

**“MACROECONOMIC IMPACT OF AIDS EPIDEMIC IN
TRANSPORT SECTOR OF COASTAL ANDHRA PRADESH -
INDIA AND COST EFFECTIVE PREVENTIVE MODULE”**

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ABSTRACT

Background: The spread of AIDS epidemic can no longer be treated as sole public health issue. It has influenced social and economic development by reducing the potential trained workers and labour force since it mainly effects the youth and the highly productive age group. India being a developing country facing HIV threat has already resulted in severe adverse affects by bringing down the level of domestic savings as both the private and public sectors are being crushed with dearth of funds. Some states in India like Chennai, are not able to attract any foreign investments due to shortage of skilled workers. The AIDS epidemic in addition to its affect on National economy has also badly rocked the transport sector of the country. The prevalence of HIV infection among workers in high risk occupations like long distance truck drivers is steadily mounting up whose behaviour patterns are typical due to high mobility and frequent sexual activity. Long haul truck drivers usually originate from rural areas who consider that sleeping with sex worker is perfectly natural and essential to release the “heat” accumulated in the body due to pressure to complete as many trips as possible to earn more money. Thousand of Long Distance Truck Drivers known for their risk behaviour pass through day in and day out on this National Highway. Eighty seven (87%) are sexually promiscuous of whom 11% only using condoms. Sixty Nine (69%) are educated. Forty seven (47%) are alcoholics. The AIDS knowledge is 70% and the prevalence of STD is 35%.

Objective of the Study: In the background of several studies in developing countries, a cost effective HIV/AIDS prevention module has been designed and evaluated the efficacy to over come the risk behaviour and reduce HIV/AIDS infection in the transport sector particularly among long Distance Truck Drivers in India.

Methodology: As the usual IEC activities have not shown much impact inspite of spending huge money in reducing the risk behaviour of Truck Drivers, a cost effective preventive module in which, three (3) Free Tea parlours (FPTs) at a distance of 40 kms each have been started on the road side along the Calcutta – Chennai National Highway in the first phase during January 2000 – December 2001 which is one of the longest National Highways in the country with a length of about 1800 km that crosses major states in India viz., West Bengal, Andhra Pradesh, Orissa and Tamil Nadu that carries nearly 40% of the total road traffic. It is estimated that road traffic, which accounts for 80% of passenger traffic and 60% of goods traffic. These FPTs work round the clock are equipped with a care-taker, games like caroms, chess and drinking water, newspapers and Condoms of popular brands like KS, DUREX, LATEX and free services of a Doctor / Counselors, free medicines and hot tea are the attractive features. Most of the drivers

like to drink hot Tea frequently for which they stop at road side Hotel, motel. Taking this factor in to consideration they are named as FTP instead of calling them conventionally as AIDS service centers or clinics for fear of stigmatization.

Results: Each Free Tea Parlour works with an establishment charges of US\$2551 and an annual maintenance of US\$15183, where as the HIV/AIDS prevalence rate has been significantly brought down in the pilot study with a rebound increase in the awareness levels of HIV/AIDS by using this cost effective module. Truck drivers are a highly difficult group of people to draw them into HIV/AIDS awareness and prevention programmes. The CSWs are another hard-core who are very resistant for changing their risk behaviour. So community based approaches involving specially the CSWs people from the transport field, Drivers and local youth as care takers of FTPs and as partners in the regular prevention of HIV/AIDS activities found to be more effective in pushing the message into these two important groups CSWs and Truck Drivers whose behaviour modification is vital in the prevention of HIV/AIDS.

ANNEXURE-1

The financial implications:

I. CAPITAL EXPENDITURE

1. *Land and Building*

(a)	Land 0.05 acres	Rs.10,000-00	
(b)	Building 20'x30' with asbestos roof	Rs,50,000-00	
		-----	Rs.60,000-00

2. *Equipment*

(a)	Borewell / Pumpset / shower bath/water tank etc	Rs.35,000-00	
(b)	Furniture including cots and utensils	Rs.15,000-00	
(c)	Electrification, TV set etc.,	Rs.15,000-00	
		-----	Rs.65,000-00

II **RECURRING EXPNEDITURE**

(Expenditure for a Month)

1. **MATERIAL**

(a)	Tea (@Rs.500x30 days)	Rs.15,000-00	
(b)	Medicines (@Rs.1000x30 days)	Rs.30,000-00 -----	
			Rs.45,000-00

2. **HONORORIUM**

(a)	Doctor (part time)-1 @Rs.3,000/-	Rs.3,000-00	
(b)	Para Medical Worker-2 (Counsellor cum social workers) @Rs.2000/- each	Rs.4,000-00	
(c)	Helpers - 2 @Rs.800/- each	Rs.1,600-00 -----	
			Rs. 8,600-00

3. **CONTINGENCIES**

	Power, Administrative and other Miscellaneous expenditure (News paper, cards etc.,	Rs.8,400-00 -----	
			Rs. 8,400-00

TOTAL MONTHLY EXPENDITURE

1.	MATERIAL	Rs.45,000-00
2.	HONORORIUM	Rs. 8,600-00
3.	CONTINGENCIES	Rs. 8,400-00

		Rs.62,000-00

EXPENDITURE PER ANNUM

Rs.62,000/- x 12 months = Rs.7,44,000-00

COST OF A FREE TEA PARLOUR FOR DRIVERS (Per Annum)

I.	CAPITAL EXPENDITURE	:	Rs.1,25,000-00 (US\$2551)
II.	RECURRING EXPNDITURE	:	Rs.7,44,000-00 (US\$15183)

Grant Total: Rs.8,69,000-00 (US\$17734)

INTRODUCTION:

The country's economy is dependent on highly mobile population of transport workers and Long Distance Truck Drivers directly and indirectly. It is estimated that there are five million long distance truck drivers in India. Usually these men are away from their families for long duration and exposed to unhealthy, environment along the Highways, and prone to several illnesses. Therefore it is envisaged to start FREE TEA PARLOURS in order to look after the welfare of this highly productive young energetic group of this country with all concern and compassion for them.

“FREE TEA PARLOUR” (FTP) which serves uniquely the transport workers in general and the Long Distance Truck Drivers in particular. An FTP will be built on the NH and it has a Free Tea which influences the Truck Drivers to have a halt on the road at FTP where all the facilities like shower bath, free news paper, free cot to take rest, free laundry, also caroms, chess, TV / Radio and play cards for short relaxation and food on subsidized rate besides counseling and free medical aid by qualified social workers and doctor will be provided for a better health. The unit works round the clock.

The Economic Impact Profile:

The effects of the epidemic radiate from the household across society. In Cote d'Ivoire, urban households that have lost at least one family member to AIDS

have seen their income drop by 52-67%, while their expenditure soared four fold. To cope up, they have to cut their food consumption by about 41%. Rural households facing similar predicaments in Thailand are seeing their agricultural outputs shrinking by half. In 15% of the cases, children are removed from schools to take care of family members who are ill and to regain lost income.

Some companies in Africa have already felt the impact of HIV on their bottom line. Managers at one sugar estate in Kenya said they could count the cost of HIV infection in a number of ways: absenteeism, lower productivity (a 50% drop in the ratio of processed sugar recovered from raw cane between 1993 and 1997) and higher overtime costs for workers obliged to work longer hours to fill in for sick colleagues. Direct cash costs related to HIV infection have risen dramatically in the same company: spending on funerals rose fivefold between 1989 and 1997, while health costs rocketed up by more than 10-fold over the same period, reaching KSh 19.4 million (US\$ 325000) in 1997. The company estimated that at least three-quarters of all illness is related to HIV infection. Indeed, illness and death have jumped from last to first place in the list of reasons for people leaving a company, while old-age retirement slipped from the leading cause of employee drop-out in the 1980s to just 2% by 1997(SOURCE NACO)

Mobile Populations and Economy of the Country

While addressing the problem of HIV/AIDS among the economically productive and sexually active sections of population, specific emphasis needs to be given

not only to high risk groups like commercial sex workers and injecting drug users, but also to specific groups in general population like students, youth, migrant workers in urban and rural areas, women and children. Migration of economically productive sections of population from rural to urban areas in search of employment is a common phenomenon all over the country. Most of the migrant labour are in the unorganised sector, are highly mobile and live in unhygienic conditions in urban slums. Long working hours, relative isolation from the family and geographical social mobility may foster casual sexual relationships and make them highly vulnerable to STDs/HIV/AIDS. All these aspects provide an unusual challenge of spread of HIV infection through various routes which comes with its long period of invisibility and subsequent manifestation through opportunistic infections. In India with a large population and population density, low literacy levels and consequent low levels of awareness, HIV/AIDS is one of the most challenging public health problems ever faced by the country.

The economic impact of AIDS epidemic needs to be acknowledged. The largest economic cost of a death due to HIV/AIDS is usually lost income as those who die from AIDS are generally younger and in their most productive years.

Because of faster economic development in certain regions of the country in the last few decades, there has been significant migration of population from rural to urban areas, both inter-State and intra-State. Migration of rural population in search of employment has also led to increase in the number of slums with poor public health infrastructure in urban and semi-urban areas. Migration is mostly

single with the workers living alone in substandard living conditions. The separation from families for long periods also result in high risk behaviour among these migrant workers. These workers, after they get infected with HIV, do also infect their unsuspecting housewives when they go home for vacation or for agricultural operations. The problem therefore has to be addressed both at the place of origin and the place of migration. The problem of these migrant workers needs special IEC and intervention programmes for provision of services like STDs clinics, condom distribution centres and access to health care. All these measures should be able to increase the awareness levels of the general population both in urban & rural areas to more than 90% in the next five years .

AIDS targeting productive age group and its influence on the Economy

The presence of AIDS in a country characterized by a poor standard of human development can set off a downward spiral of damage to hard-won gains in health and living standards. Further AIDS cuts sown people in the prime life, the ramifications of HIV infection demand a special response from bodies at local, national and regional levels in the Government, business and non-governmental sectors. Target audiences the young workers in occupations which take them far from home, like Long Distance Lorry Drivers (LDLD) have to be targeted and reached persuasively, all media need to be used, advertising, televisions, group and individual counseling through NGO, religious congregations, peer group involvement and personnel development. Since 1989 the dominant means of HIV transmission in Asia and Pacific region is through hetero sexual relations, 75% of cases world wide.

The rate of transmission among those whose means of livelihood pre-determines that they have a large number of sexual partners has also been rapidly raising, Secondly focusing on these populations groups whose occupation or behaviour subjects them to risk of HIV infection has reinforce the impressions that AIDS is a condition remote from the daily lives of the vast majority of Asian poeple. Mobility both as a characteristic of occupation and of the contemporary economic and social development process is associated with the spread of HIV infection. The effect of population movements is that an infectious agent like HIV is provided with a larger and more porous environment in which to circulate. Increased mobility is also reflected in a rise in the numbers of those engaged in occupations which entail long periods of spouse separation. Professions such as long Distance Lorry Drivers often resort to commercial sex, so now a days demand for commercial sex from those frequently ' ON THE MOVE' is growing. In a world wide with HIV the hazard of sexually transmitted disease in the red light environment takes on a new complexion not only because HIV is itself STD but because the presence of genital lesions makes more likely the transmission of HIV during sexual intercourse. But truckers who are forced to keep away from their families for long durations get no facility for healthy entertainment on highways and thus become easy prey to commercial sex workers.

In Africa, many of the communities worst affected by AIDS are those on sea-going routes, major highways or who have hosted an army on the move. A study conducted by the Institute for Population and Social Research of Mahidol

University, Bangkok on Behavioural Patterns of Thai Long Haul Truck Drivers revealed that all had had commercial sex at least once, 60% at truck stop brothels, 38% at other brothels enroute, and 2% near cargo pick-up points that 86% of the single men and 63% of the married men had had commercial sex in the past six months. Eighteen (18%) had used condoms during commercial sex. Fifteen (15%) had had a sexually transmitted disease in the past six months. Their absence from home for significant periods, their sexual needs accelerated through continuous journey, their easy access to commercial sex workers at various points on highways have brought new dimensions to their sexual life style and resulting in a frightening situation in the wake of HIV epidemic.

This epidemiological theme has demanded to conduct a survey about the risk factors of HIV/AIDS among the Long Distance Lorry Drivers at Andhra /Orissa boarder on National Highway – 5 namely Purushothampuram check post in Andhra Pradesh, India, through which daily on an average 1800-2000 lorries pass through.

Truck drivers, are the single largest group of frequently traveling males which invariably indulges in a variety of high risk behaviours viz., multipartner sex with female sex workers, which appears to be every driver's prerogative, relatively less frequent homosexual activities with their cleaners and helpers. Regular intake of alcohol which increases their vulnerability to indulge in unprotected sex and occasional use of drugs too.

Some even maintain a second wife at a frequently visited halt point. Most drivers make extra cash by carrying passengers short distances which adds to their disposable income. And this is invariably spent on buying sex and liquor. Another motivating factor is the coaxing by older drivers. It has developed as a sub-culture among these groups. Peer pressure plays a big role in diluting the inhibitions of new-comers to this occupation. The possibility of using the truck itself for sex makes it further convenient as they do not have to hire a place nor fear raids or harassment by police.

Many use the cleaners and helpers for homosexual activities in return for favours like teaching them how to drive and get a licence to drive. A positive finding is that drivers are very conscious about their health. Though misconceptions abound, but they do fear STDs and do take precautions according to their beliefs like washing the genitals with Dettol and soap water or lemon juice or with their own urine after having sex. Most seek STD services and buy medicines too. Some even take anti-biotic capsules themselves or get their blood test done for STDs. They are not fully aware of AIDS, its transmission, and the consequences. Condom use is increasing. A few cases are reported where they go to the extent of using tubes meant for sealing diesel leaks, in case they run out of condoms. Still there is a sizeable group which despite being aware of STDs is not careful about safe sex.

A strong belief associated with their being promiscuous is that driving for long hours accumulates heat which only liquor and sex can release from the body. Other reasons for their behaviour are long absence from home and spouse

for weeks at a stretch cheap and ready availability of CSWs along highways and halt point also make it convenient and alluring for them to resort to sex workers.

One encouraging feature is that this group has, so far; responded the best to intervention programmes. Their sources of information are posters, banners, hoardings and circulation of pamphlets related to AIDS awareness distributed by field workers of non governmental organizations. Drivers passing through the NGO covered check posts, showed significant difference in AIDS awareness and higher sales of condoms at and around the check-posts which is largely because of information sharing among themselves and few incidents of AIDS-related deaths among drivers.

Under the above scenario, having identified the different risk factors, intervention strategies for reducing the risk behaviour among truck drivers have been designed and implemented.

We evaluated the cost effective intervention strategies to over come the risk behaviour and reduce HIV/AIDS infection among Long Distance Lorry Drivers in India during January 2000 to December 2001 in one of the Free Tea Parlors (FTPs) on National Highway – 5 through which on an average 800-1200 lorries pass on daily. However there are seasonal variations of the trucks passing through the highway.

Objective: To Evaluate the efficacy of the cost effective intervention strategie to over come the risk behaviour and reduce HIV/AIDS infection among the transport sector/ long Distance Lorry Drivers.

Methods: As the usual IEC activities have not shown much impact in reducing the risk behaviour of Truck Drivers three (3) day and night Free Tea parlous (FPTs) at a distance of 40 kms each have been started on the road side along the National Highway covering of 120 kms in between Srikakulam and Visakhapatnam of Andhra Pradesh as a pilot project in the first phase. These Free Tea Parlous (FPTs) are equipped with a care-taker, games like caroms, chess, drinking water and newspaper, Cigarettes, match box and condoms have been arranged on subsidy rates. Condoms of popular brands like KS, DUREX, LATEX are kept as the clients have poor opinion of Govt., supplied condoms. Also free services of a Doctor / Counselors, free medicines and hot tea are the attractive features. The Doctors have been selected from the near by area and the Care-takers are usually from the peer groups and the old and retired sex workers of the profession and truck drivers to the extent possible for a better compatibility. Most of the drivers like to drink Hot Tea frequently for which they stop at road side Hotel . motel. Taking this factor in to consideration they are named as FTP instead of calling them conventionally as AIDS service centers or clinics to which they do not like to go even there is an impending need, for fear of stigmatization. The FTPs, are practically in all respects the AIDS service/counseling/relaxation centers only, aimed at to implement the comprehensive intervention strategies for the main target groups viz., Truck Drivers and Commercial Sex Workers (CSWs) as the infection among and from these groups is silently rooting deep into their innocent families and the highly productive rural/urban youth.

Results: To start with on an average 7-9% of drivers on move per day are stopping at these FTPs. During the first three months truck drivers used to just wait for a tea and go but occasionally 2% of them shown interest in talking to the Doctor/counselor. Four (4%) purchased subsidy rate condoms. By the end of six months there has been a great response that 28% of truck drivers contacted Doctor for general ailments and 17% consulted for STDs exclusively. At the end of one year 34% consulted for general ailments, 22% for STDs and 8% sought advice on HIV/AIDS positivity. This experiment has been giving very encouraging results. But the project is badly in need of financial assistance to extend services further.

Lessons Learned: Truck drivers are a highly difficult group of people to draw them into HIV/AIDS awareness programmes and intervention strategies. The CSWs are another hard-core who are very resistant for changing their risk behaviour. So community based approaches involving specially the CSWs people from the motor field, Drivers and local youth as care takers of FTPs and as partners in the regular prevention of HIV/AIDS activities found to be more effective in pushing the message into these two important groups CSWs and LDLDs whose behaviour modification is vital in the prevention of HIV/AIDS. A modest universal 'insignia for condoms' has to be developed and made popular to avoid perplexity among users.

In a country where the highest percentage of people live below the poverty line and where there is a double standard in the family norm, the

intervention strategies based on cultural, religious and attitudes of them are highly successful.

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Discussion: The LDLD are moving from Gowhati to Markapur, Calcutta-Madras, Bihar – Bangalore, Utkal – Udaynagar indicating that they are covering many parts of the country. The Long Distance Lorry Drivers during their journey halt at ‘Dhabas’, road side hotels/motels which usually provide food, rest, call girls, alcohol and drugs where they relax in different ways which include sexual intercourse with a call girl. Some of them pick up call girls from one Dhaba use them and leave them at some other ‘Dhaba’ where again those call girls are used collectively or individually by another group of drivers and local youth. As most Dhabas are connected to nearby town and villages, where secrecy is maintained, thus attracting many young persons into prostitution. Further in these centers sex is available at cheaper rate.

Hence the LDLD are responsible directly and indirectly for spreading the STDs and HIV infection from one corner of the country to any other corner in a short time. In addition the married LDLD on return when they sleep with their spouses, the infection is easily spreading to the house wives. There by risk of HIV infection spreading silently among house wives subsequently vertical transmission will end in a catastrophe of off-spring.

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Community based approaches involving specially the CSWs., people from the motor field, Drivers and local youth as care takers of FTPs and as partners in the regular prevention of HIV/AIDS activities found to be more effective in pushing the message into these two important groups CSWs and LDLDs whose behaviour modification is vital in the prevntion of HIV/AIDS (Figure-1) A modest universal 'insignia for condoms' has to be developed and made popular to avoid perplexity among users.

It is also a difficult task to prevent to stop them totally going for a commercial sex. But if the condoms are freely supplied, on National Highways, the spread of HIV can be minimized in due course. The Truck Drivers have a feeling the by making Long Journey, they get overheat which can be let out by ejaculating and / or by having sex so that they become fresh and can make further journey happily.

FTP Hypothesis

In order to bring down the risk behaviour fo the Long Distance Truck Drivers and Commercial Sex Workers which is peak at 'Dhabas' on highways, FTPs ahead to them is an efficient intervention tool and hence they have been initiated, which on long run will definitely yield good results by reducing the HIV transmission among this highly vulnerable groups. In a country where the highest percentage of people live below the poverty line and where there is a double standard in the family norm, the intervention strategies base don cultural, religious and attitudes of them are highly successful.

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