it in his eyes.

How am I to go on –  
How will I bear this taste,  
My throat cased in white spawn –  
These hands that shake and waste?

Stay by my steel ward bed  
And hold me where I lie.  
Love me when I am dead  
And do not let me die.

\*\*\*\*\*

An exclusive essay from *Aids Sutra: unknown stories of India*, an anthology in which 16 of India's best-known writers went on the road to cover a human story behind the AIDS epidemic in the country. The book has an introduction by Bill and Melinda Gates and a foreword by Amartya Sen.

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## LIST OF ACRONYMS

ABC	Abstinence, Being faithful, Condom
AIDS	Acquired Immuno Deficiency Syndrome
AITD	Asian Institute of Transport Development
ART	Ante Retroviral Treatment
BBC	British Broadcasting Corporation
BCC	Behaviour Change Communication
BSS	Behaviour Surveillance Survey
CSW	Commercial Sex Worker
CBO	Community Based Organisation
CII	Confederation of Indian Industry
CMS	Centre for Media Studies
FHI	Family Health International
FSW	Female Sex Worker
GOI	Government of India
GQ	Golden Quadrilateral
HIV	Human Immuno Virus
IIHMR	Indian Institute of Health Management and Research
IDU	Intravenous Drug Use
IEC	Information, Education, Communication
IIPS	International Institute of Population Sciences
MSW	Male Sex Worker
NACO	National AIDS Control Organisation
NACP	National AIDS Control Programme
NGO	Non-Governmental Organisation
NFHS	National Family Health Survey
NHAI	National Highways Authority of India
NNTIT	National Networked Targeted Truckers Intervention
NRP	Non Regular Partner
PIB	Press Information Bureau
PLHA	People Living with HIV/AIDS
PO	Programme Officer
RRE	Red Ribbon Express
RTI	Response To Intervention
SACS	States AIDS Control Society
SMS	Short Message Service
STD	Sexually Transmitted Diseases
STI	Selected Target Intervention
TN	Tamil Nadu
TI	Targeted Intervention
UNDP	United Nations Development Program
UNOPS	United Nations Office for Project Services
VCT	Voluntary Counselling and Testing
WHO	World Health Organization

## **CHAPTER ONE**

### **INTRODUCTION**

The first AIDS case was diagnosed in the southern city of Chennai in 1986, but more than 20 years later, India is still juggling different public health priorities while maintaining and increasing its spending on HIV/AIDS programs. The Indian Health Ministry's National AIDS Control Organization (NACO) collected data in 2006, and released in July 2007 its estimate that the country's adult HIV prevalence is approximately 0.36 percent. This corresponds to an estimated 2 million to 3.1 million people living with the HIV virus. These figures are significantly lower than the previous year's NACO estimate, which put the number of HIV cases at 5.2 million and the prevalence at 0.9 percent. The two surveys employed different methodologies and are therefore difficult to compare. In any event, the new numbers confirm that India faces a serious public health problem from HIV/AIDS. There remain great uncertainties about the pandemic's trajectory (Mitra, Prमित; 2004). The factors that influence the Indian epidemic are the size, behaviours, and disease burdens of high-risk groups, their interaction with bridge populations and general population sexual networks, and migration and mobility of both (Chandrasekaran, P. et al 2006).

Most of the infections are concentrated in a few parts of India. About two-thirds of reported HIV infections have been in six of the country's 28 states—four large states in the south and west and two small ones in the northeastern tip where more than one percent of prenatal mothers test positive for HIV. The epidemic has spread beyond high-risk groups to the general population in these localities. Three additional states—Gujarat, Goa, and Pondicherry—have concentrated epidemics with a prevalence rate of five percent or higher among high risk groups. According to World Bank data, on average, HIV prevalence in those states is four to five times higher than in the other Indian states (Mitra, Prमित 2004).

#### **1.1 National Response to HIV/AIDS**

Behavior Change Communication (BCC) is an interactive process with communities which help in developing tailored messages and approaches using a



variety of communication channels. BCC imbibe positive behaviors; promote and maintain appropriate behaviors and sustain it in the community.

In the context of the AIDS epidemic, BCC is an essential part of a comprehensive program to restrict the spread of AIDS in general population. Before communities can reduce their level of risk by changing their behaviors, they must first know basic facts about HIV/AIDS adopt key attitudes and learn a set of skills. They must also perceive their environment as supporting behavior change and seek appropriate treatment for prevention, care and support. The HIV/AIDS is primarily perceived by many as a sexually transmitted infection (STI). The AIDS epidemic forces societies to confront cultural ideals and practices that can contribute to HIV transmission. Effective BCC is therefore vital for responsible interventions. It can also mobilize the political, social and economic responses needed to mount an effective program.

In response to contain the AIDS menace, Government of India implemented AIDS programs through a semi-autonomous body 'NACO', within the Ministry of Health. NACO's autonomy was intended to prevent bureaucratic delays from retarding India's HIV/AIDS prevention work. NACO works with a network of fairly autonomous state offices, that are intended to be the real operating arm of the AIDS program. In April 1992 the Government of India launched a comprehensive National AIDS Control Programme (NACP). Its first phase (NACP-I) extended till 1999. The second phase NACP-II with the objectives to reduce the spread of HIV infection in India and to strengthen India's response to HIV/AIDS on a long-term basis started in 1999 continued till to 2007. On April 1, 2007, India launched NACP-III which will extend till 2012. The new phase emphasizes on decentralizing HIV/AIDS programs, establishes a regulatory authority to ensure safe blood, increases targeted intervention programs to cover 80 percent of high-risk groups, extends outreach programs to migrants and truckers, increases community care centers, puts 300,000 people on antiretroviral treatment (ART) and seeks to train 380,000 health personnel. The transition from NACP I to NACP II and now NACP III is one of a gradually more comprehensive response. While for NACP I the main focus was on safe blood and general

prevention, NACP II established the State AIDS Control Societies and started working with NGO. Now with NACP III, the government will build on these partnerships with civil society organizations, but also work towards greater active involvement of the target groups themselves in the program (World Bank 2007).

In addition to national and state AIDS-control programs, the Indian government involves a number of health care programs established for government employees as vehicles for HIV/AIDS prevention and treatment. The government's Indian Railways, which operate the largest health care system in the country, as well as the military and the Central Government Health Scheme, all provide testing and counseling as well as treatment.

India's plan for dealing with the pandemic so far has focused mainly on prevention of HIV infection. But as it expands treatment, the financial and technical resources required are growing exponentially, putting an enormous strain on public health infrastructure. India has excellent small targeted awareness and successful intervention programs among high-risk groups. Indian policymakers are still grappling with different approaches to scale up these successful programs, which can then be implemented country wide with modifications to suit local characteristics.

Besides the government's programs, an effective response to the HIV/AIDS epidemic in India requires the active participation of employers, NGOs and the media. A few businesses have provided real leadership in providing HIV/AIDS programs for their employees and families, notably Tata. Both Tata and Reliance have run HIV/AIDS programs in the context of broader employee health programs. Several other businesses have undertaken prevention activities such as peer counseling. The Confederation of Indian Industry (CII), India's most prominent business group, has developed "good governance" norms on AIDS programs for its member companies. But the stigma of AIDS keeps this kind of program in the shadows.

Distribution of HIV infection varies across the country and within the states, no centralised uniform programme intervention will be able to address the disease as

the programme implementation has been decentralised to state and Union Territories, each of which has a State AIDS Control Society (SACS) responsible for implementation of the programme at its levels.

### **1.2 Response to Risk Factors**

Since the Government of India initiated a programme to contain and counter HIV/AIDS, it started to identify the high risk groups to reduce sexual transmission of HIV within high-risk sexual networks, and from these high-risk networks into the general population through survey and research. Studies found that India's epidemic continues to be concentrated in populations with high-risk behavior characterized by unprotected paid sex, anal sex, and injecting drug use with contaminated injecting equipment. Several high-risk groups have high HIV prevalence, and sexual networks are wide and inter-locked (World Bank, 2007). According to National AIDS Control Organization (NACO), the bulk of HIV infections in India occur during unprotected heterosexual intercourse.

### **1.3 HIV Transmission and Truckers**

Evidence in India and elsewhere shows that the community of truckers is vulnerable to HIV due to a higher prevalence of risky sexual behaviour, which results from a variety of social and economic factors as well as their work patterns. Therefore, National AIDS Control Programme III (NACP III) prioritizes HIV prevention among truckers as a key programme component.

It is generally accepted and well-documented that long distance truck drivers have been and remain one of the key forces in the spread of HIV/AIDS pandemic across the nations. The role of truck drivers in the transmission of HIV/AIDS and other sexually transmitted diseases is rooted in the lifestyle that comes with the profession, as well as the broader social and economic factors. Truck drivers are mostly young/ middle aged, physically active, highly mobile, spend long hours on the road and, are away from their families for days together. Compared to the rest of the population, their need for entertainment and female companionship (sexual urge), makes them very likely to use the services of commercial sex workers in stop-over towns near major transportation routes.

These truck stops have developed as an entire infrastructure of networks and services meeting the business and recreation needs of truck drivers, including *dhabas* (road side restaurants), bars and brothels, and a high population of commercial sex workers.

The co-mingling of the mobile, sexually active, high-risk populations explains the high prevalence of HIV and STI rates in truck drivers and the subsequent spread of the disease through out the country. In addition to having sex with FSW, most truck drivers have wives at home who are likely to become infected with HIV by their husbands, and continue spreading the virus in their local communities (Hudson, 1996).

Several surveys and studies conducted along highways in many parts of the world show that truck drivers constitute an especially vulnerable group who contract and spread HIV because of their high-risk behavior at truck stops where they engage in sexual contact with commercial sex workers.

The study on Trans Africa Highway, Uganda by Nzyuko et al. (1997); Ramjee and Gouws (1998, 2002) study on truck stops of South Africa and Hsu (2001) study on the impact of Mandalay-Muse Highway and cross sectional study on Brazil truck drivers by Lacerda et al (1997) confirm the high potential risk of this group for HIV infection and other sexually-transmitted diseases.

Studies conducted in Burkina Faso (Lankoande et al. 1998) and in Eastern Africa (Mbugua et al., 1995; Bwayo et al. 1994) reported that high HIV prevalence is not limited to truck drivers only in Southern African countries.

Similarly, studies in India found evidence that truck drivers are highly vulnerable to HIV infection. A study (Manjunath et al. 2002) among 263 truck drivers/assistants recruited at a highway clinic in South India in 1999-2001 reported frequent female sex workers (FSW) contacts, alcohol consumption, presence of various STDs and high -positive rates of HIV.

In their study on HIV risk behavior, condom use, and HIV/AIDS awareness among 302 truckers in Delhi and its nearby areas, Singh and Malaviya (1994) found that three-fourth of drivers admitted having multiple heterosexual partners, including prostitutes, and some of them admitted sex with homosexual. Only one-fourth of them were aware that HIV may be transmitted sexually, three-fourths of them engaged in unprotected sex despite having awareness of HIV, and a third of them reported histories of either urethral discharge or genital ulcers.

Study on the level of knowledge regarding the modes of transmission and prevention of HIV/AIDS among lorry, truck, taxi and auto driver, in Kerala found that higher knowledge regarding modes of HIV/AIDS transmission among lorry and truck drivers than that of taxi and auto drivers. The study found that majority (96%) of the lorry and truck drivers knew the major modes of transmission of HIV/AIDS. Corresponding percentages for Taxi drivers and auto drivers are 73 and 84 respectively. Homosexual method considered to be best method to prevent HIV/AIDS by three-fourth of them and only one-fourth of them felt that condom use could prevent the disease. This study also confirmed vulnerability to HIV infection as majority had multiple sexual partners, only one-fourth were using condom during sexual contact with Commercial Sex Workers (Jayadevan et al. 2004).

Another study of 1600 truckers of Gujarat (Bhalla et al; 2004) found that the half of the respondents did not use condoms during sex with CSW and only little less than a third reported awareness about AIDS. Three-fourth of them stated weight loss to be the primary symptom of HIV/AIDS infection and majority considered 'sex' as the route of HIV transmission. Regarding the source of knowledge, television and radio accounted for most of the respondents, followed by relatives and friends.

Due to the migratory nature of their occupation and being far away from their families for a long time, the truck drivers tend to have multiple sexual partners and visit commercial sex workers often. Earlier studies in India have documented a gradual increase in knowledge about HIV infection, safe sexual behaviour among truck drivers, CSWs etc (Bansal 1995; AMASR, 1996, 1997, 1998; BSS

Report Tamil Nadu Wave X 2006). For example, prevalence of misconceptions among Truckers and helpers, related to HIV prevention has decreased tremendously from 92.0 percent in 1996 to 41.2 in 2005.

The national Behavioural Sentinel Survey (BSS) of 1999 indicates high-risk sexual contacts during transit (87%) and poor condom usage (11%) among truckers, making them vulnerable to STIs and HIV/AIDS. Surveillance studies indicate that the prevalence of HIV among truckers in general may be more than 10 times higher than in the general population (7.4% among truckers as compared to 0.7% with the general population). Given an estimated HIV prevalence of 11.16% among long-distance truckers in India, there could be an estimated 0.6-0.7 million HIV positive truckers in India by 2005 figures (NACO, 2007).

The above discussion indicates that long-distance truckers with high risk sexual behaviour, who move throughout the country, can act as transmission “bridges” from areas of higher prevalence to those of lower prevalence.

According to Targeted Interventions for Truckers Guidelines, published by NACO (2007), India has one of the largest road networks in the world spreading about 3.3 million km. This figure includes expressways, National Highways, State highways and major district roads and rural roads. It is estimated that 65%-70% of the nation’s cargo handling is done by road. National Highways are the prime arterial route, covering about 65,559 km. Although National Highways constitute only 2% of the total road network, they bear approximately 40% of the total traffic. The Ministry of Road Transport and Highways states that as of 31 March 2003, the total number of registered motor vehicles in India was 6,735,291, of which 2,159,824 were multi-axle/articulated vehicles (i.e. trucks and lorries).

Regarding the work force dependent on this occupation, the Asian Institute of Transport Development (AITD) gives a figure of around five million truck drivers in India. This estimate is based on the assumption that there are about 2.5 million trucks in the country and that each truck has two drivers. Similarly, the report of a study by the Indian Institute of Health Management Research (IIHMR) quotes a figure of about 5-6 million truckers (i.e. truck drivers and other crew members) in

India. Among them, about 40%-50% (or about 2-2.5 million) ply on long-distance routes. Given the rise in the number of trucks operated for goods transportation, the total number of truck drivers in the country is expected to double in the next ten years, and the HIV transmission could also spread in proportion to the increasing number of truckers, if no remedial steps are undertaken soon.

#### **1.4 Relevance and Justification**

As mentioned earlier, India has one of the largest road networks in the world with around five million workforces. The opening of new transport routes as a result of better relationships with the neighbouring countries increases the risk of spreading the infections through transporters and migrant workers. This has placed India in a critical position as far as trafficking of sex workers is concerned. It has increased the risk of spread and transmission of diseases in the entire region as many workers in the transport sector are not aware of the consequences. Awareness of how to protect oneself from HIV in the absence of comprehensive knowledge is low in the transport sector. Due to their poor educational and economic background coupled with the socio-cultural practices prevalent in the region, the most vulnerable groups lack common sense and knowledge on HIV/STI to protect them. Therefore, to slow down or stop the spread of HIV, understanding the knowledge of high risk groups is essential to modify and evolve appropriate intervention for behavioural changes through IEC.

#### **1.5 Factors Affecting Truckers' Risk-Taking Behaviour**

Among the factors affecting truckers risk taking behaviour is their harsh and stressful working conditions and unsafe roads which contribute to their low perceptions of the seriousness of HIV infection.

Studies (NACO 2007) found that although the level of knowledge related to STI and HIV/AIDS is relatively high, this knowledge is rarely converted into action among truckers. Lack of comprehensive knowledge about HIV/AIDS results in lack of concern for self and a false sense of security leading them to risky behaviour. Other factors such as their young age, and extended separation from

family, loneliness, absence of entertainment, consumption of alcohol also lead them towards vulnerability.

In addition, truckers carrying significant sums of cash to meet their travel needs, making them attractive customers to the network based sex work industry operate at the halt points. Limitations such as inadequate health services, non-availability of condoms leave them vulnerable to HIV infection, but nevertheless take the opportunity to have sex when it arises, as their immediate sexual needs appear to take precedence over the possible long term consequences of unprotected sex. Therefore, highly mobile lifestyle of truckers has the potential to transmit the dreaded disease faster in every stopover locations when they visit commercial male/female sex workers . Since many of the truckers are married, their spouses are likely to become infected with HIV.

In the absence of a vaccine or a cure, Information, Education and Communication (IEC) is one of the most important strategies in the fight the spread of HIV/AIDS. Intensive IEC efforts will not only raise awareness levels in the general population on prevention of the infection but also bring about behaviour change to adopt and maintain healthy lifestyle among high risk population

### **1.6 Strategy for Truckers Intervention**

The IEC strategy efforts at NACO are implemented at two levels. At national level NACO is responsible for policy planning and framing of guidelines for IEC activities countrywide, besides implementing some campaigns at the national level. Political and media advocacy receive special focus at the national level. NACO formulates IEC guidelines to provide a framework for focussed and cost effective IEC activities from time to time. At the state level IEC activities are driven by local priorities and communication in local languages.

Being aware that national highways may become a conduit for contracting HIV / AIDS by truck drivers, the National Highways Authority of India (NHAI), as part of loan commitment to the World Bank and the Asian Development Bank, has got into a mode in 2006 by initiating Healthy Highways campaign to combat the scourge of the diseases. It has set up a Unit at its Headquarters in Delhi to address



the issue along the highways. The key objectives of NHAI's HIV/AIDS Programme are to increase the level of awareness for Prevention and Control of HIV/AIDS, to promote safe sex behaviour and to increase planned interventions. Under this programme, primary target groups are temporary migrants like truck drivers, female sex workers, cleaners, brothel inmates, contractual workers, and *dhaba* owners along the highways. NHAI initially covered a project area of 3,200 kms of national highways. The programme on NH-2 (1499 kms) and NH -28 (503 kms) is replicated along the other arms of the Golden Quadrilateral.

The key implementation strategy for the project focuses on building partnerships and linkages with CBOs, NGOs, oil companies and other companies to build appropriate networking with key stakeholders and transport associations.

NHAI has also launched "*pathik mela*" programme in selected spots on the highways in collaboration with the District Administration and other stakeholders. The activities in the *Mela* include medial clinics for health check ups, condom promotion and distribution stalls, counselling centres, etc. Promoting HIV/AIDS awareness through the IEC strategy such as posters, bill boards, hoardings, cultural programmes and entertainment shows encouraging participants.

### **1.7 Statement of Problem**

On account of mobility, workers in the transport sector are more likely to be infected by HIV. Highways operators, especially long haul truck drivers, cleaners, helpers, owners and workers in the roadside shops, petrol pumps etc and road construction workers become conduits for contracting and spreading HIV/AIDS. Taking into account the massive road network in India and the nature of bi-directional relationship with the epidemic, the HIV/AIDS programme for the transport sector is crucial for controlling and preventing the spread of the disease in India.

### **1.8 Research Objectives**

To assess strategies to increase awareness of HIV/AIDS through IEC on highways in India; and to highlight the factors responsible for success or failure of such strategies.

**1.9 Research Questions:**

- I. What factors contribute to the spread of HIV/AIDS in India?
- II. What awareness programmes are being carried out by NGOs, government and other actors?
- III. How does the awareness campaign help in restricting transmission of HIV/AIDS among transport sector personnel and commercial sex workers?

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## **CHAPTER TWO**

### **METHODOLOGY & LIMITATIONS**

#### **2.1 Introduction**

The research study is descriptive with both qualitative and quantitative data. The study focused on the IEC component of the campaign against HIV/AIDS among truckers. The main source of information was a combination of questionnaires (both closed and open ended), interviews and focus group discussion with the programme officers and other stakeholders in the field.

The primary data were collected through questionnaire from the truckers along the Golden Quadrilateral (GQ) highways in India and by interviewing the Programme Officers, Technical Officers, Project Directors, and State AIDS control societies and other stake holders in the field.

Information from websites, similar case studies, books and specific literature available on the subject was also collected. National AIDS Control Organisation (NACO), Ministry of Health and Family Welfare, Government of India, WHO, consulting programme officers in AIDS Control Cell in the National Highways Authority of India (NHAI), Ministry of Road Transport and Highways also provided important inputs on the subject.

#### **Selection of locality**

Since the industry is fragmented and scattered, the first step was to understand the trucking operations and locate areas where a sizable number of trucks halt for a long time and the truckers have sufficient time to interact. Hotspots and halt-points of truckers on the Project Road were identified on the basis of Traffic Density, Economic Importance and the arms of the Golden Quadrilateral where commercial sex workers are active.

The Transport Nagar in Jamshedpur along the National Highway No.2 connecting Delhi and Kolkata (passing through the States of Uttar Pradesh., Bihar, Jharkhand

and West Bengal) was selected as one of the places for the data collection. It is strategically situated at the heart of the town, near the bus stand. The area is surrounded by habitation of the long route truckers, helpers, cleaners and contractual workers. The offices of Truck Drivers Association and Transporters Association are also located in adjoining areas. Long route truckers on duty from outside city take rest in the nearby locality before undertaking their journey.

The other two locations where the data were collected through questionnaires are Gurgaon road on NH No.8, connecting Delhi with Mumbai (passing through Haryana, Rajasthan, Gujarat and Maharashtra) and a private petrol pump near Cuttack on the NH 5, linking Kolkata and Chennai (passing through West Bengal, Orissa, Andhra Pradesh and Tamilnadu).

### **Survey population**

Truckers attending the 'Health Camp' organized by National Highways Authority of India (NHAI), Road Transport Ministry, at Jamshedpur, Bihar were included as proxy for the Truckers at the high risk of HIV Transmission. Although the camp was well attended by the cleaners and helpers, only the Trucker- driver was included in the survey.

### **Sampling frame**

Truckers attending the health check-up at pathik mela at Jamshedpur, near Toll plaza at Gurgaon road and near a petrol pump at Cuttack.

### **Sample size**

Considering the time constraint faced by the researcher, sample size was restricted to 150.

### **Sampling technique**

Respondents for this study were chosen by simple random sampling method. Only the truck drivers were included for interviews.

## **2.2 Data collection**

Data were collected by the researcher with the help of pre-tested schedule by interview method. A month prior to the actual data collection, the questionnaire was pre-tested with truckers in Delhi, to identify the mistakes it need correcting. As many potential respondents attended the health camp at Jamshedpur along with their family members, most of them were reluctant to participate in the survey in presence of their family considering the sensitivity of the questions. However the researcher, with the help of Camp Organizers, was able to convince the respondents to participate in the survey. In order to ensure confidentiality and maximize the responses, the truckers were not asked their name. The interviews were conducted only with truckers, in secluded places in order to maximize the responses. The researcher explained every question in detail to collect the information.

Some truckers refused to participate in the survey on the pretext that they had to accompany their family and children to the magic show and other cultural programmes. However, it would be difficult to predict their true intention of non participation.

## **2.3 Scope and Limitations:**

The study was intended to be undertaken only in the project sites of national highways passing through the states of Tamil Nadu, Maharashtra, Karnataka, and Andhra Pradesh. However due to linguistic and logistic constraints, Southern Indian states could not be covered.

Despite the best efforts of the researcher there existed psychological barriers between researcher and respondents due to the problem of openly talking about the subject of sexual conduct, which is a taboo in conservative social background the truckers come from. Taking into account the diversity in the country profile, collection of data from different localities was a difficult task. Being a government functionary posed a problem while collecting data from the participants.

## **2.4 Structure of the Paper**

The paper is divided into seven chapters. The first chapter starts with a general introduction on the subject, traces the problem area and national response to the problem, research objectives and research questions. The second chapter defines the methodology and limitations of the paper. The third chapter reviews some of the past studies available on the subject. The fourth chapter describes some contemporary concepts of implementation policies and tries to establish linkage between Information, Education and Communication (IEC) and Behaviour Change Communication (BCC). The fifth chapter attempts to analyse and interpret data to draw inferences after critical examination. The sixth chapter briefs about discussions with Programme Officers in the field. Finally the paper concludes in chapter seven with recommendations.

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## **CHAPTER THREE**

### **LITERATURE REVIEW**

#### **3.1 Introduction**

It is generally accepted and well-documented that long distance truck drivers remain one of the key forces in the spread of HIV/AIDS pandemic across regions. The role of truck drivers in the transmission of HIV/AIDS and other sexually transmitted diseases is rooted in the lifestyle that comes with the profession, as well as the broader socio-economic factors.

In this section, studies on the association between truckers and HIV and AIDS was reviewed to get an understanding of the topic under study prior to the assessment.

#### **3.2 Sexual Practices**

A survey of truck drivers visiting sex workers at truck stops in KwaZulu-Natal found an overall HIV prevalence of 56% - staggering, but hardly surprising considering the findings of a related study by the same authors (Ramjee et al. 1998) that found similar rates of infection in sex workers servicing the same truck stops along the major road between Durban and Johannesburg in summer 1996/spring 1997. Half of the women were HIV seropositive, and the occurrence of various STIs was between 14% and 71% (Ramjee et al, 2002, 1998).

A high HIV prevalence is, of course, not limited to truck drivers only in Southern African countries. A survey of 236 truck drivers in Burkina Faso (Lankoande et al, 1998) in 1994 found HIV prevalence rates of approximately 18%. In Eastern Africa, several studies reported HIV prevalence rates of 25% to 32% among truck drivers in Kenya and Uganda. (Mbugua et al., 1995; Bwayo et al. 1994).

Surveys and studies conducted along highways in many parts of the world show that truck drivers constitute an especially vulnerable group who contract and spread HIV because of their high-risk behavior at truck stops where they engage in sexual contact with commercial sex workers. Nzyuko et al. (1997) find that

HIV seroprevalence among truck drivers and their assistants along the Trans-Africa Highway in Uganda was 35 percent (1980s). In Kenya, east of Nairobi, 27 percent of truck drivers and their assistants tested HIV positive. HIV seropositivity was found to be even higher among sex workers who work on the Trans-Africa Highway, with 76 percent of sex workers in Lyantonde, a truck stop in southwest Uganda, testing HIV-positive.

In a survey conducted by Ramjee and Gouws (2002) in South Africa, it was found that the mean age of the truck drivers (all men) was 37 years (range 18–71 years), and that of the sex workers (all females) was 25 years (range 15–49 years). Sixty-six percent of the men reported having a sexually-transmitted infection in the previous six months, and 37 percent always stopped for sex along the route. Twenty-nine percent reported never using condoms with sex workers, whereas 13 percent had used condoms with their wives. Anal sex was practiced by 42 percent of the men. The overall HIV prevalence (in the two groups combined) was 56 percent.

The Institute for Population and Social Research, Mahidol University, Bangkok, Thailand, investigated sexual behaviors of long-distance truck drivers in Thailand to define patterns and determinants critical to the transmission of HIV among 327 drivers interviewed in 1992. Forty-eight percent reported a commercial sex worker (CSW) as their first partner and 87 percent had contact with a CSW at some time. Median lifetime number of all partners was 29. About 40 percent of subjects visiting CSWs used condoms inconsistently or not at all.

A UNOPS/UNDP study shows how land transport sector can uniquely contribute to spreading HIV. When roads and bridges are built, they link low and high HIV prevalence areas such as villages and cities, respectively—true not only domestically but also internationally. The impact of road construction on HIV spread for a low prevalence area pre- and post-road construction or improvement is seen in the case of the Mandalay-Muse Highway which, constructed in 1997, links Mandalay, Myanmar via Muse to Yunnan, China (Hsu, 2001). An examination of the data shows an overall increase of HIV prevalence amongst injecting-drug users after the completion of the highway. A similar phenomenon



was also observed in Guangxi, China, when the highway linking Kunming (Yunnan) to Nanning (Guangxi) was completed. Overall documented HIV cases for Guangxi jumped from 10 to 525 within this short three-year period.

The improvement of National Highway One in Vietnam has also facilitated the increase of HIV cases in the North (Ha Noi and Hai Phong). This rapid increase in HIV prevalence in the North is associated with the improved linkages that characterized the pre-existing high HIV-prevalence area in the South, such as Ho Chi Minh City.

A cross-sectional study was performed of 300 male truck drivers recruited in the port of Santos, Brazil, including a face-to-face interview and blood sampling for HIV and syphilis serology (Lacerda et al. 1997). The results of the study show that 72 percent of the participants were married. Forty percent reported having more than one sex partner; 21 percent reported sex with commercial sex workers; 14 percent reported sex with girls that they met on the road; 16 percent had sex with other men's wives; and 3.3 percent reported sex with men during the past year. The findings of this study confirm the high potential risk of this group for HIV infection and other sexually-transmitted diseases.

A survey of 71 drivers along major trucking routes in Florida found that one-third of them had had frequent sexual intercourse on the road with multiple partners, but few used condoms. Commercial sex workers were their most frequent partners for on-the-road sex. The risk was compounded by occupational conditions, which motivated truckers to drive long hours, often using drugs to stay alert. Sex, alcohol, and drugs were perceived as quick, effective stress relievers during down time on long, lonely trips. Despite their high-risk behaviors, truckers tended to consider themselves at low risk for HIV infection and expressed a number of misconceptions regarding HIV transmission. For example, many truckers did not associate HIV risk with heterosexual contact or think that condoms were effective in preventing HIV transmission (Stratford et al. 2002).

Another piece of the truckers' sexual activity pattern is made of regular or semi-regular "girlfriends" in the communities along the route. In general, truckers begin to associate sex workers with a risk of STIs and HIV transmission, but some studies note a trend toward casual sex with women they perceive as "clean", not toward less casual sex as a whole. To make this distinction, truckers rely either on their own judgment, or sometimes on the services of middlemen, as reported in Uganda (Gysels et al, 2001). Although these women typically have sex with truckers in exchange for gifts or money, the truckers do not perceive them as sex workers, and believe that a personal relationship of sorts exists between them. They will be less likely to use a condom during sexual relations with such a woman as their perception of risks decreases.

In India too, studies have focused on the sexual behaviour of truckers. Singh and Malaviya (1994) in their study on HIV risk behavior, condom use, and HIV/AIDS awareness among 302 truckers in Delhi and its nearby areas found that 78% of drivers admitted having multiple heterosexual partners, including prostitutes, and 5% admitted to regular homosexual sexual encounters. Around 25% of them were aware that HIV may be transmitted sexually, 28% of promiscuous drivers used condoms regularly, none admitted taking IV drugs, 35% reported histories of either urethral discharge or genital ulcers, and 3 of the 302 men tested were found to be infected with HIV. The authors note that 77% of them engaged in unprotected sex despite having HIV awareness.

A study (DFI and FHI 2001) on of 335 truckers from Bihar and West Bengal found that, prevalence of syphilis (6.3%), active syphilis (1.2%); gonorrhoea ( 1.8%) and genital chlamydial infection (1.2%) among them. HIV was found among 6.3 percent. Out of all, 27.5% truckers had said that they had sex with female sex Worker (FSW) or non regular partner (NRP) in the preceding 12 months and the number of different sexual partners ranged from 1 to 40. The mean number of sexual partners was 5.3. Of the those who had reported having sex, only 30.4% had stated that they used condom and only 27.2% reported use of condom all the times or most of the times they had sex with them. Awareness about STIs/HIV was observed to be high.

In a study conducted in Gujarat among truckers as quoted earlier, it was found that 58% had visited CSWS. More than half (56.9%) of them never used condoms during sex with CSWS and this tendency was more among married truck drivers. Only 30.5% had heard about AIDS and 79 percent of them stated weight loss to be the primary symptom of HIV/AIDS infection and majority (53%) considered sex as the route of HIV transmission (Bhalla et al. 2004).

### **3.3 Knowledge of HIV/AIDS**

Studies published to date demonstrate that although truck drivers do have some knowledge of HIV/AIDS, this knowledge is not consistent or comprehensive, and furthermore, that knowledge and practice frequently do not go hand in hand. Despite general awareness of HIV/AIDS and its dangers, truck drivers do not report a uniform reduction in risky behaviors, such as the use of sex worker services and casual sex with multiple partners.

High awareness of HIV/AIDS amongst truckers also does not imply they always have the necessarily knowledge of transmission routes and prevention methods. For instance, although nearly all (96%) truckers in a Burkina Faso study of high-risk populations have heard of AIDS, their knowledge of HIV transmission routes, transmission risk and available preventive measures was quite low (Meda et al, 1998). In a 2001 survey of Mozambican truckers, only a quarter could point out positive aspects of condom use (Mohamed & Pacca, 2002.) In studies of Kenyan truck drivers, almost all of them (99%) have heard of HIV/AIDS (Bwayo et al., 1991), although the extent of knowledge about specific aspects of HIV/AIDS was less consistent.

Studies addressed the knowledge, attitudes and practice of truck drivers in Thailand found that, a high percentage of truck drivers have the knowledge of how to prevent HIV/AIDS transmission, but their attitudes on their susceptibility reflect the practice of not using condoms [Singh et al 1993, Podhista et al (1996).

In a study of Kenyan truck drivers regarding their awareness of HIV/AIDS, 61% of the truck drivers surveyed by Bwayo et al. (1991) reported frequenting CSW. Of the truck drivers surveyed by Wilson et al. (1994) 64% reported visiting

prostitutes while away from home for work and 20% reported hiring CSW when they were not traveling.

Studies (Bansal, 1995; AMRS, 1996, 1997 and 1998; Chaturvedi, 2006) on knowledge of HIV and AIDS documented a gradual increase in knowledge about HIV infection, safe sexual behaviour among truck drivers, CSWs etc. Regarding the source of knowledge, electronic mass media (Television and Radio) accounted for majority, followed by Friends and relatives.

Regarding the knowledge, in India 44 and 54 percent of women are aware of RTI/STI and HIV/AIDS respectively. The corresponding level of awareness among husbands of eligible women is 53 and 76 percent. The percent of women who are aware of RTI/STI and HIV/AIDS is lowest in Meghalaya (42 percent) and Bihar (29 percent) respectively to highest in Bihar (89 percent) and Pondicherry (98 percent). Similarly awareness level of husbands of eligible women of RTI/STI and HIV/AIDS are lowest in Meghalaya (11 percent) and in Chhatisgarh (54 percent) to highest in West Bengal (87 percent) and in Pondicherry (100 percent) respectively (IIPS, 2002-04).

Extensive study has been conducted among high risk group by NACO in 2001 and 2006. About 98 percent of the respondents reported that they had heard about HIV or AIDS or both. The proportion of respondents who were aware that consistent condom use could prevent HIV was 89 percent and the corresponding proportion was higher than BSS 2001 (85%). More than three-fourths (77%) of the respondents were aware that HIV can be prevented by having one faithful uninfected sex partner. About 71 percent of the respondents were aware of both the methods of prevention i.e. prevention by correct and consistent condom use and having one uninfected faithful sex partner. No significant difference was observed in awareness regarding different methods of prevention between clients of brothel and non-brothel FSWs. About 93 percent of respondents were aware that a person could get HIV/AIDS by sharing a needle that was already used by an infected person and 80 percent of the respondents were aware of vertical transmission (pregnant woman to her unborn child) of HIV. Two-thirds of the

respondents in Behaviour Sentinel Survey (BSS) 2006 reported that HIV could be transmitted from an infected mother to her newborn child through breast feeding.

The proportion of respondents who were aware that HIV cannot be transmitted through sharing a meal with an infected person has significantly increased from 67 percent in BSS 2001 to 80 percent in BSS 2006. The awareness that HIV cannot be transmitted by mosquito bites was 74 percent and nearly three-fourths of the respondents were aware that a healthy looking person could be suffering from HIV. The proportion of respondents who had correct awareness on the two misconceptions (transmission of HIV through sharing a meal, mosquito bite) associated with the transmission of HIV and were aware that a healthy looking person could be infected with HIV was 51 percent in BSS 2006 against 39 percent in BSS 2001.

District Level Household Survey conducted between 2002-2004 (DLHS, 2006) studied the knowledge of HIV/AIDS among the general population. The half of the women and men were aware of HIV/AIDS in 50 percent and 90 percent of the surveyed district in India respectively. The lowest level of awareness of HIV/AIDS among women was reported in Paschimi Champaran (8 percent) in Bihar and among men in Doda (0.4 percent) in Jammu and Kashmir, and highest among women is in Mahe (100 percent) of Pondicherry and Aizwal (100 percent) Mizoram and among men in Toothukudi (100 percent) Tamil Nadu. Districts where awareness level of men are 95 percent or more, the level of awareness of HIV/AIDS among women is also high.

Similarly, NFHS-III (2007) revealed that, although the spread of HIV/AIDS is a major concern in India, only 61 percent of women age 15-49 and 84 percent of men age 15-49 have heard of AIDS. Knowledge of HIV/AIDS prevention methods differs markedly between women and men age 15-49. Overall, approximately 4 in 10 women and 7 in 10 men know each of the three ABC methods of prevention—abstinence, being faithful, and condoms. Knowledge of each prevention method rises with increasing education and wealth. Women and men with regular exposure to mass media are twice as likely to know each of the three methods of prevention as do adults without access to media.

Misconceptions about HIV/AIDS are common. Only 38 percent of women and 61 percent of men know that a healthy-looking person can have HIV/AIDS. About two-thirds of women and half of men erroneously believe that HIV/AIDS can be transmitted by mosquito bites. Larger proportions of women and men are aware that HIV/AIDS cannot be transmitted by hugging someone who has AIDS (43 and 64 percent, respectively) and by sharing food with a person who has HIV/AIDS. However, only a minority of women (31 percent) and men (45 percent) reject all three misconceptions.

As evident from the above studies, the information sources such as radio, billboards, magic shows and street plays during health camps were the most effective components of the IEC campaign and BCC strategies.

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## CHAPTER FOUR

### CONCEPTUAL/ANALYTICAL FRAMEWORK

#### 4.1 Introduction

Many health behaviour theories arising from the field of communications have been designed to investigate the relationship between health information, communication and behaviour change. These theories can be divided into categories such as explanatory and change. Explanatory theories are those theories that address *why* a certain problem exists; then investigates the underlying variables that contribute to the problem (National Cancer Institute 2005).

Change theories advance the development of health interventions by identifying important concepts that can be incorporated into information and communication messages and strategies. Change theories also provide a framework for evaluation of interventions. A benefit of change theories is that they inherently require an identification and analysis of assumptions prior to the design and implementation of any intervention programs. Diffusion of innovations is an example of change theory.

Given the wide range of health communication theories, there are parallel problems, cultures and contexts that they target. Some centre on the individual as the program target; others take more holistic, social and cultural approaches. Some of the theories can be utilized across cultures, but most have only been examined within a narrow context or culture (Airhihenbuwa and Obregon 2000; Noar and Zimmerman 2005). In order to advance understanding, researchers must consider the characteristics of their target population, their demographics and the socio-cultural context. Critics of behaviour change models identify several problems with the models such as research designs not being matched to investigate the theories and models that have been proposed (Noar 2006). Some models do not consider the role of the cultural perspectives within which studies are conducted, with cultural factors often cited as the overriding factor that is

missing from many health promotion programmes (Airhihenbuwa and Obregon 2000; Singhal and Rogers 2003; Kalipeni et al 2004).

Despite the problems that have been identified with behaviour change theories and models, they offer the best prevention for HIV/AIDS since there is no cure for the disease although medicines have been developed to defer death. Information campaigns that are based on behaviour change theories build on previous research advance our understanding of the ways in which the information changes the individuals who are exposed to the prevention messages. This is a useful element in research on the field of information. Use of this theoretical base in analysing how information and knowledge influence change attitude on sex behaviour will be applied with focus on IEC in review of literature. Case studies of successful stories from various parts of the world would be given.

#### **4.2 The Role of Behavior Change Communication**

BCC is an integral component of a comprehensive HIV/AIDS prevention, care and support program. It has a number of interrelated roles. BCC can ensure that people are given the basic facts about HIV and AIDS in a language or visual medium and in the process increase knowledge of the community. It can encourage community about the underlying factors that contribute to the epidemic, such as risk behaviors and risk settings, environments and cultural practices related to the diseases. It can also stimulate discussion on healthcare-seeking behaviors for prevention and support. BCC can lead to appropriate attitudinal changes about right and responsibility for safe practices

Communication about HIV/AIDS has the potential to reduce stigma and discrimination.

BCC can advocate for an effective approaches to the epidemic by influencing policy makers. It can also promote services for prevention, care and support. BCC programs can focus on teaching new skills and behaviors and contribute to development of a sense of confidence in making decisions.

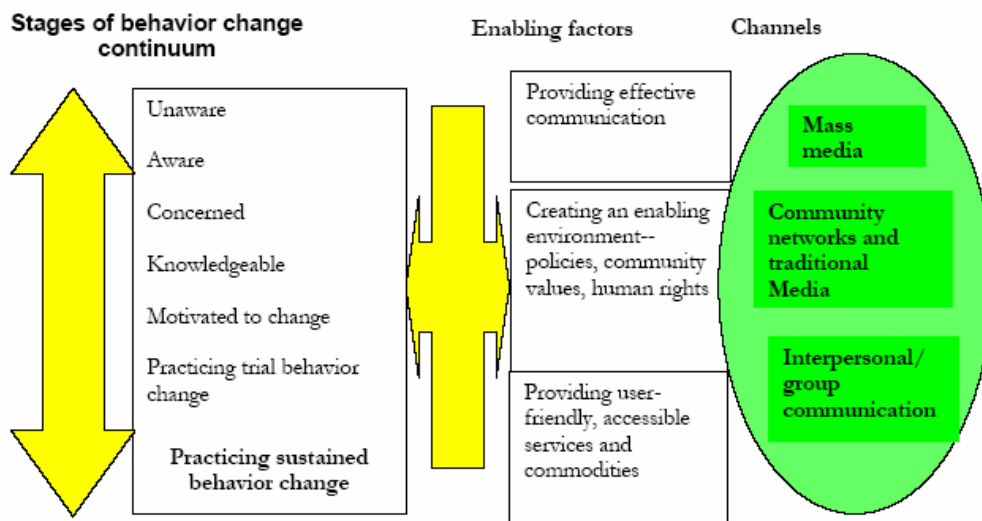
#### **4.3 The Process of Behavior Change: A BCC Design Framework**

BCC theories have evolved over the past several decades. These theories are valuable foundations for developing comprehensive communication strategies and



programs. As per the model developed by Family Health International (FHI), BCC practitioners draw upon various models and theories to design effective programs and activities. These include the Diffusion of Innovations model as advocated by Everett Rogers, the Stages of Change model of Prochaska, DiClemente and Norcross, the Self-Efficacy model of Bandura and the Behavior Change Continuum (World Bank). The BCC practitioners at FHI use a combination of theories and practical steps that are based on field realities, rather than relying on any single theory or model.

**Figure 1. A framework for BCC design**



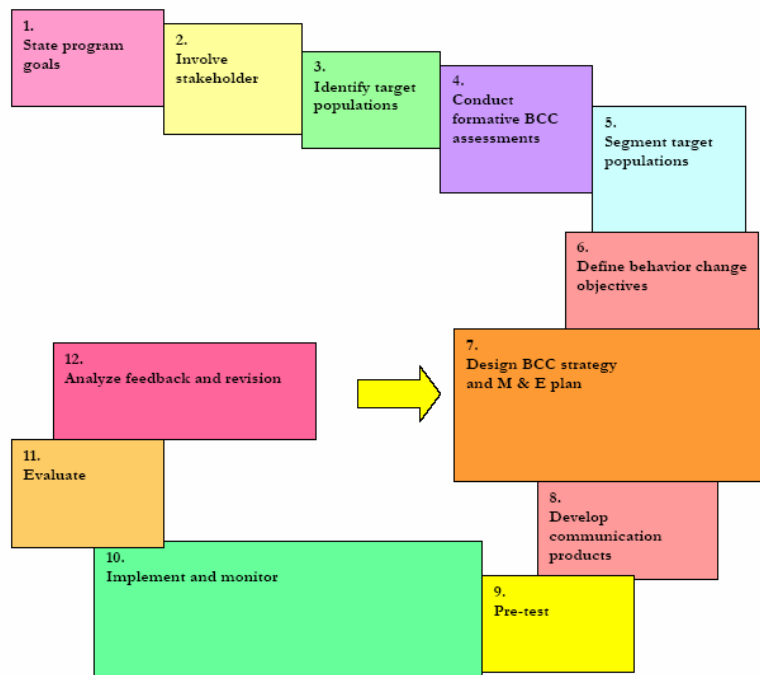
The changing behavior of the individual, community, or institution goes through a series of steps, sometimes moving forward and sometimes moving backward and sometimes skipping steps. Even when the communities adopt new behaviors, they may at times revert to old behaviors under certain circumstances. Identifying and understanding where the majority of a community is in the change process is crucial for designing a BCC strategy.

Different channels have different affectivity and different goals. Communication through mass media can ensure that correct information reaches a specific population and can model positive attitudes. When community is motivated to attempt new behaviors, policies and the larger social environment become more important. But when community get ready to change, the services, or products being promoted must be available to them.

#### 4.4 BCC Strategy Development and Planning

To put this approach into action, FHI promotes a practical, step-by-step methodology for developing and implementing a BCC strategy. The steps as shown in the figure below are meant as a general guide. The strategy vary as per the local situations and therefore be adapted accordingly

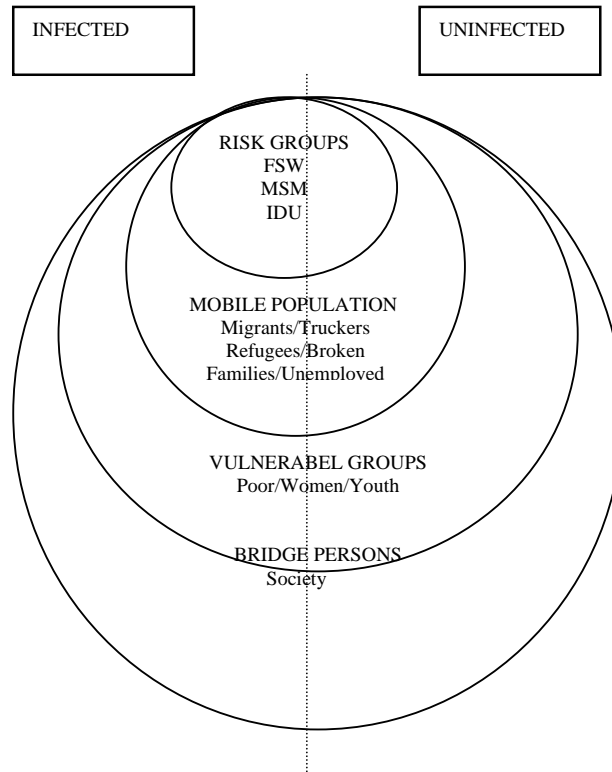
**Figure 2.** Steps in developing a behavior change communication strategy



#### 4.5 IEC and Behavior Change Communication (BCC)

It is to be noted that high risk behaviour core transmitter audience are addressed by the Targeted Interventions. The focus of this strategic framework is the general population. The desirable and feasible behaviours are already known such as delaying sexual activity, not indulging in multipartner sex, not sharing needles, not taking HIV infected blood, getting oneself checked for HIV, availing the services for STI, not stigmatizing and discriminating for PLHAs. Given this dimension the communication framework has been conceptualized with the elements such as Behaviour Change Communication, Advocacy and Social Mobilization. While advocacy and Social mobilization provide the enabling and supportive environment, it works with the people and groups directly through messages and activities.

**Figure - 3**  
**IEC/BCC Integrated Audience Approach**



On operational parts the strategy targets a set of ambitious behavioral objectives that go well beyond an increase in knowledge and awareness, which have been the primary focus of communications programs in the past. Changing behavior, in contrast to changing knowledge, requires formative research that focuses on in-depth behavioral analysis to uncover as to why current behaviors persist and why new behaviors are resisted.

The strategic Communication theme is the issue of perception and attitudes that take into consideration of rights, responsibility and respect. We need a perception that is clear of any myth, misconception and inaccuracy. The perception and attitude have a direct link to the behaviour. It is the perception that has come out strongly in the Communication needs assessment which actually is one of the primary root cause of the attitude of stigma and discrimination.

BCC should therefore be linked to the overall goals and strategies of HIV/AIDS

prevention, care and support programs. Organizations who plan and implement HIV/AIDS programs should develop approaches that view BCC as a strategic framework and not as an isolated communication tactics .

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## **CHAPTER FIVE**

### **DATA ANALYSIS AND INTERPRETATIONS**

#### **5.1 Introduction**

This chapter is divided into six sections. In the first section, general profile of truckers under study has been discussed according to selected characteristics. The second section deals with the high risk behaviour of the truckers with reference to their alcoholism and casual sex and the factors associated with it. In the third section, knowledge of HIV/AIDS with special focus on its prevention have been discussed and the fourth section deals with respondents' knowledge on transmission of HIV/AIDS. In the fifth section, awareness of truckers on HIV/AIDS Programmes is analyzed. The last section, deals with the role and influence of advertisements with reference to their risky behaviour.

#### **5.2 Individual Characteristics**

Table-1 indicates that most (71.4 %) of the truckers under study were below the age of 35, as nature of this industry prefer to engage the people who are in the economically active age group as they are required to travel long distance frequently. However, a few (5 percent) of them were found to have crossed the age of 50. Their distribution by place of residence indicate that three-fourth of them belonged to rural areas while others live in urban and semi-urban areas. Literacy level - which is an important correlate with safer sex practices, shows that nearly three-fourth of them had attended school. Marital status of respondents shows that all but eight truckers were found to be married.

Mobility nature of truckers shows that 71.4 percent of them were away from home for 11 or more days in a month. Due to nature of their profession, they have to traverse the length and breadth of the country. Being in the sexually active age group and staying away from home for long contributed to the degree of vulnerability to HIV/AIDS of the truckers under study.

**Table 1. Profile of Truckers**

<b>Characteristics</b>		<b>N 150</b>	<b>Percent</b>
<b>Age</b>			
	18-25	28	18.7
	26-35	79	52.7
	36-50	36	24.0
	Above 50	7	4.6
<b>Marital Status</b>			
	Married	138	92.0
	Unmarried	12	8.0
<b>Place of Residence</b>			
	Rural	112	74.7
	Semi Urban	21	14.0
	Urban	17	11.3
<b>Education</b>			
	No Schooling	23	15.4
	Primary	92	61.3
	Secondary	29	19.3
	High School	6	4.0
<b>Number of days away from home (in a month)</b>			
	Less than 5 days	10	6.6
	5-10	33	22.0
	11-15	76	50.7
	16-20	12	8.0
	21 and above	19	12.7

Data on alcohol consumption among truckers revealed that except a few (8 truckers) others claimed of consuming alcohol. Among the truckers (142) who claimed consumption of alcohol, a majority (55.6%) of them reported that they

consume daily which increase their own and their partners vulnerability to HIV/AIDS. This finding requires serious attention as studies found that, truckers who drink alcohol when visiting commercial sexual workers, engage in riskier behavior and are more likely to have HIV and STIs. Alcohol use alleged to contribute to risky behavior in numerous ways; for example, by causing sexual dis-inhibition, leading to more sexual partners, difficulty in remembering to use a condom, or being unable to use it correctly.

Earlier studies found that truckers away from their families for long durations, and in the unhealthy environment along the highways become easy prey for commercial sex workers. Therefore, an attempt has been made to study their sexual life style. First, the question was asked to the unmarried truckers followed by married truckers, if they ever had sex with other than their spouse. Eighty-four percent of the married and 10 out of 12 the unmarried answered in ‘affirmation’. These findings are astounding as the marital status of the truckers did not seem to have any association with truckers sexual life. The major reason for this answer could be due to the researchers’ non-insistence of asking even the respondents name – which probably might have lead the truckers to confide the truth without hesitation.

### 5.3 Respondents High Risk Behaviour

**Table 2: Alcohol Consumption**

Characteristics	N 150	Percent
<b>Ever use of Alcohol</b>		
Yes	142	94.7
No	8	5.3
<b>Frequency of Alcohol consumption</b>		
Daily	79	55.6
Once in a two days	34	23.9
Once in a week	18	12.7
Once in a month	11	7.7

Table-2 presents the distribution of respondents according to their high risk behaviour such as alcoholism and casual sex. It should be mentioned that the responses given by the unmarried truckers were clubbed with that of 138 married truckers for the convenience of analysis and interpretation. Regarding the type of sexual partner they engaged in casual sex while travelling, 48 percent of them (62 truckers) claimed sex with known commercial sex workers and 36 percent of them had sex with unknown non-commercial sex workers.

**Table 3: Sexual Behaviour**

Characteristics		N 150	Percent
<b>Sexual Relation Other Than Spouse<sup>1</sup></b>			
	Yes	128	85.3
	No	22	14.7
<b>Type of sexual partner<sup>2</sup></b>		<b>N=138</b>	
	Known CSW	66	48
	Unknown CSW	50	36
	Unknown non-CSW	22	16
<b>Frequency of Sex</b>			
	Regular	72	52.0
	Frequently	7	5.3
	Non-regular	14	10.0
	Rare	23	16.7
	No Answer	22	16.0

Table 3 gives the information about the frequency of sexual activities, majority (52%) reported that they had sex regularly, while another 5.3 percent said that they had sex frequently. This could be due to the migratory and stressful nature of

<sup>1</sup> Asked only for those married (N=142)

<sup>2</sup> 10 out 12 unmarried truckers reported of engaging in sex while travelling also clubbed with the married respondents claimed sex while travelling.



their occupation and being away from their families for a long time which might have made them to visit commercial sex workers.

### **Education and Type of Sexual Partner**

The association between truckers' education level and the type of sexual partner is given in the following table.

**Table 4: Respondents' Education Vs Type of Sexual Partner**

	<b>Known CSW</b>	<b>Unknown CSW</b>	<b>Unknown non-CSW</b>	<b>Total</b>
No Schooling	03 (13.0)	14 (61.0)	06 (26.0)	23 (100.0)
Primary	42 (50.6)	29 (34.9)	12 (14.5)	83 (100.0)
Middle	16 (61.5)	07 ((27.0)	03 (11.5)	26 (100.0)
High School	05 (83.3)	-	01 (16.7)	06 (100.0)
Total	66	50	22	138

(percentage given within brackets)

From the table, it is clear that there is a variation according to the level of education and the type of sexual partner. For example, truckers with schooling preferred to have sex with 'known CSW' rather than 'unknown CSW' and 'unknown non-CSW'. The possible reason for the positive association between the truckers' education level and their preference for 'known commercial sex worker', due to their perception of less risk of HIV/AIDS infection, when they have casual sex with known CSW.

### **Condom Behaviour**

Behavioral surveillance plays a very important role in understanding the nature and the magnitude of HIV/AIDS problem and act as a base for formulating appropriate interventions to change risky behaviour, especially among high-risk groups. Therefore, attempt has been made to understand the practices regarding HIV/AIDS among truckers. All the respondents who had sex in the previous months were asked about the use of condom, frequency of its use, reason for use and the persons who proposed the use of condom.

In the case of condom use during sex in the preceding month (Table 5), findings show regular use of condom only by 48 percent of respondents while around eight percent said that they never used condoms. Percentages of truckers reported the

use of condom most of the times, and only on sometimes were 32.7% and 11% respectively. This picture clearly indicates that every act of sex without condom exposes to vulnerability of HIV/AIDS infection, therefore sizable number of truckers are under the high risk of infecting HIV/AIDS.

**Table 5: Condom Behaviour**

<b>Characteristics</b>		<b>N 138</b>	<b>Percent</b>
<b>Use of Condom in the last month</b>			
	Every time	61	48.0
	Most of the time	42	32.7
	Sometimes	15	11.3
	Never	10	8.0
<b>Person suggested to use condom<sup>3</sup></b>		<b>N 127</b>	
	Respondent	58	45.3
	Partner	29	22.7
	Both	41	32.0
<b>Reason to use condom</b>			
	To avoid pregnancy	20	15.7
	To protect from STD	44	34.6
	To protect t from HIV	52	41.0
	Partner's insistence	9	7.1
	No Answer	2	1.6
<b>Source of knowledge for condom use</b>			
	Friends	47	36.7
	Fellow Drivers	41	32.0
	Doctor	2	1.3
	Sex partner	20	16.0
	Other	18	14.0

<sup>3</sup> Respondents reported of using condom in the last month were asked.

Reason for not to using condoms		N=12	
	Non-availability	7	66.7
	Do not like	2	1.7
	Didn't think it was necessary	1	0.8
	No Answer	1	0.8

Truckers' responses to a very direct question regarding the persons who suggested the use of condom indicated the attention-grabbing result. Although 58 truckers (45.3%) took a decision to use condom on their own; a third (32.8%) of them reported of taking joint decision along with the partner and a little more than a fifth of them decided to use condom only at the initiative of the partner. This finding clearly point-out that the truckers are relatively less hesitant to take protective measures. The awareness level of the truckers towards HIV/AIDS and protection from it is very high even though some of them are tempted to go without condom for their immediate sexual gratification not with standing the consequence of their action.

Similarly, respondents' reasons for using condom show the mixed picture. Although, a majority mentioned that the fear from HIV infection (41%) and STD infection (34.6 %) prompted them to use condom, a little more than a fifth of them (22.8%) reported that they used condom either to avoid pregnancy or at the insistence of their sexual partners. It should be noted that, irrespective of the IEC activities focusing on the use of condom in preventing HIV/AIDS, a sizable proportion of truckers had not realized the importance and use of condom in preventing HIV/AIDS. Interestingly, their sexual partner was able to negotiate the trucker and took the initiative for the use of condom.

Regarding the source of information for the condom use, a greater percentages of the truckers stated that peer groups (47 mentioned 'friends' and 41 mentioned 'fellow drivers') as the major source of information for their awareness about condom, which clearly indicate that peer group could contribute in spreading the knowledge and impact behavioral change.

### Reasons for non-use of condom

Of the 11 truckers who did not use condom during sex were probed for the reasons thereof. Eight of them assigned ‘non availability of condom’ as the reason while two of them reported that they do not like condom. This finding shows that, though truckers have been targeted by IEC campaigns there still exist major lacunae in their sexual behaviour. To ensure the easy availability of condom, necessary intervention for the promotion of condom usage by truck drivers by involving transport company owners, truck drivers unions, NGOs etc should be taken.

### Education and Condom Use

**Table 6: Truckers Education VS Condom Usage**

Condom Use	Everytime	Most of the times	sometimes	Never	Total
<b>No Schooling</b>	-	09 (39.1)	09 (39.1)	05 (21.8)	23 (100.0)
<b>Primary</b>	39 (47.0)	31 (37.4)	07 (8.4)	06 (7.2)	83 (100.0)
<b>Middle</b>	21 (81.0)	05 (19.0)	-	-	26 (100.0)
<b>High School</b>	06 (100.0)	-	-	-	06 (100.0)
<b>Total</b>	66	45	16	11	138

Table 6 shows the condom use by education level of truckers, The association between these these two variable is strong. For example, all the truckers attended high school use condom everytime they have sex, where as non-use and irregular use of condome found to be higher amoong the truckers without schooling or with primary education. Therefore, it can be concluded that, in the case of condom usage, education level of truckers found to be a major determinant.

**Table 7: Reasons for condom use/non-use**

Condom Use	Everytime	Most of the times	Sometimes	Never	Total
To avoid pregnancy	10 (15.1)	2 (4.5)	8 (50.0)	-	20
To protect from STD	24 (36.4)	17 (37.8)	3 (18.7)	-	44
To protect t from HIV	27 (40.9)	23 (51.0)	2 (12.5)	-	52
Partner's insistence	5 (7.6)	3 (6.7)	1 (6.3)	-	9
No Answer	-	-	2 (12.5)	-	2
Non-availability	-	-	-	7 (63.6)	7
Do not like	-	-	-	2 (13.2)	2
Didn't think it was necessary	-	-	-	1 (9.1)	1
No Answer	-	-	-	1 (9.1)	1
<b>Total</b>	66 (100.0)	45 (100.0)	16 (100.)	11 (100.0)	138

It is important to know the reasons for use and non-use of condom to develop the appropriate IEC intervention for the high risk groups. The Table 7 shows the reasons given by the users and non-users. Although the picture is not clear, it indicates that, truckers those used condom everytime and most of the time reported fear of HIV/AIDS and STD as the major reason for using the condom. Among the irregular users, 8 out 16 reported that they used condom to avoid the pregnancy.

In the case of reasons for not using condom among non-users, seven out of 11 stated 'non-availability of condom' as the major reason for not using and two of them did not like condom and one did not feel its necessity.

#### **5.4 Knowledge of HIV/AIDS and its prevention**

In the face of increasing numbers of people being identified with HIV, the government of India under the National AIDS Control Programme (NACP) initiated a appropriate and comprehensive educational programmes focusing on

enhancing people's knowledge about HIV/AIDS and building behavioural skills to encourage prevention practices (NACO, 2005) especially among high risk groups.

**Table 8: Truckers Knowledge on AIDS**

Awareness of HIV/AIDS		N	Percent
	Knowledge of HIV/AIDS	150	100
Source of information about HIV/AIDS		N=150	
	Radio/TV/Cinema	52	35.0
	Posters/Hoardings/Dailies/Magazines	35	23.0
	Kiosks/Dhabas	22	14.7
	Melas/Fairs/Magic Show	8	5.3
	Health workers	11	7.4
	Spouse/ non-spouse sexual partners	2	1.3
	Friends/Relatives	10	6.7
	Adult Education Programme	8	5.3
	Others	2	1.3

Keeping the above in mind, all truck drivers were asked if they had ever heard of an diseases called HIV/AIDS and those who had heard of AIDS were then asked a series of questions to ascertain the extent of their knowledge, and the prevalence of common misconceptions about AIDS and HIV transmission.

The **Table-8** clearly shows that knowledge of AIDS is universal among truckers. When all the truckers were further asked to identify the source from which they had learned about HIV/AIDS, majority of them mentioned electronic media (radio, television and cinema) and printed media posters/ hoarding/ newspaper/ magazines). However, a substantial number of them stated 'friends / relatives' and 'health workers' as the source of information.

### 5.5 Respondents knowledge on HIV/AIDS Transmission

The question related to their knowledge about the modes of transmission of HIV/AIDS (Table 9) found that 92 percent of the truckers claimed to have knowledge about the modes of transmission. Interestingly, most of them correctly identified about the modes of transmission and prevention, when they were asked to mention about the ways of transmissions. Only two truckers had misconception that ‘sharing food’ with the person infected would cause transmission.

**Table: 9 Truckers Knowledge on HIV/AIDS Transmission**

<b>Awareness of HIV/AIDS transmission</b>		<b>N</b>	<b>Percent</b>
Yes		138	92.0
No		7	4.7
Don't know		5	3.3
<b>Awareness of ways of HIV/AIDS transmission</b>			
Unsafe sex (without condom)		57	38.0
Sex with multiple partners		41	27.3
Blood Transfusion from HIV infected		17	11.3
Mother to child transmission		2	1.3
Injecting Drug Use		8	5.4
Sharing needles		9	6.0
Sharing food		2	1.3
Sharing injection		11	7.4
Others		3	2.0
<b>Knowledge about condom in protecting HIV infection</b>			
Yes		130	86.7
No		11	7.3
Don't know		9	6.0
<b>Knowledge about ways to reduce the chance of HIV</b>			
Use of condom		67	44.7
Limited number of sexual partners		35	23.3

Avoid sex with sex workers	18	12.0
Avoid sex with persons who have many partners	14	9.3
Avoid sex with homosexuals	2	1.3
Avoid sex with persons who inject drugs	7	4.7
From mosquito bites	4	2.6
Others	3	2.0
<b>Respondents Feel Healthy Looking Person vulnerability to HIV/AIDS</b>	138	92.0

Data on their knowledge of condom use in HIV/AIDS prevention found that a proportion (13 percent) of truckers were not aware of the use of condom in preventing HIV/AIDS and four of them erroneously believed that HIV/AIDS can be transmitted by mosquito bites too. It was astounding to know that five of them did not believe that healthy looking person can be infected with HIV/AIDS. This finding substantiated the earlier studies that although truck drivers do have some knowledge of HIV/AIDS, this knowledge is not consistent or comprehensive.

### 5.6 Awareness of HIV/AIDS Programme

To achieve the objectives of reducing the spread of HIV infection in India, and strengthening India's response to HIV/AIDS on a long term basis, the National AIDS Control Programme has been further expanded in its second phase (NACP-II from 1999-2004). Implementation of programme has been decentralised by establishing State and Municipal AIDS Control Societies in every State for a more focused programme with adequate financial and administrative powers to identify and respond to local needs.

**Table 10: Knowledge of HIV/AIDS Programme**

Knowledge about HIV/AIDS Programme	N	Percent
Awareness of HIV/AIDS Programme	142	94.7
Awareness of Voluntary Counseling and Testing (VCT)	138	92.0
Awareness of treatment availability of HIV/AIDS	119	79.3
Awareness of Treatment, Care and Support centres	88	58.7



Source of information for the above programmes			
	Radio / Television / Cinema	57	38.0
	Posters / Hoardings /Newspaper / Magazines	31	20.7
	Friends / Relatives	29	19.3
	Health Workers	25	16.7
	School Teachers	2	1.3
	Adult Education Program	3	2.0
	Work Place	2	1.3
	Others	1	0.7

In this study, an attempt has been made to assess the awareness of HIV/AIDS program among truckers. Awareness of HIV/AIDS programme was very high as 142 out of 150 truckers reportedly were aware of programme on HIV/AIDS and 92 percent of them reported to have heard of Voluntary Counseling and Testing (VCT).

Data on truckers' knowledge on availability of HIV/AIDS treatment indicate that around a fifth of them were not aware of it, which would possibly affect their protecting and treatment seeking behaviour. In the same way, nearly 62 truckers were not aware of the existing scheme of Treatment, Care and Support Centres, which again confirm that absence of comprehensive knowledge on HIV/AIDS among truckers.

Regarding the source of information for their knowledge of different components of HIV/AIDS programme, 57 truckers (38%) attributed to electronic mass media such as Radio, Television and Cinema, and printed media (posters/hoarding/newspapers/magazines), friends/relatives and health workers were other sources reported by them. This indicates that, although IEC campaign has resulted in spreading the awareness on HIV/AIDS, its strategy needs to be improved further in providing the complete and comprehensive knowledge on the important components such as treatment availability of HIV/AIDS and VCT especially among the high risk groups. It should be mentioned that, there is a little variation

in source of knowledge with reference to HIV/AIDS infection and HIV/AIDS programme implemented by the Government of India. For example, ‘kiosks/dhabas’ were mentioned the third major source of knowledge about the HIV/AIDS infection but ‘friends/relatives’ were mentioned as the third major source of information in the case of HIV/AIDS programme. Health workers (16.7%) were mentioned as the source of knowledge for HIV/AIDS Programme and the corresponding percentage HIV/AIDS infection was 7.4, This reflect that although mass media played a major role in spreading the knowledge about HIV/AIDS infection and HIV/AIDS programme, government health workers carried a message about the government HIV/AIDS programme to the high risk group.

### 5.7 Advertisements on Risky Behaviour

In order to examine the impact of awareness of HIV/AIDS among them, they were probed about the change in practices associated with sex. According to them, they have become more conscious in preventing or protecting from HIV/AIDS. Of all, three-fourth of them reported that they started using condom when they have casual sex while travelling; others reported that they have become more vigilant to symptoms or indication of STD and some said that they went for HIV/AIDS testing.

**Table 11: HIV/AIDS Advertisements Induced Behaviour Change**

Type of changes		N	Percent
	Use of condom	109	72.7
	Reduced interaction with CSW or other partners	8	5.3
	Reduced alcohol intake	4	2.7
	Looked for symptoms of STD among sex partners	2	1.3
	Paid greater attention to my own possible symptoms of STD	14	9.3
	Testing for HIV/AIDS	13	8.7
Reason for remembering advertisements			
	Repetitions	44	29.3
	Attractive slogan	71	47.3

	Popular face	12	8.0
	Dramatic depiction	18	12.0
	Others	5	3.4

### **Effectiveness of Advertisement**

Quality and medium of advertisements play major role in shaping and influencing one's knowledge and opinion on HIV/AIDS, which would strongly affect their sexual behavior. All the truckers were asked about the reasons for remembering the advertisements. The results from Table-11 show that for 71 truckers (47.3%) said that 'attractive slogan' made them to remember the message and 44 of them said that repeated exposure to advertisement was made them to remember the message. However, 'dramatic depiction' of the message and 'popular face' were respectively made 18 and 12 truckers to remember. To elaborate the point, the examples of regional film stars and cricketers in the advertisement was given.

## **CHAPTER SIX**

### **FINDINGS AND DISCUSSION**

A notable feature of this study was that despite the sensitive nature of the questions, nearly all of those who were approached agreed to participate in the interview after initial hesitation by few. Another factor that contributed for their participation could be not asking or recording their personal identity. This made the truckers under study feel comfortable with the researcher and revealed answers for sensitive questions.

In total, 150 truckers were interviewed for this study, most of whom were married. A majority of them belonged to economically active age group (26-35 years) and live in rural areas. Their education level shows that most of them attended school. Two-thirds of the truckers were away from home more than 11 days in a month as the nature of their job require.

An important finding of this study on the factors associated with high risk behaviour was, except a very few, all truckers reported consumption of alcohol. This finding has corroborated with findings of other studies. Of all those reported alcohol consumption, majority of them said that they consumed alcohol daily. The major reasons for this could be due to nature of their stressful work, which require them to spent more number of days away from their family on travelling.

Another significant finding from this study was that most of the truckers engaged in casual sex – that is with sex partner other than their spouse. Most of the married and all the unmarried respondents declared that they engaged in sex regularly. Without doubt, frequent travelling, long absence from home made the sexually active young truckers particularly vulnerable to engage in casual sex, and the apparent, abundant presence of commercial sex workers at these highways provided the opportunity. The enhanced economic activities due to accelerated expansion of road sector infrastructure might have attracted deprived section of

the poverty stricken people from the nearby areas towards Commercial Sex profession.

Regarding the type of partner, nearly half of the truckers had sex with known commercial sex workers while travelling. However, a third of them engaged in casual sex with unknown commercial sex worker – while a fifth of them engaged in sex with non-commercial partners.

Taking into account of truckers' nature of occupation, one important issue that was explored in this study related to the frequency of sexual contacts that the respondents experienced previous month. In this regard most of the married and all the unmarried respondents declared that they engaged in sex regularly; a tenth of them reported of having had sex frequently. A fifth of them chose not to answer this question despite they engage in casual sex while traveling. The combination of separation-induced vulnerability and ample opportunities resulted in the observed phenomenon of large scale casual sex among the truckers under study.

An interesting difference is noticed in the condom use pattern. Nearly half of the truckers reported regular use of condom during casual sex; a little more than tenth of them claimed using condom sometimes only, while a few reported not using condom at all during casual sex. It should be mentioned that those who reported either not using or using sometimes only posed big threat for spread of HIV/AIDS both among high risk and in general population.

Given the possibility that some respondents gave socially desired responses when reporting their own behaviour, the researcher posed additional questions intended to ensure that respondents were reporting condom use accurately. The researcher asked 'who suggested condom use?', 'why did you and your partner use the condom?'. Additional questions guaranteed cross-verification in their responses to some extent, and supported the view that truckers tend to use condom with sex workers. For example, 58 truckers made decision to use condom during casual sex on their own; whereas 29 of them decided to use only at the suggestion of their sexual partner. This evidence shows that mere awareness of HIV/AIDS and practice do not go hand in hand among truckers and expose them to high risk as

every sexual encounter that one have without condoms carries a risk of HIV infection.

The discrepancy between awareness of HIV/AIDS and their behaviour become more evident when the reason for using condom is analyzed. Although three-fourth of them stated that they used condom for the fear of HIV/AIDS, a fifth of them reported of 'using condom to avoid pregnancy', and 'at the insistence of sex partner'.

Twelve truckers, who reported of not using condom during casual sex, were further probed about the reasons to identify the factors associated with risky behavior. Eight of them said that 'non-availability of condom', while two reported their dislike towards condom as they feel condom makes sex less enjoyable.

The discussion above brought out three issues. First, mere awareness of HIV/AIDS does not necessarily result in appropriate behavior change. Second, truckers lack comprehensive knowledge on HIV/AIDS and importance of condom against HIV infection. And lastly, non-availability of condom increases the risk of exposure to HIV infection. Therefore, these issues should be addressed with appropriate IEC strategies.

Mass media, as a part of the IEC campaign provides means of expanding programme messages beyond the boundaries of the interventions. It has the added advantage of reaching the population outside a formal intervention environment at a time truckers may be more receptive to behaviour change messaging. Therefore, an attempt has been made to assess the impact of IEC on truckers behavior related to safer sex. All truckers were asked about the source of information of condom use. Quite interestingly, their responses revealed that their friends and fellow drivers acted as major catalyst to spread the knowledge of condom use among truckers, while a little less than the third of them declared 'sex partners and others sources' for their knowledge of condom use. From the above, it can be inferred that 'peer group' played a significant role in spreading the message along with 'sexual partners' too acted as the catalyst to spread the message of condom use in preventing HIV infection.

This study found that, knowledge of AIDS is universal among truckers and electronic media and printed media stated as the major source of knowledge on HIV/AIDS – hoardings, banners and advertisements placed on the highway stops also imparted knowledge to some extent.

Another point emerged from this study is that most of them claimed knowledge on means of HIV/AIDS transmission and identified correctly about the modes of transmission and prevention. Notable answers on HIV prevention were ‘condom use’ and ‘restriction of sexual partners’, ‘avoidance of commercial sex workers’ and ‘avoidance of homosexuals’. However, none of them stated that ‘abstinence from sex’ also protects one from HIV/AIDS infection.

Although truckers reported correct knowledge of HIV/AIDS transmission, a few truckers believed that ‘mosquito bite could cause HIV transmission’. Similarly, knowledge gap noticed about the use of condom in preventing HIV/AIDS infection and wrong perception that healthy looking person can not be infected with HIV/AIDS. These all can be considered as a proxy for knowledge gap or absence of comprehensive knowledge that exist among high risk group of truckers.

Most of respondents claimed awareness of HIV/AIDS program and Voluntary Counselling and Testing (VCT) but number of them lacked knowledge about the availability of treatment against HIV/AIDS and also about the existence of Treatment, Support and Care Centers. Need for enhancing the knowledge on these important components of HIV prevention, would play positive role among truckers in protecting their families and general population.

According to the truckers, electronic media and printed media mentioned as the major source of information in imparting knowledge on various components of HIV/AIDS.

Truckers claimed that their exposure to advertisements on HIV/AIDS led to behaviour change such as increased use of condom during casual sex while

travelling, vigilant to symptoms of STD and willingness to undergo HIV/AIDS test if any indication noticed.

Truckers appreciated the quality of advertisement and claimed to remember the message given in as it is made up of 'attractive slogans' with 'dramatic depiction' with the popular face'. However, these responses remain meaningless if the truck drivers do not report a uniform reduction in risky behaviors, such as the alcohol consumption and use of sex worker services while travelling.

### **6.1 Discussions with Programme Officials**

As a part of the study, the researcher discussed on key issues related to IEC with Programme managers. In total, eight discussions were held i.e., four officers from NACO and one each from the Ministry of Shipping, Road Transport and Highways, NHAI, All India Confederation of Goods Vehicle Owner's Association (AICGVOA) and All India Truckers' Welfare Association (AITWA).

#### **Successful Programme**

According to the programme officers, Red Ribbon Express (RRE) component of HIV/AIDS programme is most successful. RRE Project, conceptualized by Rajiv Gandhi Foundation, is being implemented by NACO as a multi-sectoral project to spread awareness on HIV/AIDS and promote safe behavioural practices. The RRE comprises of seven coaches, with display of educational material, arrangements for orientation and sensitization of selected groups. One of its coaches is dedicated for providing counselling and syndromic treatment for STI and RTI cases.

According to programme officers, NACO has succeeded to draw a larger number of population from rural areas and small towns who were never approached before with this innovative and effective approach. This is for the first time that through RRE, it could generate interest in the minds of the policy makers, intellectual and public in general.

#### **Failed Programme**

In the case of failed component of HIV/AIDS programme, some officers said that 'SMS Campaign to promote safe sex practices' as a failed component. This SMS campaign restricted its reach only to the population with hand phones. However, this initiative of communicating the public through SMS did not succeed as expected. In the midst of advertisements flooding through SMS by



many national and international companies, the importance of NACO message on safe sex practices got lost.

### **Ongoing IEC Programme and its effectiveness**

About ongoing IEC activities for restricting HIV prevalence in the general population, officials listed programmes such as mass media, inter personal media, out door media, folk media implemented by NACO as most successful. The ministry of road transport circulate a course material for refresher training to drivers to create awareness among long distance truckers. According to the programme officers, although, Bill Boards, Posters, Hoardings, Radio Talks, Pamphlets, Leaflets, etc. may have achieved the end of reaching the target population, effectiveness as those of IEC activities are not very community specific and at points, not self explanatory. For example, even after intensive IEC programme, the stigma and misconception about the people living with HIV/AIDS and modes of transmission is still prevailing among the general public.

### **Major thrust areas**

According to the programme officers at NACO, imparting knowledge about modes of transmission among general public should be given higher priority by the IEC programmes. In addition, the current IEC component should be strengthened to dispel the misconception about HIV/AIDS and reduce, fear, stigma and discrimination against persons living with HIV/AIDS among general public.

### **Innovative approaches**

All the officers agreed that there is a need to develop culture specific IEC materials. They also emphasized the use different local media like Theatre groups, Mime, magic shows etc. at truckers' halt points, to sensitize the truckers. Organizing health camps and 'melas' suggested, as it would allow interactive sessions with the participants in regular interval would play an important role in enhancing the knowledge among general public. One key informant opined a novel idea that the state government should gift a CD covering all aspects of HIV/AIDS and safe behaviour to the newly wed couples in the state. The impact of awareness regarding the disease on such occasion would ever remain in the minds of the people and help the spread of message through the peer groups to the community.

**Role of NGOs**

The importance of NGOs' role in spreading the HIV/AIDS programme is recognized by all the officials. NGOs have played a major role in supporting the various initiatives of government. Therefore, grassroots NGOs, which has the better understanding of local culture – acceptance among the people should be liberally allowed to design their own ways to reach the general public with the message on HIV/AIDS.

NGOs have a good role to play in awareness building. As they are in the same place they have a better understanding about the local culture and group specific information that they can provide to the community. Moreover there are also acceptable in the local community and all this make the efforts more impact oriented. About sustainability of the awareness campaign, it was suggested that the alternative sources of funding have to be located in order to have self generating resources.

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## **CHAPTER SEVEN**

### **CONCLUSION AND RECOMMENDATION**

#### **7.1 Conclusion**

There is no doubt that travel along the major transport routes is an essential requirement for the socioeconomic well-being of the region; at the same time, it offers opportunities for faster transmission of HIV /AIDS among the people in the region.

Long-distance truck drivers spend weeks at a stretch on the highways and thus are away from their home family members for extended periods of time. Poor road infrastructure, long work hours and the urgency to reach their destination in the stipulated time cause stress lead them interact with CSW to release stress and escape from isolation. In the absence of alternative entertainment, consumption of alcohol leads to vulnerability. Highly active and easily accessible sex networks operate along the highways and at halt points. Truckers carry significant sums of cash to meet their travel need, making them attractive customers to the sex work industry. They tend to have multiple sexual partners, including female sex workers (FSWs) on the highways, or have other fixed partners en route or at places where they stop for rest or food. Availability of limited sexual health services on the highways also contribute for increased vulnerability. These factors lead them to engage in and exposure to high-risk sexual behaviour than others.

This study demonstrates that truckers have a problem translating the knowledge they do have into perception of individual risk, and denial is a part of their attitudes to HIV/AIDS. While truck drivers do have some knowledge of HIV/AIDS, this knowledge is not consistent or comprehensive furthermore, knowledge and practice frequently do not go hand in hand. Despite their general awareness of HIV/AIDS and its dangers, truck drivers do not report a uniform reduction in risky behaviors, such as the alcohol consumption and use of sex worker services.

Though truckers have been targeted by IEC campaigns and exposed different medium of advertisements, there still exist major lacunae in their sexual behaviour. To overcome these lacunae, information regarding all modes of transmission HIV/AIDS and other STIs should be given due importance and transport company owners, truck drivers unions, NGOs etc. should be involved in the promotion of condom usage among truck drivers and also in ensuring easy availability of condom.

Peer education appears to be a appropriate strategy of choice in intervention campaigns targeting truck drivers as most stop-over towns are located in remote areas and are beyond the reach of mass media (except radio). In addition, truck drivers are in daily contact with other high-risk populations concentrated in fairly small areas, which should make peer education outreach programs easier to plan.

Similarly sex workers, who are in daily contact with truckers, can be used to promote and distribute condoms and to promote the concept of safe sex among truckers. The efforts of these trained peer educators include distribution of condoms and counseling of sex workers to persuade them to insist on the use of condoms with their clients. Therefore appropriate interventions can be taken in this regard.

To exploit the feeling of fear to communicate the dangerousness of the threat, risk reduction messages (i.e. "AIDS Kills"), or put forward solutions to create the feeling of self efficacy in addressing the problem (i.e. "Use Condoms") or both can be helpful to greater extent. Studies shows that the combination of the two delivers the best results. Fear messages are rarely effective when they do not offer an alternative to risky behavior.

In addition, truckers' perception of themselves as family men and good providers, despite their actions on the highway, should be exploited, in a thematic advertisement on protecting families by staying away from extramarital sex may be used in the BCC campaigns.

Though the level of awareness among truckers related to STIs and HIV/AIDS is relatively high, findings show, this knowledge is rarely converted into action.

Lack of concern for self and a false sense of security due to improper understanding or interpretation of information about HIV/AIDS lead to risky behaviour among them. Even a minor group of population who ignore the risk of unsafe sex may pose a big threat for spread of HIV AIDS for general population. .

The knowledge and information level of truckers towards HIV/AIDS is very high. Ironically, despite information about these dreaded diseases, the drivers are tempted for sex outside regular partner, even unknown CSWs. This suggest that the need for behavioural change in the truckers is very important from the policy perspective. Such a policy approach may bring change by focussing more on building local, regional and national capacity to develop programmes that lead to positive action by stimulating society-wide discussions.

## **7.2 Recommendation**

There is a need for a policy approach integrating IEC with BCC in all the components of intervention on HIV/AIDS related awareness campaigns. Such policy approach should involve all the stakeholders, identify target population, define objectives, design strategy of implementation, monitor and evaluate plan to get feedback for modification of the programme from time to time. For ensuring the collaboration, coordination and appropriate resources, political and bureaucratic commitment will be a pre-requisite condition for its' sustenance ( Grindle and Thomas 1991)

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**Appendix 1**

***CONFIDENTIAL***  
***For Research Purpose only***  
**QUESTIONNAIRE**

**A. Background Characteristics**

Name:.....State:.....

Q.1 Age:

18-25	26-35	36-50	Above 50
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.2 Marital Status:

Married	Unmarried
<input type="checkbox"/>	<input type="checkbox"/>

Q.3 Type of Locality:

Rural	Urban	Semi-Urban
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.4 Education:

Primary	Secondary	Higher	Never attended school
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.5 You are away from home for how many days in a month?

Less than 5 days	5-10 days	11-15days	16-20 days	21-30 days
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.6 Have you ever had alcohol?

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>

Q.7 If yes, how frequently?

Daily	Once in 2 days	Once in a week	Once in a month
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.8 Do you have sexual relationship with any partner other than your spouse?

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>

Q.9 If YES, how frequently:

Q.10 Who is your sexual partner?

Known CSW	Unknown CSW	Unknown non CSW	Unknown Partner
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.11 How frequently you have sexual intercourse with your partner?

Regular	Non-regular	Frequently	Rare	Never	Don't know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.12 During last one month with what frequency did you/your partner use a condom?

Never	Every time	Most of the time	Sometime
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.13 Who suggested condom use that time?

Myself	My partner	Joint decision
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.14 Why did you and your partner use the condom that time?

Avoid Pregnancy	Protect from Sexually Transmitted Infections	Protect from HIV infection	Partner's desire	Don't Know	Other
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.15 If not, why did not you and your partner use the condom at that time?

Not available	Too expensive	Partner objected	Don't like them	Used other contraceptive	Didn't think it was necessary	Didn't think of it	Other	Don't Know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.16 Where from you knew the use of condom?

Friends	Fellow Driver	Doctor	Sex Partner	Others
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.17 Have you ever heard of HIV or the disease called AIDS?

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>

Q.18 From which source of information have you heard about HIV/AIDS?

Radio / Television / Cinema	Posters / Hoardings/ Newspaper / Magazines	Kiosks / Dhabas	Melas / Fairs / Magic show	Health Workers / Tax collection office	Spouse / Partner	Friends / Relatives	Adult Education Program	Others
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.19 Do you know how a person can infect with AIDS?

Yes	No	Don't Know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.20 Please list all the ways you know person can get AIDS?

Unsafe sex (without condom)	Sex with multiple partners	Blood Transfusion from HIV infected	Mother to child transmission	Injecting Drug Use	Sharing needles	Sharing food	Sharing injection	Others
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.21 Can people protect themselves from HIV by using a condom correctly every time they have sex?

Yes	No	Don't Know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.22 Is there anything else a person can do to avoid or reduce the chance of getting HIV/AIDS?

Abstain from sex	Use of condom	Limit number of sexual partners	Avoid sex with sex workers	Avoid sex with persons who have many partners	Avoid sex with homosexuals	Avoid sex with persons who inject drugs	From mosquito bites	Others
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.23 Do you think that a healthy-looking person can be infected with HIV, the virus that causes AIDS?

Yes	No	Don't Know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.24 Have you ever heard of HIV/AIDS Program?

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>

Q.25 Have you ever heard of Voluntary Counseling and Testing (VCT) Program?

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>

Q.26 Do you know that treatment is now available for HIV/AIDS?

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>

Q.27 Have you ever heard of treatment, Care and Support Centers available for Persons Living with HIV/AIDS?

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>

Q.28 From which source of information have you heard about these programs?

Radio / Television / Cinema	Health Worker s	Friends/ Relatives	School Teachers	Adult Education Program	Posters / Hoardings / Newspaper / Magazines	Work Place	Others
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.29 If you become aware of HIV/AIDS recently, have you began to modify your practice in any of these:

Use of condom	Reduced interaction with CSW or other partners	Reduced alcohol intake	Looked for symptoms of STD among sex partners	Paid greater attention to my own possible symptoms of STD	Testing for HIV/AIDS
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

.30 Which is the most memorable advertisement about HIV you remember most

Q.31 Why do you remember the Advertisement?

Repetitions	Attractive Slogan	Popular face	Dramatic depiction	Any other
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Thank you

**KEY ISSUES DISCUSSED WITH Programme Managers,**  
**Stake holders Key Informants**

**Characteristics of the Key Informant**

Name

Duration of working hours

Role/Responsibility

**Perception/Opinion about the HIV/AIDS program**

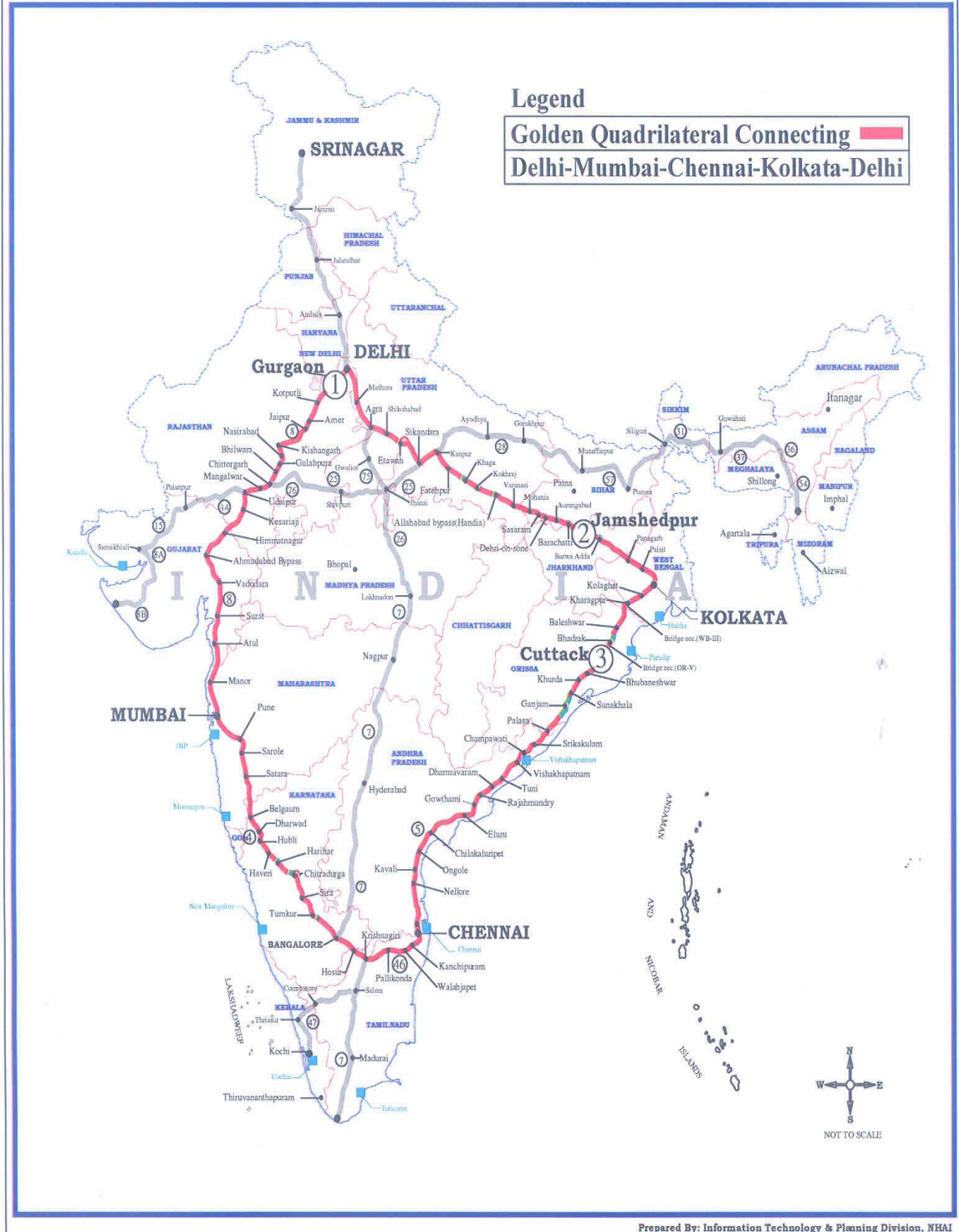
- 1) In your opinion which of the component of HIV/AIDS program is most successful and why?
- 2) In your opinion which of the component of HIV/AIDS program is least successful and what are the possible reasons?

**Effectiveness of the IEC programme**

- 3) What are the ongoing IEC activities in the State/District for restricting the HIV prevalence in the general population?
- 4) How do you rate the effectiveness of these IEC activities?
- 5) What are the major thrusts in the existing IEC programs in the State/District?
- 6) Would you like to suggest some innovative approaches in or to enhance the effectiveness of the IEC programme in the State /District?
- 7) What is your opinion about the potential role of NGOs in improving the HIV/AIDS awareness program in the State/District?
- 8) How would you rate the effectiveness of their functioning?
- 9) Sustainability of the IEC intervention program

## GOLDEN QUADRILATERAL

The field study was conducted at Delhi-Gurgaon Road (1), Jamshedpur (2) & Cuttack (3)



Prepared By: Information Technology & Planning Division, NHAI

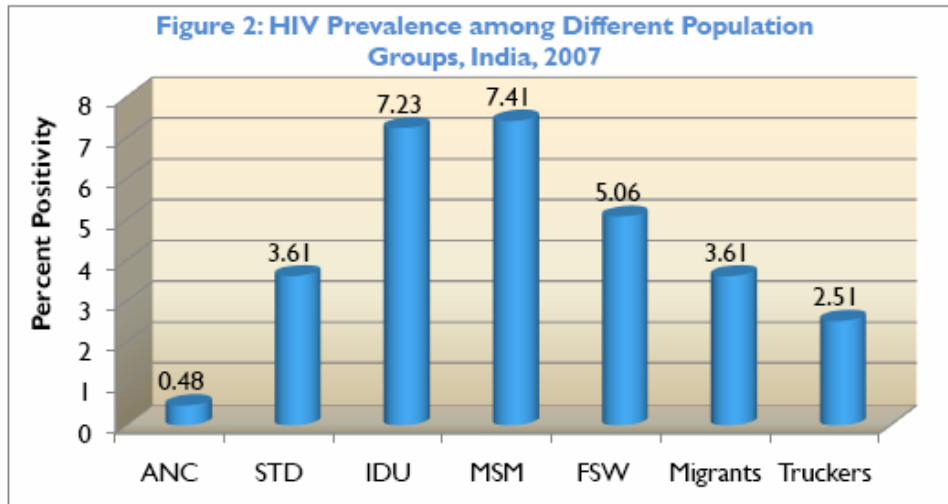
## Appendix 4

### Sentinel Site Distribution

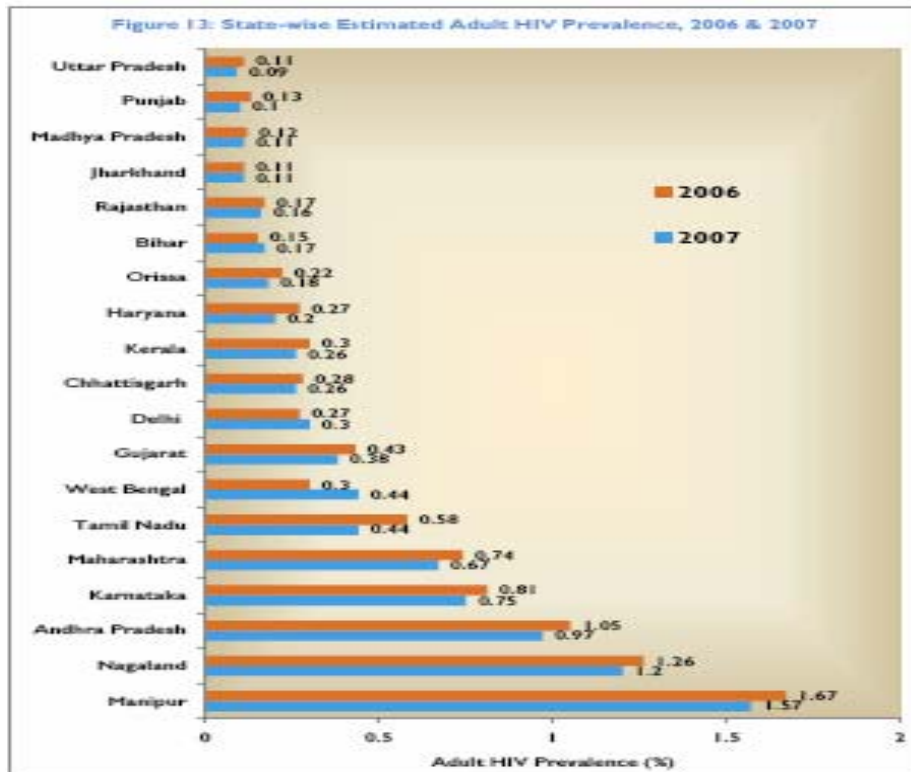
#### Distribution of Sentinel Sites across Districts, State-wise Summary (in India), 2007

S.N	State	Total No. of Dts.	Dts. with site	Dts. with ANC site	Dts. with Only ANC site	No. of ANC sites	Dts. with HRG site	Dts. without HRG site	No. of HRG sites
1	A & N Islands	3	3	3	2	3	0	3	0
2	Andhra Pradesh	23	23	23	5	52	16	7	20
3	Arunachal Pradesh	16	11	6	4	6	1	15	1
4	Assam	27	25	16	10	16	11	16	13
5	Bihar	38	36	23	8	23	14	24	15
6	Chandigarh	1	1	1	0	1	1	0	5
7	Chhattisgarh	16	16	14	10	17	1	15	2
8	D & N Haveli	1	1	1	1	1	0	1	0
9	Daman & Diu	2	2	2	2	2	0	2	0
10	Delhi	9	9	5	1	5	5	4	10
11	Goa	2	2	1	0	2	1	1	1
12	Gujarat	25	25	25	14	25	3	22	6
13	Haryana	20	19	12	7	12	9	11	9
14	Himachal Pradesh	12	12	8	6	9	5	7	6
15	Jammu&Kashmir	14	14	14	8	15	0	14	0
16	Jharkhand	24	18	12	7	15	5	19	6
17	Karnataka	27	27	27	20	54	2	25	6
18	Kerala	14	14	6	0	6	13	1	15
19	Lakshadweep	1	1	1	0	2	0	1	0
20	Madhya Pradesh	50	45	36	30	36	3	47	3
21	Maharashtra	35	35	35	20	73	12	23	18
22	Manipur	9	9	9	4	14	4	5	8
23	Meghalya	7	6	6	4	7	1	6	1
24	Mizoram	8	7	7	2	8	5	3	6
25	Nagaland	11	11	11	3	19	8	3	9
26	Orissa	30	30	30	17	31	9	21	10
27	Puducherry	4	2	2	0	2	2	2	5
28	Punjab	20	18	13	11	13	6	14	10
29	Rajasthan	33	32	26	14	26	5	28	5
30	Sikkim	4	3	2	1	3	2	2	3
31	Tamil Nadu	30	30	30	13	63	11	19	14
32	Tripura	4	4	1	0	2	1	3	1
33	Uttar Pradesh	70	69	51	39	61	8	62	9
34	Uttarakhand	13	11	7	4	9	0	13	0
35	West Bengal	19	18	10	3	13	12	7	23
	<b>INDIA</b>	<b>622</b>	<b>589</b>	<b>476</b>	<b>270</b>	<b>646</b>	<b>176</b>	<b>446</b>	<b>240</b>





**Estimated Adult HIV Prevalence, State-wise, India, 2006**



**Appendix 5****List of Programme Officials**

<b>Sl. No.</b>	<b>Name</b>	<b>Designation</b>	<b>Date of Interview</b>
1	Shri S.K Dash, IAS	Joint Secretary, Ministry of Shipping Road Transport & Highways	20.11.08
2	Dr. D.Bachani	Dy. Director General, NACO	2.10.08
3	Dr. S. Jana	National Programme Officer, NACO	2.10.08
4	Shri Mayank Agrawal, IIS	Joint Director (IEC)	3.10.08
5	Dr. Ruchi Sagorwal	Programme Officer, NACO	3.10.08
6	Shri Santomba Singh	Manager, NHAI	12.11.08
7	Shri Chittaranjan Dass	Vice President, All India Confederation of Goods Vehicle Owners Association (AICGVOA)	4.11.08
8	Shri R.C. Gulati	National Secretary, All India Truck Owners Association (AITOA)	27.10.08