KNOWLEDGE AND ATTITUDE REGARDING HIV / AIDS INFECTION AMONG THE TRUCK DRIVERS – A ONE YEAR CROSS-SECTIONAL STUDY.

By

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DISSERTATION

Submitted to the
KLE University,Belgaum,Karnataka,

in the partial fulfillment
of the requirements for the degree of

DOCTOR OF MEDICINE (M.D)

IN

COMMUNITY MEDICINE

Under the guidance of

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I hereby declare that this dissertation entitled **"KNOWLEDGE AND ATTITUDE REGARDING HIV / AIDS INFECTION AMONG THE TRUCK DRIVERS – A ONE YEAR CROSS-SECTIONAL STUDY"** *is a bonafide and genuine research work carried out by me under the guidance of* **Dr.VIJAYA.A.NAIK.**$_{\textbf{MD,DPH}}$ *Professor and Head, Department of Community Medicine, Jawaharlal Nehru Medical College, Nehru Nagar, Belgaum-590010.*

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Dr. Kantesh Shidaraddi.

LIST OF ABBREVATIONS USED

HIV	-	Human immunodeficiency virus
AIDS	-	Acquired immunodeficiency syndrome
CSW	-	Commercial sex worker
UNAIDS	-	United Nations Joint Program On AIDS
NACO	-	National AIDS Control Organization
SES	-	Socio-economic status
IV Drug	-	Intra venous drug
CDC	-	Centre for disease control
STI	-	Sexually transmitted infections
NGO	-	Non governmental organization
NH-4	-	National Highway- 4
VCTC	-	Voluntary counseling and testing centre
WHO	-	World Health Organization

ABSTRACT

Title: "Knowledge and attitude regarding HIV / AIDS infection among the truck drivers – a one year cross-sectional study".

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Key words: KAP,HIV/AIDS, truck drivers, sexual behavior.

Background and Objectives:

Truck drivers are crucial in spreading HIV infection through out the country in a short time because of their high risk behavior. This population requires extra and concentrated efforts so that the problem of AIDS could be brought to low level among them. A study of this nature will help to formulate an information, communication and education package regarding HIV / AIDS which can be used for these truck drivers.

Objectives:

To study the knowledge and attitude regarding HIV / AIDS among long distance truck drivers and to observe the sexual behaviour among them.

Study design:

Cross-sectional

Methods:

The present cross-sectional study was conducted on truck drivers visiting any of 5 'dhabas' situated in the outskirts of Belgaum city. The study was carried for a period of 1 year from Jan-2007 to dec-2007. All the truck drivers were invited to participate and those who consent for interview were taken to separate enclosure in order to maintain privacy and confidentiality. Data was collected on knowledge, attitude regarding HIV/AIDS and sexual practices by personal interview of the participant using a pre-designed and pre-tested questionnaire.

Results:

Out of 400 truck drivers, majority were below 40 years with mean age of 31.2 years. 59% were from semi-urban place of residence, 12% of the participants were illiterates, 86% were married and 75.5% were in occupation for less than 10 years.

21% have heard of HIV as compared to 73.5% who have heard of AIDS and 90% got this information from mass media. Majority of the participants had good knowledge about modes of transmission but misconceptions existed in less than 50% of the participants. Majority of the participants expressed that social problems are the main reason for not informing their HIV status to others. 74.5% of the participants were willing to give sympathy/care and share kitchen/toilet with the HIV/AIDS patients. 10% and 28.5% drivers had genital discharge and itching in every 6 months. 48% of the truck drivers used alcohol during their sexual exposure to CSWs and 4.5% of the total abused IV drugs.

60% of the drivers got exposed to sex between 18-20 years for the 1st time in their life. Among those who were exposed to CSWs, 7% did not used condoms at all during sex. This makes them the highest risk group. Overall knowledge of the participants regarding HIV/AIDS increased with increase in their educational status. 65% illiterates told that they will give sympathy and care for HIV patients. 4 illiterates, 30 and 16 of primary and secondary level education participants did not use condoms during sex with CSW.

Knowledge of the participants regarding transmission of HIV/AIDS increased with increase in their socio-economic status. 92%, 69% and 57% of the participants of class II, III and IV thought that they should show sympathy and give care to AIDS patient. 11.7%, 13% and 14% of the participants of class II, III and IV did not have the habit of condom use at the time of their sexual exposure to CSWs. Among those who have used condoms 38% and 21% of married and unmarried group always used while, 25.5% and 16.8% of them occasionally used condoms during their sexual exposure to CSWs.

Personal habits and exposure to CSWs among participants increased with increase in their duration of stay away from home.

The results of this study clearly highlighted the need for health education strategies to be modified in such a way that the knowledge gained is converted to the healthy practices among truck drivers.

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INTRODUCTION

Historians will look back on the latter part of 20th century as having had one great medical triumph, the eradication of smallpox, and one great medical tragedy, HIV/AIDS.

The human immuno-deficiency virus (HIV) pandemic is the greatest Public Health, Social and Economic Crisis of our time[1]. The Acquired Immunodeficiency Syndrome (AIDS) crisis continues to deepen in Africa, while epidemics are growing with alarming speed in Asia and Eastern Europe. No region of the world has been spared.[2] The epidemiological and clinical features differ greatly among countries. The epidemiological features depend upon the social and cultural practices of the people which may again vary from region to region.[3]

AIDS has been with us for more than 20 years. It will continue to challenge the mankind for many decades to come. In the absence any effective vaccine or drug the most important lesson we have learned so far is that we can prevent new infections with proper health education and we can improve the quality care treatment for people living with HIV / AIDS.[2]

Globally, AIDS has killed more than 25 million people since it was first recognized in 1981, making it one of the most destructive epidemics recorded in the history.[4] UNAIDS estimate that AIDS epidemic claimed 2.1 million (1.9-2.4 million) lives in 2007; children accounts for 0.33 million (0.31-0.38 million) deaths. An estimated people living with HIV were 33.2 million (30.6-36.1 million); 2.5 million

(1.8-4.1million) were newly infected with the virus. Children living with HIV/ AIDS 2.5 million (2.2-2.6 million) and children newly infected with HIV/AIDS 4.2million (0.35-0.54 million) at the end of 2007.[5] The projected number of children orphaned by HIV/AIDS is more than 13.4 millions in three regions studied (Sub-Saharan Africa, Asia, Latin America and the Caribbean), a number that will increase to 25 million by 2010.[6]

The first AIDS case in India was diagnosed among sex workers in Chennai, Tamilnadu in 1986, since then HIV infection has been reported regularly from all states and union territories. Today India accounts for 6.3% of worlds infected population and in sheer numbers it is second largest population of HIV infected individuals. National AIDS control organization (NACO) estimate that 2.1 million people were living with HIV in 2007. The adult prevalence rate is 0.36%.[7]

The infection has been mainly by heterosexual intercourse, with commercial sex workers, long distance truck drivers and migrant labour serving as vehicles of spread except in North Eastern states where the spread is by IV drug users.[8]

Earlier it was confined to high risk groups. Now it has percolated to all the strata of the community. The infection is highly prevalent in Andra Pradesh, Goa, Karnataka, Maharashtra, Tamilnadu, Manipur, Mizoram and Nagaland. The number of pregnant women infected with HIV is increasing leading to increase in the newborns infected.

Though drugs are available to increase the longevity of life, the cost of treatment is beyond the reach of poor and middle class people. The increased susceptibility to opportunistic infections and premature death causes greatest socio economic impact on the family. Care of the orphan children is great burden to the society. Stigma and discrimination have fuelled the transmission of HIV and has greatly increased the negative impact creating major barriers to prevent further infections and providing adequate care, support and treatment.[9]

India has one of the largest road networks in the world and an estimated 5 million long distance lorry drivers. These men are away from their families for longer durations. During their journeys, they stop at "Dhabas" the road side hotels that usually provide food, rest, sex workers, alcohol and drugs. They pick-up women, use them and leave them at some other dhaba, where they are used by other drivers and local youths.[10]

Because HIV prevalence is increasing among CSW, HIV may be transmitted along highways through the truck drivers. Thus long distance lorry drivers are crucial in spreading HIV infection through out the country in a short time.[11] The prevalence of HIV/AIDS infection is 47.6% among the truck drivers. Their knowledge, attitude and sexual behavior will have great impact on the spread of HIV/AIDS.[7]

Since the prevalence of HIV / AIDS is very high in Belgaum district, it is absolutely necessary to know the knowledge, attitude and sexual behavior of the truck drivers travelling along the national highway (NH-4) which is passing through

Belgaum. There are number of Dhabas where long distance truck drivers take food and rest. In some Dhabas, even service of commercial sex workers is provided.

Very few studies have been conducted on long distance truck drivers in this area. The present study was conducted to assess the knowledge, attitude and sexual behavior of the truck drivers regarding HIV/AIDS. A study of this nature will help to formulate an information, communication and education package regarding HIV / AIDS which can be used for these truck drivers.

OBJECTIVES

1. To study the knowledge and attitude regarding HIV / AIDS among long distance truck drivers.

2. To study the sexual behavior amongst them.

REVIEW OF LITERATURE

HISTORICAL PERSPECTIVE:

A few peculiar cases were reported in 1978 in United states. They suffered from rarer diseases like Kaposi sarcoma and other serious opportunistic infections diagnosed on the basis of histology or culture found in immuno-compromised persons in the cases there was no known cause for diminished resistance. In June 1981 surveillance for such new cases was initiated in the USA. By 1983, 1000 such cases were reported to CDC. The second 1000 cases were reported to over the next 6 months, by July 1983; and the third 1,000 in 5 months, by December 1983. This chapter summarizes the descriptive epidemiology of AIDS in the United States based primarily on the first 3,000 cases reported through the surveillance system.[12]

In Africa, doctors were also coming across with patients with unusual symptoms amongst young people who dramatically lost weight and died. This became known as slim disease. It secured likely that disease being found in Africa was same as this new disease in USA.[13]

In 1982, the surveillance initiated in United States described these conditions among injecting drug users, recent immigrants from Haiti, people receiving blood and blood products and children of mothers belonging to one of the risk groups. One year later AIDS was also found among female heterosexual partners of patients with AIDS and among Central Africa immigrants in Belgium.[14]

In 1982, the Centre for Disease control, Atlanta defined AIDS as a disease that is at least moderately predictive of a defect in the cell meditated immunity occurring in a person with no known cause for diminished resistance to those diseases such as

Kaposi sarcoma, Pneumocystis carinii and other serious opportunistic infections diagnosed on the basis of histology or culture.[15]

In 1983, a group of French investigators from the Pasteur Institute, headed by Luc Montagnier isolated a retrovirus from a homosexual man with generalized lymphadenopathy and they called this virus Lyamphadenopathy Associated Virus (LAV).[16]

In 1984 Gallo and co-workers from the National Institutes of Health in the United States isolated a similar virus. This virus was named Human T- lymphotropic Virus type III (HTLV-III).[17]

These two were shown to be the same and in 1986 an international committee agreed to rename the virus as Human Immunodeficiency Virus (HIV). Further work has shown that there is at least one other virus capable of producing the signs and symptoms of these cases. The original virus has been called HIV- 1 and the second one HIV-2. It was found that a period of 10 years could elapse between infection with virus and developing AIDS.[13]

Although AIDS was first reported in 1981 in USA, on retrospective investigations of a serum collected in 1959 from a person of Zaire to study viral haemorrhagic fever at Centre for Disease Control found to have contained HIV-1 antibodies. HIV-1 infection was also suspected in seamen and their family from Norway in 1960 that died in 1976.[18]

George William et al. mentions that another seaman from Manchester, England died in 1959 with unexplained immunodeficiency and with same typical opportunistic infections. He was confirmed to have suffered from HIV/AIDS as determined by polymerase chain reaction technique performed on his well-stored serum. Though AIDS was first reported in 1981, a blood sample taken in 1959 from a

sailor in Kinshasa, Zaire was found to indicate HIV infection. 1959 sample is the oldest evidence in the world so far. [19]

HISTORICAL ASPECTS IN INDIA:

1986: First AIDS case in India was reported from Bombay.[20]

1991: Presence of HIV-2 infection in India was reported for the first time from Bombay.[21]

At present India is experiencing highly varied HIV epidemic. Prevalence differs not only from state to state but also within the states. Approximately 2 to 3.6 million people were living with HIV in 2007.[7]

KARANATAKA: It is bordered by three states that have well-established and growing HIV epidemics (Maharashtra, Tamil Nadu and Andhra Pradesh). There is extensive migration to and from these states and there are major transportation routes connecting Karnataka to them.

There are also economic and social factors that contribute to Karnataka's vulnerability. Poverty levels are high, leading to economic pressures that promote commercial sex work.[22]

CSWs are used by truck drivers for sex. This sexual behaviour of truck drivers makes them high risk population for HIV/AIDS infection. Furthermore, wives and family as well as their community will also be at increased risk.[10]

A survey conducted by ORG Centre for social research at Jharkhand in 2003 on 299 long distance truck drivers showed that, most respondents traveled long distances

of over 500 kms away from home. Nearly all (95 percent) of the respondents stated that their regular halting points were *dhabas* (roadside eating joints).

75% of the respondents were between the age group of 18-39, with the total mean age being 31.5 years. A little less than three-fourths of the respondents reported that they were currently married. 9% separated from their spouses or were widowers. one-fourth of the respondents had unmarried.50% of them having studied between Grade V and Grade XII.

About 37 percent had been in their current occupation from one to five years and 50% from six to 15 years. 66% were from rural areas. However, around two-fifths of the respondents were from city. 48% and 38% of them have spent less than 10 days and 10-20 days away from family per month respectively. 64 percent of the respondents had consumed alcohol. Habitual alcohol consumption before sex was quite low (10 per cent). 4% percent of the respondents reported injecting drug use.

Awareness of HIV/AIDS among the respondents was 86 percent.50% knew that AIDS could be prevented, 21% were aware that HIV/AIDS was incurable.75% knew that HIV could be transmitted through sexual contact and through blood during transfusions, Mother to child 69% and through breast feeding 54%. Knowledge of prevention was 64% and 59% with condom use and single sexual partner.39% had one or the other misconceptions about transmission like mosquito bite, sharing meals. About 8 % had genital discharge or ulcers/sores in the 12 months.87% knew the condom use and 10% knew its use in prevention of STI's and hiv/aids.

Median age of respondents at first sex was 18 years. 80% had sex with CSW's. 8 % of the respondents had ever had sex with a male partner. Exposure to the radio, television and newspapers was 41%, 43% and 42% respectively. 34% felt that families would accept another member if s/he was infected with HIV, and 25% felt

that the community would also accept such persons. 40% of them who were away from home for 10 days in a month had non-regular sexual partners. Consistent condom use was 12.5% among them.[23]

In another study conducted by Chaturvedi S. et. al on 283 long distance truck drivers in 2004 on Pune-Ahmednagar Highway, mean age of truck drivers was 28.97 years.10.61% truck drivers were less than 20 years of age, 47.35% were between 21-30years and 42.04% were more than 30 years of age.65.37% were married.24.39% drivers had studied primary , 64.66% between secondary school and rest had studied college. 97.2% truck drivers were aware of HIV/AIDS. Out of these, 67.28% got information from Mass media, 24.72% from their peer group and 5.28 % from NGOs or doctors. Majority of the drivers were aware that HIV can be transmitted by heterosexual route, contaminated needle and blood transfusion. However knowledge about transmission from pregnant mother to her unborn child, through breast-milk and homosexual route was less.

26.5% felt that AIDS can be transmitted by sharing meals, 53% stated that it can be spread by mosquito bite and 51.24% were of the opinion that AIDS can spread by using same toilet. 57.24% of truck drivers had exposure to CSWs. Out of 57.24% truck drivers who gave history of CSW exposure only 6.79% had used condom every time. Of the 148 truck drivers who stayed away from home between 10 - 20 days per month, 50.7% gave history of CSW exposure.80.6% truck drivers who stayed away from home for more than 20 days gave history of CSW exposure. 48.8% were aware about STIs, of them 21.4% always used a condom with CSWs.[24]

A study by Balla.S.S. et.al in 2006 on long distance drivers revealed that 46.8% of truck drivers were in age group of 15-25 yrs. 26.3% were illiterate. 72% of truck drivers were married. 58% had visited CSWs. 56.9% of total truck drivers never used condoms during sex with CSWs and this tendency was more among married truck drivers. Only 30.5 percent had heard about AIDS. Regarding symptoms of AIDS 78.9 percent had knowledge about weight loss to be the primary symptom. Majority (53 percent) considered sex as the route of transmission. Major source of information for HIV was friends (31.1 percent). 70.7 percent of them were of opinion that condom is a protective measure against AIDS.[25]

In another study by Muhammad Anwar Chaudhry et.al, in 2005 in Pakistan half of the respondents were illiterates and 85% were married. Seventy-seven percent of the truck drivers had a monthly income of Rs. 6000 or less.

It was found that 50% of the truck drivers did not know whether needles had any role in the spread of HIV/AIDS. Forty to fifty percent of respondents had the misconception that AIDS can be contracted by casual contact and by being in the same room with a person with AIDS. Two third of the truck drivers did think that monogamy and condom use is an effective method for AIDS prevention. An association between low knowledge of AIDS and high negative attitude towards persons with AIDS was found to exist, which was statistically significant.[26]

A survey by Ramjee et al, in 2002 on truck drivers visiting sex workers at truck stops in KwaZulu-Natal, South Africa, indicated that 37% of all men always stopped for sex along the route, and 42% practiced anal sex, with less than 25% reporting the use of condoms during anal sex. 70% of men reported having wives or regular

girlfriends; 29% reported never using condoms with sex workers, and only 13% used condoms with their wives.[27]

In a study by William Sorensen et. al in 2007 on Bolivian truck drivers, they earned an average net salary of $363 per month (range $208 - $672), four times higher than the Bolivian per capita income. Truckers revealed information about time spent on journeys, with the majority (65%) spending less than one week on the road at a time, 23% spending 1 to 4 weeks on the road at a time, and 13% were away from home for over one month at a time. Truck drivers worked an average of 11 years in this occupation. 56% of the participants reported having multiple sex partners. Of 246 truck drivers, about one-third (31%) said that they had never used condoms. Of those who had used condoms, 57% had used them but not recently and the remaining 43% had used condoms during the last month. 19% truckers reported having had an STI.[28]

A cross-sectional survey done by Bansal R.K. et,al,to study the degree of knowledge of HIV and AIDS among 420 long distance truck drivers in Indore city of Madhya Pradesh showed that 94% of the drivers were totally ignorant about AIDS and 83% of drivers had history of extra marital sex and of these only 2 regularly used condom. 14% of them had past history suggestive of STD infection.[29]

A survey by Greenstar Social Marketing on 683 truck drivers in Pakistan in 2005 revealed that mean age was 33 yrs and majority of drivers were married, 44% of sample lives at the truck stop alone or with someone else. Monthly income of the most averaged between Rs. 2,500-5,000. Awareness about HIV/AIDS is 81.2% while of STIs is 55.5%, while knowledge about two correct ways of HIV transmission is

40%. 65% have heard of condoms mainly for use in contraception, of which 44% believe in its efficacy in the prevention against HIV/STIs. Most believe they are priced at low or very low levels. 19% express the view that condom users are at high risk of HIV/AIDS. 72.4% of drivers indulge on extramarital/premarital sex; while of those ever having had sex 42.3% had done so before the age of 21. Personal risk perception of STIs and HIV/AIDS is 20% and 12.6%.[30]

A research by OSHC in 1997 on sexual practice of truck drivers in Philippines revealed that almost half of the respondents are in their mid-30s. A large majority of them had heard about STD/HIV/AIDS but, misconceptions on the causative agents and modes of transmission of these diseases still exists among 10% of the respondents.

Forty-five percent of the respondents believe that being intoxicated is one of ways that could tempt them to engage in casual sex. Other ways that could tempt them when they have taken prohibited drugs (15.7%) and being far away from home/homesick (2%).About half of the respondents (163 out of 300) admitted having had sex with persons other than their wives or regular partners. Thirty-six percent (59 out of 163) of them had casual sex less than one year ago. For those who engaged in causal sex, only 15% of truck drivers/ helpers had used condoms.[31]

A study by Schneider J. et. al, in 2006 on South Indian truck drivers in Andhra Pradesh revealed that mean age was 30.2, 56% were from out of state, 73% spent <7days away from family per year, 58% reported consistent condom use when visiting a commercial sex worker.[32]

A questionnaire survey by Rao KS, Pith RD, Chalam PS., on Sexual life style of long distance lorry drivers in India showed that in the 21-30 age group,78% were

unmarried and sexually promiscuous. Among them, 331/425 reported having 31-60 sexual partners during the past 12 months. Only 29 of the 40 married men aged less than 21 years reported having sex daily. Almost half of subjects (47%) drank alcohol daily. 69% (3938) were educated.[33]

A cross-sectional study by Wang BO et.al in 2002 showed that half of the participants were unmarried. A greater proportion of them reported premarital sex (83.7%) and a sexual onset age younger than 18 years (37.7%).

A larger proportion of them reported having been intoxicated with alcohol at least once during the previous month (60%). They were also more likely to have a history of drug use (13.1%), having had multiple sexual partners in the last month (31.1%) and having regular sexual partners who had sex with others (40.8%).
Most men (70%) believed that using condoms was effective ways to prevent STDs. Perceptions of barriers to condom use were common among these men.[34]

A study by Singh YN, Malavia AN on long distance truck drivers in India revealed that, the drivers were aged 20-40 years, 60% of them were married with families. 78% of drivers admitted having multiple heterosexual partners, including prostitutes, 5% of study group had regular homosexual encounters. Only one forth of the drivers had heard about HIV/AIDS, routes of transmission and 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. 77% were nonetheless engaging in occasional unprotected sex.[35]

A study by Podhisita C et.al , on Long distance truck drivers in Thailand showed that Forty-eight percent reported a commercial sex worker (CSW) as their first partner and 87% had contact with a CSW at some time. Median lifetime number of all partners was 29. In the 6 months prior to interview, 35% had two or more partners. Among the currently married, 23% had CSW contact within the past 6 months; 13% had contact with a non-marital, non-commercial partner; and about 8% reported marital as well as both CSW and non-commercial relationships in the same time period. Over half the unmarried reported sexual relations in the 6 months; 25% reported contacts with both CSWs and non-commercial partners. About 40% of subjects visiting CSWs used condoms inconsistently or not at all. Drivers were knowledgeable about AIDS and prevention measures, with some important misconceptions. 28% claimed occasional use and 14% never used condoms. Only 3% of drivers perceived themselves to be at high risk of HIV infection; 62% claimed to be at no risk.[36]

A study by Foster SJ et. al in 1999 9n Uganda revealed that all men had heard of condoms but only eight men (9.4%) used condoms regularly for the prevention of AIDS. There was nonetheless, a degree of willingness to use condoms once informed that they could reduce the risk of AIDS. 90% knew that the best way to avoid AIDS as to be sexually monogamous. 36% of them would be willing to use condoms to reduce the risk of AIDS, were suggested as a further preventive measures by 19% of respondents.[37]

A study by Manjunath JV et.al in 2002 on sexual lifestyles of long-distance truck drivers in south India showed that all of the participants were sexually active and heterosexual contact was the predominant mode (99.2%). Two-thirds of them had

contact with commercial sex workers (CSWs) and roughly 60% admitted alcohol consumption. 38.7% of participants had various STDs. The higher median age, education less than primary school level, longer duration of occupation, longer duration of each trip and a previous history of genital ulcer disease were significant risk factors for the acquisition of HIV infection amongst them.[38]

MATERIALS & METHODS

The present cross-sectional study was conducted on truck drivers visiting any of 5 'dhabas' situated in the outskirts of Belgaum city to know the knowledge, attitude and sexual behavior of long distance truck drivers who pass through National highway-4**.**

Source of Data:

Long distance truck drivers who parked their vehicles at "Dhabas" nearby the Pune-Bangalore National Highway (NH-4) passing through Belgaum city.

Study Design

Cross-sectional study.

Study period

1 year from Jan-2007 to dec-2007.

Inclusion Criteria

All the truck drivers who stopped their vehicles at any of the five "Dhabas" and gave consent for the interview are included.

Exclusion Criteria

Those who did not give consent were excluded.

Areas of study

Two groups of Dhabas were selected on either ends of the city

outskirts at Honaga and Halaga villages, which are 15 Kms North and South from the heart of Belgaum city on NH-4.

A written consent was obtained from all the participants prior to the enrollment for study.

All the truck drivers were invited to participate and those who consent for interview were taken to separate enclosure in order to maintain privacy and confidentiality.

Method of Collection of the Data

Data was collected by personal interview of the participant between 9.00 AM to 5.00 PM on Mondays and Fridays, for a period of 1 year using a pre-designed and pre-tested questionnaire.

Care was taken to ensure that each driver was interviewed only once.

Sample size

In a pilot study it was found that on an average of 15 truck drivers are available for the interview per day. However, only 4 out of 15 were willing to participate in the study. i.e., approximately 8 drivers per week were eligible to be included in the study.

Hence the sample size of this study for a period of 1 year was calculated to be 400.

Statistical Analysis

Analysis was done using rates, ratios and proportions. Further according to the importance of variables found, Chi-square test and‘t’ test were used.

SPSS Version 14.0 statistical software was used for statistical analysis.

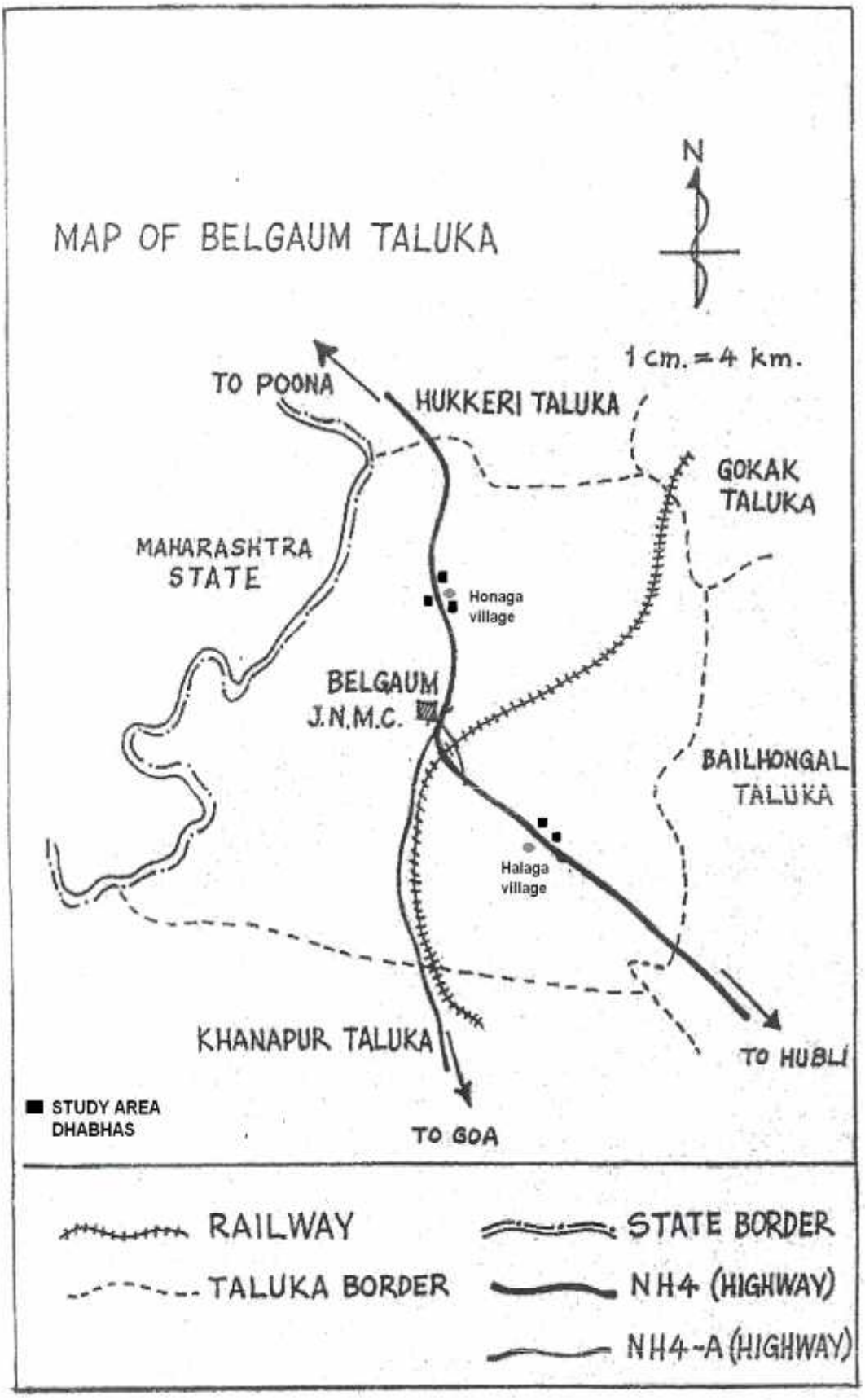

MAP OF BELGAUM TALUKA
N
1 cm. = 4 km.
TO POONA
HUKKERI TALUKA
GOKAK TALUKA
MAHARASHTRA STATE
Honaga village
BELGAUM J.N.M.C.
BAILHONGAL TALUKA
Halaga village
KHANAPUR TALUKA
TO HUBLI
STUDY AREA
DHABHAS
TO GOA
RAILWAY
STATE BORDER
TALUKA BORDER
NH4 (HIGHWAY)
NH4-A (HIGHWAY)

Figure1: Study area (Dhabha) on NH - 4

Figure 2: Consenting the driver for interview

Fig 3: Personal interview with the driver

Figure 4: Giving health education to the drivers

Definitions of study variables:

Age : Age was recorded to the nearest completed year.

Illiterate : The person who cannot read and write.

Literate : The person who can read and write.

Primary education : The person who has studied up to 5^{th} standard.

Secondary education : The person who has studied up to 10^{th} standard.

College : The person who has studied above 10^{th} standard.

Post-graduate : The person who has obtained post-graduate degree from any university.

Socioeconomic status : The socio-economic status was classified using modified B.G. Prasad's classification.

Socio-economic class	Prasad's classification 1961 (per capita income in rupees per month)	Modified Prasad's classification in study period (2007-08)
I	100 and above	2600 and above
II	50-99	1300-2599
III	30-49	780- 1299
IV	15-29	390-779
V	Below 15	Below 390

The mean consumer price index for the study period was taken. Modification was done with the aid of multiplication factor (MF), which was obtained as below.

$$MF = \frac{\text{Value of consumer price index (Average value for study period)}}{100} \times 4.93$$

$$= 519 \times 4.93 / 100 = 25.59 \approx 26$$

Unmarried : The person who has never married in life.

Married : The person who has ever married in life and living with his spouse.

Widower : The person who has ever married in life and lost his spouse (due to her death).

Divorcee : The person who has legally divorced his spouse.

Nuclear family : Family unit consisting of husband, wife and their Children.

Joint family : It is a lateral extension of nuclear family.

Extra-marital sex : Those who have sex with other than their spouse(s).

High risk behavior : Unprotected sexual intercourse (i.e., without a condom) with many partners or sharing of unsterilized injecting equipment.

Pre-marital sex : Those who had sex before marriage.

Commercial sex worker: Someone who offers sex in exchange of money, food or any other thing.

Alcohol consumption:

For assessment purpose period of recall was kept as “past one year”. Subjects who had never consumed alcohol were kept in the category of “non drinkers” while, those who had consumed any alcoholic drinks during the past one year were drinkers.

Smoking:

Those who smoked tobacco in any form are considered as smokers.

Pilot study:

Pilot study was conducted on 40 subjects (i.e. 10% of total sample size) with a view to find out the feasibility of the study. The questionnaire was standardized and validated during pilot study so as to ensure high content criteria and validity.

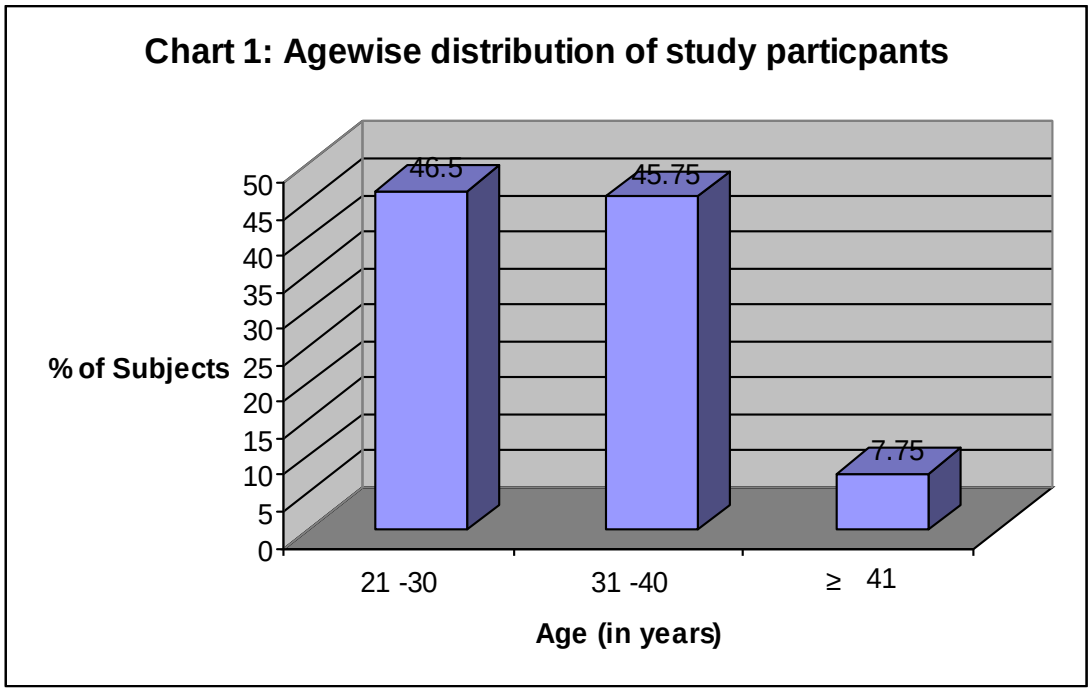
RESULTS

This cross sectional study was conducted on truck drivers visiting any of the 5 'dhabas' situated in the outskirts of Belgaum city. A total of 400 participants were included in the study.

I. Demographic profile

1. Age wise distribution of participants.

Age (in years)	Number	Percentage
21 -30	186	46.50
31 -40	183	45.75
≥ 41	31	7.75
Total	400	100



In the present study, majority of the participants were below 40 years. 186(46.5%) belonged to age group of 21-30 and 183(45.75%) belonged to age group of 31-40. while the rest (7.75%) were above 40 years.

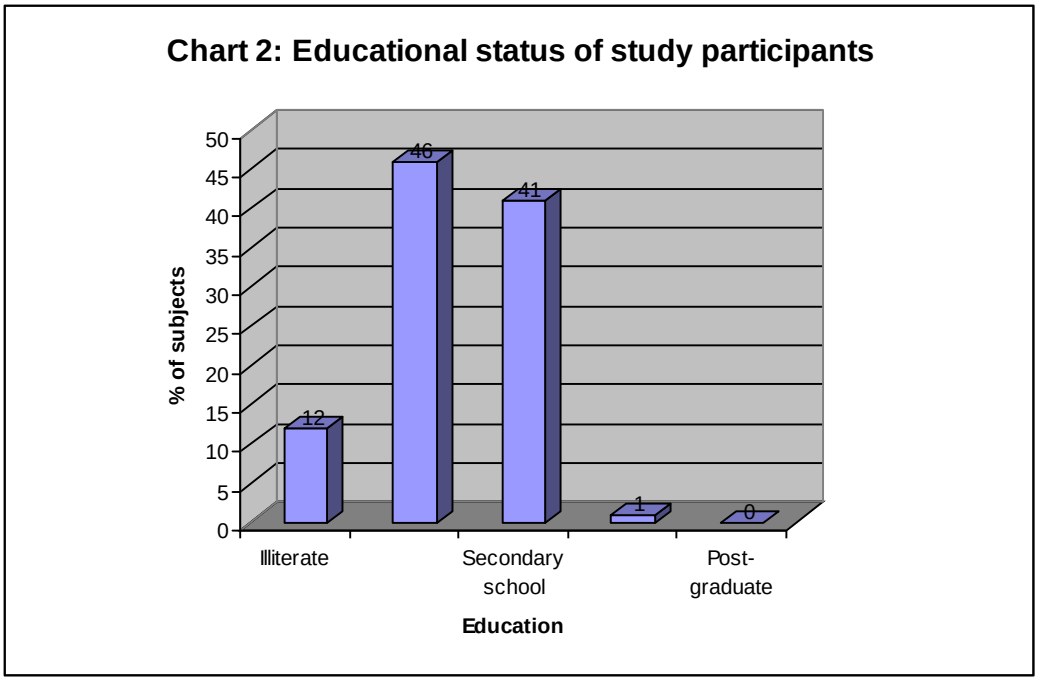
2. Distribution of participants based on their residence.

Place of residence	Number	Percentage
Rural	110	27.50
Semi-urban	236	59.0
Urban	54	13.5
Total	400	100

In our study, majority of the participants 236(59%) were from semi-urban places.

3. Educational status of study participants

Education status	Number	Percentage
Illiterate	48	12
Primary school	184	46
Secondary school	164	41
College	4	01
Post-graduate	0	0.0
Total	400	100



In the present study, 48(12%) of the participants were illiterates. 184(46%) and 164(41%) had primary and secondary school education respectively. Only 4(1%) had finished college.

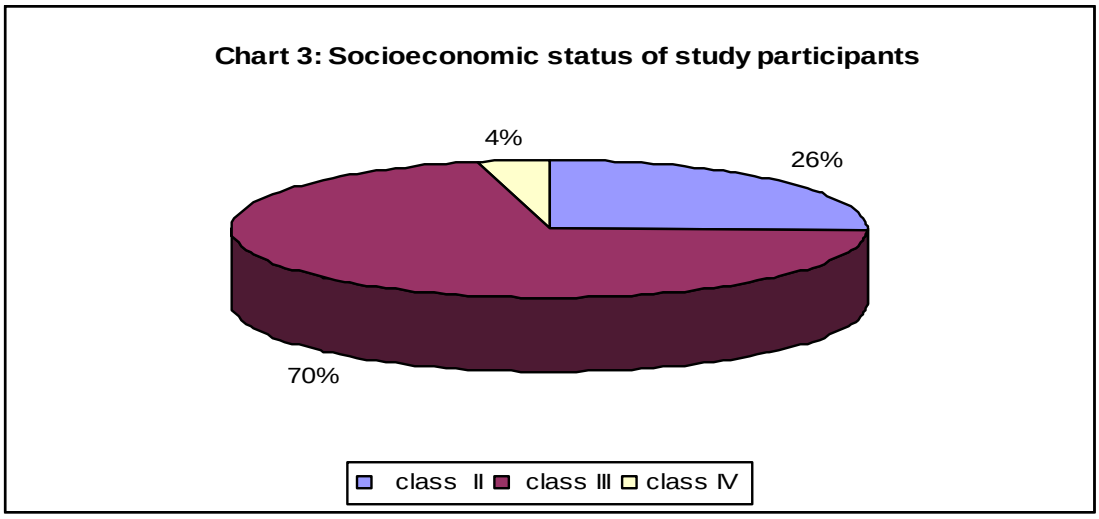
4. Marital status of study participants.

Marital status	Number	Percentage
Unmarried	47	11.8
Married	344	86.0
Widower	08	2.0
Divorcee	01	0.2
Total	400	100

In the present study, majority of the participants 344(86%) were married and 47(11.8%) were unmarried. Out of the remaining 8 were widowers and only one was divorcee.

5. Socio-economic status of participants.

socio-economic status	Number	Percentage
I	00	0.00
II	102	25.50
III	284	71.00
IV	14	03.50
V	00	0.00
Total	400	100



In our study, majority of the participants 284(71%) belonged to class III of socio-economic class, while 102(25.5%) and 14(3.5%) belonged to class II and class IV respectively.

6. Type of family of participants.

Among the participants of our study 214(53.5%) belonged to nuclear family and the rest 186(46.5%) were from joint family

7. Distribution of participants based on duration of truck driving.

Occupation(in years)	Number	Percentage
1 – 5	140	35.00
6 – 10	162	40.50
11 -15	64	16.0
≥ 16	34	08.50
Total	400	100

In the present study, 75.5% of the truckers were driving for less than 10 years, 140(35%) were driving for less than 5 years and 162(40.5%) between 6-10 years. 64(16%) of them were driving their trucks for more than 11 years but less than 15 years, while 34 were in the category of 16 years and above.

8. Duration of stay away from home in a month among participants.

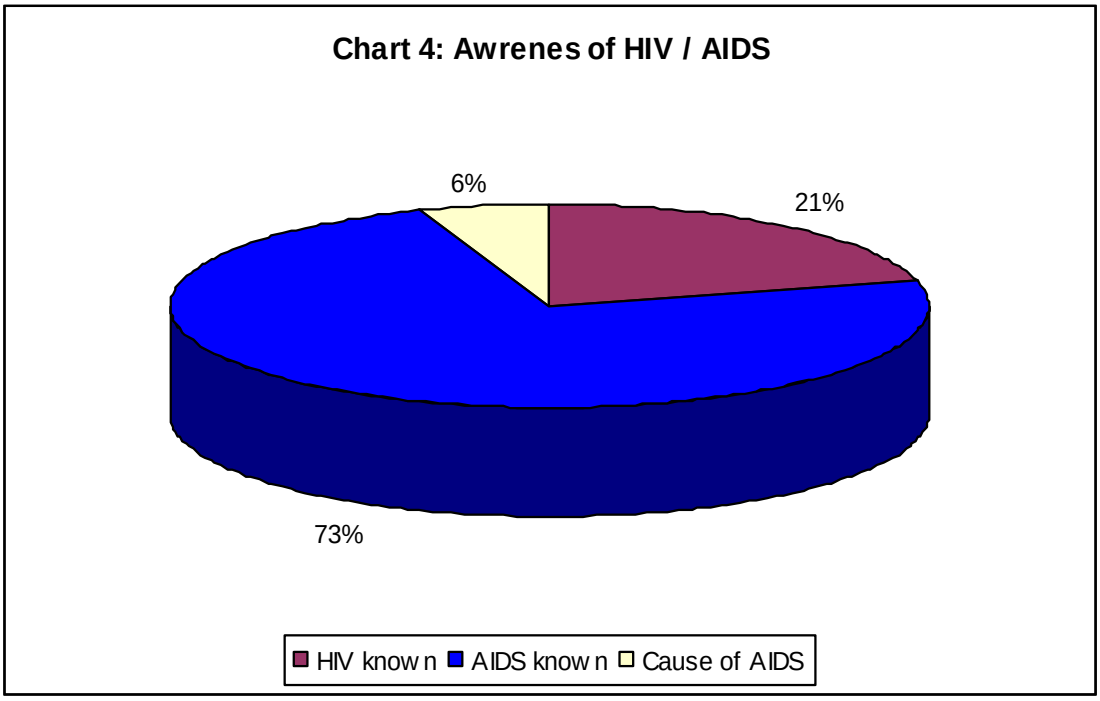
Duration (in days)	Number	Percentage
Less than 10	96	24.00
10 – 20	290	72.50
More than 20	14	03.50
Total	400	100

Among the participants, majority i.e. 290(72.5%) stayed 10-20 days away from home per month and 96(24%) were away from home for less than 10 days. However, a minority of them i.e. only 14(3.5%) had spent more than 20 days away.

II. Knowledge of the participants regarding HIV/AIDS.

9. Awareness on HIV/AIDS among participants.

Awareness	Number	Percentage
HIV known	84	21.00
AIDS known	294	73.50
Cause of AIDS	22	05.50
Total	400	100



In the present study only 84(21%) had heard of HIV as compared to 294(73.5%) who had heard of AIDS. However, out of the 400 only 22(5.5%) knew about the cause AIDS.

10. Source of information on HIV &AIDS among participants.

	n= 84		n= 294	
Source	HIV	%	AIDS	%
Mass media	76	90.04	263	89.45
Friends	04	4.76	20	6.80
Family	00	00.0	03	1.02
Doctor	04	4.76	08	2.72

Out of the 84 participants who have heard of HIV 76(90%) got this information from mass media, 4(4.76%) each from friends and doctors respectively. Among the group who knew about AIDS mass media again stood the highest as the channel of information. 263(89.45%) got this information through mass media. 20(6.8%) of them have heard of AIDS through friends. 3(1.02%) and 8(2.72%) have heard from family and doctors respectively.

11. Knowledge regarding mode of transmission of HIV/AIDS among participants.

n= 400

Mode of transmission	Number	Percentage
Sexual contact	398	99.50
Multiple sexual partners	394	98.50
Blood transfusion	374	93.50
IVdrugs/syringes/needles	286	71.50
Mother to child	210	52.50

Majority of the participants had good knowledge about modes of transmission. i.e.398

(99.5%), 394(98.5%) and 374(93.5%) knew that HIV could be transmitted through sexual contact, multiple sexual partners and blood transfusion respectively. However knowledge regarding other modes of transmission was little less with 71.5% and 52.5% through syringes/needles and mother to child respectively

12. Misconceptions among participants.

n= 400

Misconceptions	Number	Percentage
Mosquito bite	164	41.00
Kissing	172	43.00
Socializing/caring	250	62.50
Sharing meals	262	65.50

Misconceptions regarding modes of transmission of HIV existed in less than 50% of the participants.164 (41%) and 172(43%) answered that mosquito bite and kissing could spread HIV. While 62% and 65% felt Socializing/caring and sharing meals with HIV patient will transmit the disease respectively.

13. Knowledge regarding life-long association of HIV/AIDS among participants.

Association	Number	Percentage
Associated	194	48.50
Not associated	206	51.50
Total	400	100

In the present study less than half of the participants, i.e.194 (48.5%) knew that HIV/AIDS as a disease is life long associated. The rest felt that it is not so.

14. Knowledge regarding symptoms of HIV/AIDS among participants.

n= 400

Symptoms	Number	Percentage
Loss of weight	282	70.50
Prolonged fever	294	73.50
Chronic diarrhea	224	56.00

In the present study 70.5%, 73.5% and 56% of the participants had the knowledge that AIDS will lead to loss of weight, prolonged fever and chronic diarrhea respectively.

15. Knowledge regarding investigations of HIV/AIDS among participants.

Investigations	Number	Percentage
Blood	376	94.00
Blood and others (urine/stool/saliva)	24	06.00
Total	400	100

In our study 376(94%) of the participants knew that HIV/AIDS can be detected through blood investigation. While 6% of them felt that apart from blood HIV/AIDS can be detected in urine, stool and saliva also.

16. Knowledge of prevention of HIV/AIDS among participants.

n= 400

Prevention	Number	Percentage
Condom use	398	99.50
Avoiding multiple sex partners	394	98.50
Avoiding sex with CSWs	394	98.50
Avoiding IV drug addiction	282	70.50
Using sterilized needles/syringes	278	69.50

Majority of the participants had good knowledge of prevention of AIDS with 398(99.5%), 394(98.5%) and 394(98.5%) who told that condom use, avoiding multiple sexual partners and avoiding sex with CSWs will aid in prevention of the disease transmission respectively. while, knowledge regarding other modes prevention was little less with 70.5% and 69.5% to avoiding IV drug addiction and using sterilized needles/syringes respectively.

17. Knowledge regarding treatment of HIV/AIDS and VCTC among participants.

n= 400

Knowledge	Number	Percentage
Treatment	382	95.50
VCTC	134	33.50

Majority of the participants had good knowledge regarding treatment of HIV/AIDS. 95.5% knew that there is treatment for the illness.

134(33.5%) knew about VCTC and its functions.

III. Attitude of participants regarding HIV/AIDS.

18. Willingness to get tested for HIV/AIDS among participants.

Willing	Number	Percentage
Yes	39	9.75
No	361	89.25
Total	400	100

In the present study only 39(9.75%) were willing to get tested for HIV/AIDS and the rest did not want to undergo the test.

19 a. Willingness of the participants to inform their HIV/AIDS status to others.

Willing	Number	Percentage
Yes	107	26.50
No	293	73.50
Total	400	100

293(73.5%) of the participants of our study group were not willing to inform their HIV/AIDS status to others members of the family or the community.

19 b. Reasons for not informing his HIV status to others among participants.

n= 293

Reasons	Number	Percentage
Social problems	216	73.75
Fear of out casting	68	23.25
Fear of losing job	57	19.50

In our study majority of the participants 216(73.5%)expressed that social problems are the main reason for not informing their HIV status to others while fear of out casting from family and community and fear of losing job were other explanations by 68(23.25%) and 57(19.5%) of the respondents respectively.

20. Attitude of participants towards HIV patient.

n= 400

Attitude	Number	Percentage
Sympathy/care	298	74.50
Neglect/avoid	102	25.50
Share kitchen/toilet	106	26.50

In our study 298(74.5%) of the participants were willing to give sympathy/care and share kitchen/toilet with the HIV/AIDS patients while 102(25.5%) were of opposite opinion that they will neglect and avoid the HIV/AIDS patients.

21. Genital problems among participants.

n= 400

Genital problems	Number	%
Genital ulcers	26	6.50
Discharge	66	16.0
Itching	154	38.5
Warts	10	2.50

In the present study genital itching was the most common problem the participants faced.

20(5%) and 6(1.5%) of the truck drivers had genital ulcers in every 6 months and 12 months respectively. 42(10%) and 114(28.5%) had discharge and itching in every 6 months while 22(5.5%) and 2(0.5%) had them in every 12 months respectively.

22. Habits among participants.

n= 400

Habit	Number	%
Alcohol	192	48.0
IV Drugs	18	4.50
Smoking	150	37.5

In the present study 192(48%) of the truck drivers used alcohol while 37.5% smoked and 18(4.5%) of the total abused IV drugs.

IV. Sexual behavior of participants

23. Age at 1st sexual exposure among participants.

Age (in years)	Number	Percentage
17	10	2.50
18-20	240	60.0
21-23	150	37.5
Total	400	100

In the present study 10(2.5%) of participants had their 1st sexual exposure when they were 17 year old. Majority (60%) got exposed between 18-20 years. Another 37.5% of them had their 1st experience between 21-23 years

24. Exposure to CSWs at dhabhas and condom use with them among participants.

Condom use with CSWs	Number	Percentage
Not exposed to CSWs	206	51.5
Exposed but not used condoms	28	7.0
Exposed & always used	94	23.5
Exposed & occasionally used	72	18.0
Total	400	100

In the present study a little above half of the participants i.e.206 (51.5%) did not get exposed to commercial sex workers. Among those who were exposed to CSWs, 28(7%) did not used condoms at all during sex. This makes them the highest risk group.

While among those who used condoms, 94(23.5%) used always and 72(18%) used occasionally.

25. Practice of other type of sex apart from vaginal route among participants.

n= 400

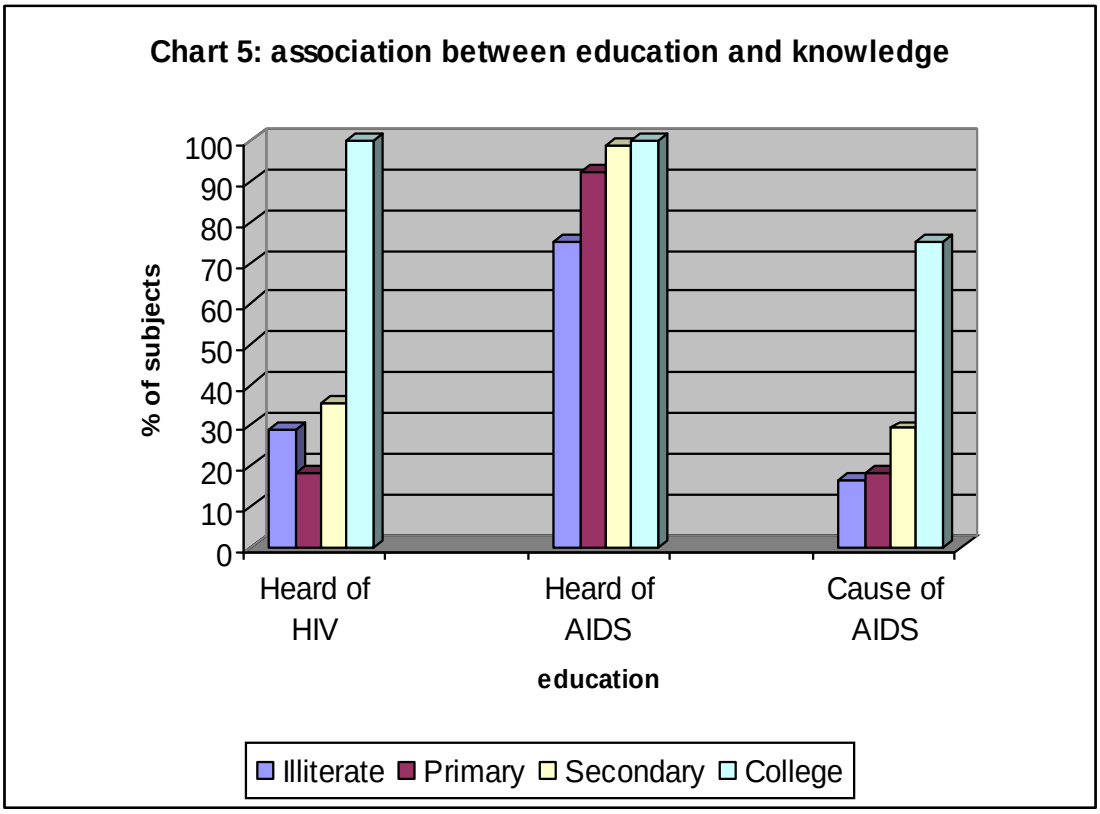
Type of sex	Number	Percentage
Anal	44	11.0
Oral	18	4.50
Both	30	7.50

In our study 44(11%) and 18(4.5%) of the truck drivers practiced anal and oral sex respectively. 30(7.5%) of them practiced both of them apart from the vaginal sex.

26. Association between educational status and knowledge regarding HIV/AIDS among participants.

Education	N	Heard of HIV		Heard of AIDS		Cause of AIDS	
		Number	%	Number	%	Number	%
Illiterate	48	14	29.16	36	75.0	08	16.67
Primary	184	34	18.47	170	92.39	34	18.47
Secondary	164	58	35.36	162	98.78	48	29.26
College	04	04	100	04	100	03	75.0

X^2= 5.031, df = 2, p = 0.001.



In the present study the overall knowledge of the participants regarding HIV/AIDS increased with increase in their educational status and proved to be statistically significant.

Among the illiterates 14(29.16%) had heard of HIV, 36(75%) had heard of AIDS and only 8(16.67%) knew the cause of AIDS is a virus. In the group of primary level of education, 18% had heard of HIV, 92% had heard of AIDS and 34(18%) knew the cause of AIDS.

In the group of secondary level of education, 35% had heard of HIV, 98% had heard of AIDS and 48(29%) knew the cause of AIDS. While among those of college level of education knowledge about HIV/ AIDS was 100% except only one person failed to tell the correct cause of AIDS.

27. Association between educational status and knowledge regarding transmission of HIV/AIDS among participants.

Education	N	Sexual contact		Blood contact		Mother to child	
		Number	%	Number	%	Number	%
Illiterate	48	46	95.83	42	87.50	16	33.34
Primary	184	184	100	168	91.30	92	50.0
Secondary	164	164	100	160	97.56	100	60.97
College	04	04	100	04	100	02	50.0

Chi-square = 8.993, df =2, p=0.011.
Chi-square =15.56, df =2, p=0.016.
Chi-square =12.078, df =2, p=0.002.

In the present study the knowledge of the participants regarding transmission of HIV/AIDS increased with increase in their educational status and proved to be statistically significant.

Among the illiterates 46(95%), 42(87%) and 16(33%) knew that sexual contact, blood contact and vertical transmission from mother to her child are the routes of transmission of HIV/AIDS. In higher level of education groups the knowledge of transmission was much higher with 100% for sexual contact. For blood contact the knowledge was 91.30%, 97.56% and 100% among the participants of primary, secondary and college level of education. Knowledge regarding vertical transmission was 50%, 60% and 50% among the participants of primary, secondary and college level of education.

28. Association between educational status and misconceptions regarding transmission of HIV/AIDS among participants.

Education	N	Mosquito bite		Kissing		Socializing		Sharing meals	
		Number	%	Number	%	Number	%	Number	%
Illiterate	48	14	29.16	16	33.34	28	58.34	26	54.16
Primary	184	70	38.04	74	40.21	124	67.39	128	69.56
Secondary	164	80	48.78	80	48.78	96	58.53	104	63.41
College	04	00	00	02	50.0	02	50.0	04	100

X^2= 6.486, df = 2, p= 0.039
X^2= 4.725, df = 2, p= 0.004
X^2= 3.478, df = 2, p =0.176
X^2= 4.184, df = 2, p =0.023

In our study 29% of illiterates, 38%and 48% of the group with primary and secondary level of education thought that mosquito bite could transmit the disease. Likewise, 40% and 48% of the group with primary and secondary level of education group thought that kissing a patient of HIV/AIDS could transmit the disease.

67% and 69% of primary, 58% and 63% secondary level of education group thought that socializing and sharing meals with a patient of HIV/AIDS could transmit the disease. Although misconceptions seemed to be more in participants with primary and secondary level of education this difference was not statistically significant.

29. Association between educational status and knowledge regarding prevention of HIV/AIDS among participants.

Education	N	Condom use		Having single sexual partner		Avoiding IV drugs		Using sterilized needles/syringes	
		Number	%	Number	%	Number	%	Number	%
Illiterate	48	42	87.50	39	81.2	32	66.6	28	58.3
Primary	184	168	91.3	171	92.9	110	59.7	110	59.7
Secondary	164	160	97.5	152	92.6	136	82.9	136	82.9
College	04	04	100	03	75	04	100	04	100

X^2=8.993, df = 2, p=0.011.
X^2=6.881, df = 2, p=0.032.
X^2=23.805, df = 2, p=0.000
X^2=26.186, df = 2, p=0.000.

In the present study knowledge of the participants regarding prevention of HIV/AIDS increased with increase in their educational status and proved to be statistically significant.

Among the illiterates 87.5%, 81%, 66% and 58% were aware that condom use, having single sexual partner, avoiding IV drugs and using sterilized needles/syringes could prevent the transmission of HIV/AIDS. While 91%, 92%, 59.7% and 59.7% with primary level of education knew that condom use, having single sexual partner, avoiding IV drugs and using sterilized needles/syringes could prevent the transmission of HIV/AIDS. 97%, 92%, 82.9% and 82.9% with secondary level of education knew that condom use, having single sexual partner, avoiding IV drugs and using sterilized needles/syringes could prevent the transmission of HIV/AIDS. However, Knowledge among participants with college level of education was 100%

and 3 out of 4 participants told that practicing of single sexual partner could prevent transmission of the disease.

30. Association between educational status and attitude towards HIV patient among participants.

Education	N	Sympathy/care		Neglect/avoid		Share kitchen/toilet	
		Number	%	Number	%	Number	%
Illiterate	48	30	62.5	18	37.5	20	41.6
Primary	184	140	76.08	36	19.5	44	23.9
Secondary	164	124	75.61	38	23.1	40	24.3
College	04	04	100	00	00	02	50

X^2=4.135, df = 2, p=0.047.
X^2=6.938, df = 2, p=0.031.
X^2=6.495, df = 2, p=0.039.

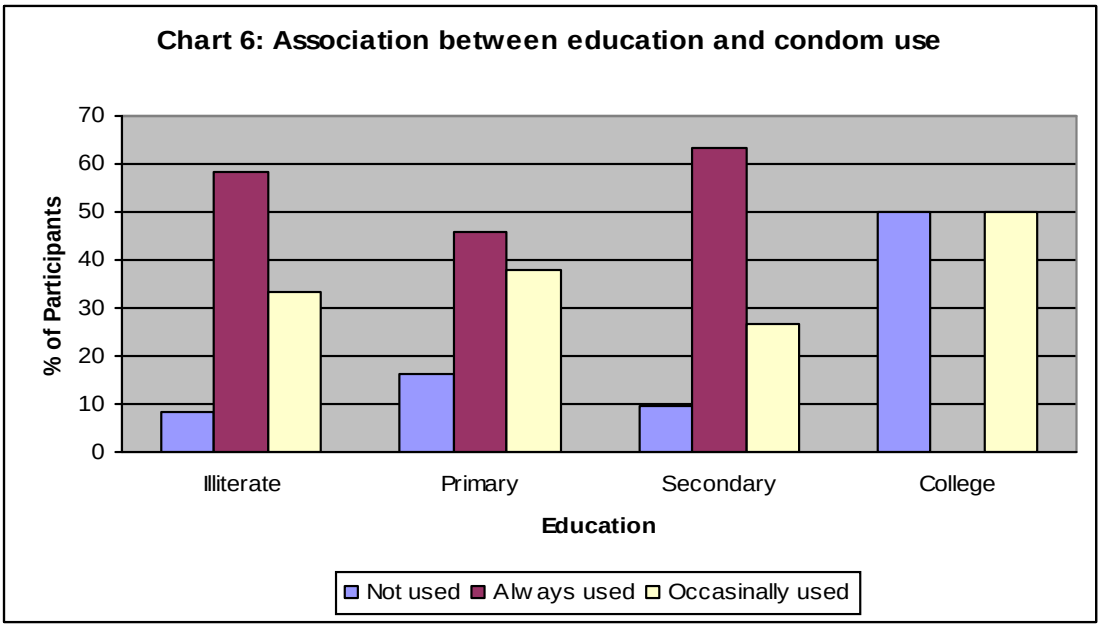
In the present study attitude of the participants toward HIV patient in case of showing sympathy and care as well as sharing kitchen and toilet with them increased with their educational status and shown to be statistically significant.

Among the illiterates 30(62.5%) told that they will give sympathy and care for HIV patients as well as 41% of them were of the attitude that sharing kitchen and toilet will not harm them. Likewise, 76%, 75% and 23%, 24% of them with primary and secondary level of education felt that caring and sharing meals with HIV patient will not harm. This held good for the group of college level education also.

31. Association between educational status and habit of condom use with CSWs among participants.

Education	N	Not used		Always used		Occasionally used	
		Number	%	Number	%	Number	%
Illiterate	48	04	8.3	28	58.33	16	33.34
Primary	184	30	16.3	84	45.65	70	38.04
Secondary	164	16	9.7	104	63.41	44	26.82
College	04	02	50	00	00	02	50

X^2=10.537, df = 4, p=0.032.



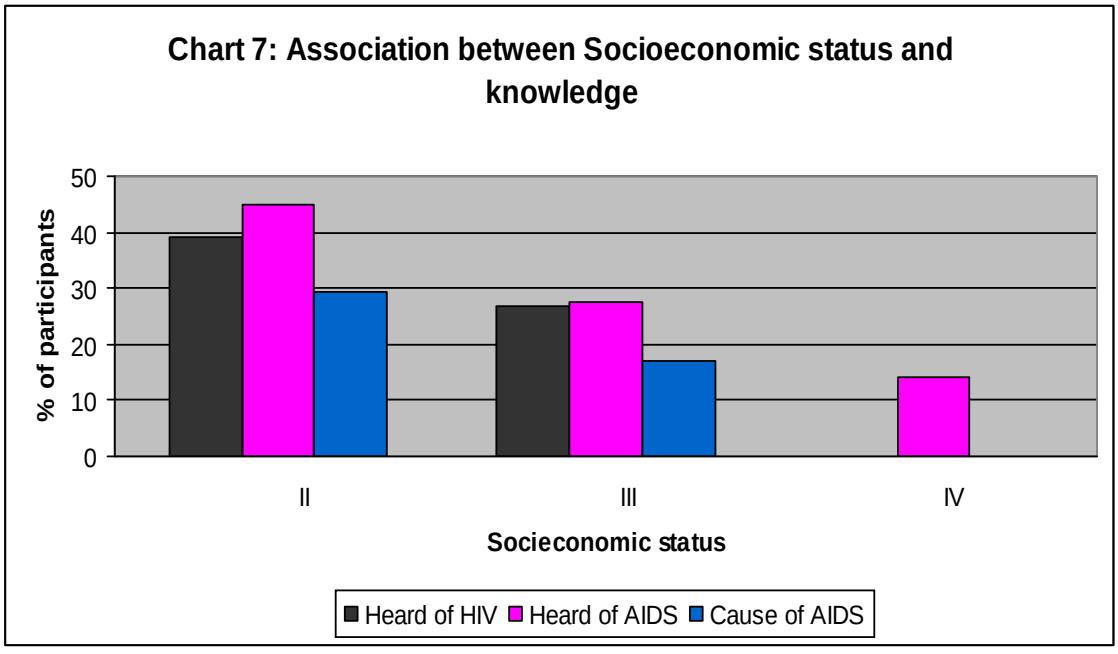
In the present study habit of condom use with CSWs among participants increased with increase in their educational status and which was statistically significant. 4(8.33%) of the illiterates, 30(16.4%) and 16(9.7%) of primary and secondary level education participants and 50% of college level education participants did not use condoms during sex with CSWs.

58% of illiterates,45%aand 63% of other higher class of education group always used condoms while 33%,38%and26% of illiterates, primary and secondary level education participants only occasionally used condoms during their sexual exposure with CSWs. 2 out of 4 participants with college level of education were occasional condom users.

32. Association between socio-economic status and knowledge regarding HIV/AIDS among participants.

Socio-economic status	N	Heard of HIV		Heard of AIDS		Cause of AIDS	
		Number	%	Number	%	Number	%
II	102	40	39.2	46	45.0	30	29.4
III	284	76	26.7	78	27.4	48	16.9
IV	14	00	00	02	14.2	00	00

X^2=11.580, df = 2, p=0.003.
X^2=12.807, df = 2, p=0.002.
X^2=10.997, df = 2, p=0.004.



In the present study 40(39.2%), 46(45%) and 30(29%) of the participants of category II of socio-economic status had heard of HIV, AIDS and cause of AIDS. Likewise, 76(26.7%), 78(27.2%) and 48(16.9%) of them belonging to category III of socio-economic status had heard of HIV, AIDS and cause of AIDS. 14% of class IV category had heard of AIDS. None of the participants of class IV knew about HIV or its cause.

The association was statistically significant.

33. Association between socio-economic status and knowledge regarding transmission of HIV/AIDS among participants.

Socio-economic status	N	Sexual contact		Blood contact		Mother to child	
		Number	%	Number	%	Number	%
II	102	102	100	98	96.0	70	68.6
III	284	284	100	262	92.2	130	45.7
IV	14	12	85.7	14	100	12	85.7

X^2=5.42, df = 2, p=0.002.
X^2=1.498, df = 2, p=0.221.
X^2=21.967, df = 2, p=0.000.

In the present study the knowledge of the participants regarding transmission of HIV/AIDS increased with increase in their socio-economic status and proved to be statistically significant.

Among the participants of class II of socio-economic status 100%, 96% and 68.6% knew that sexual contact, blood contact and vertical transmission from mother to her child are the routes of transmission of HIV/AIDS. Among class III, 100%,

92.2% and 45.7% knew that sexual contact, blood contact and vertical transmission are the routes of transmission of HIV/AIDS. Knowledge regarding sexual transmission and vertical transmission was little less (85.7%) among class IV participants. However, all of them knew that HIV can be transmitted through blood contact.

34. Association between socio-economic status and knowledge regarding prevention of HIV/AIDS among participants.

Socio-economic status	N	Condom use		Having single sexual partner		Avoiding IV drugs		Using sterilized needles/syringes	
		Number	%	Number	%	Number	%	Number	%
II	102	102	100	100	98.0	76	74.5	76	74.5
III	284	282	99.2	280	98.5	192	67.6	188	66.1
IV	14	14	100	14	100	14	100	14	100

X^2= 8.22, df = 2, p= 0.003.
X^2=3.76, df = 2, p= 0.029.
X^2=7.79, df =2, p = 0.002.
X^2=10.627, df = 2, p = 0.012.

In the present study the knowledge among the class II socio-economic status participants regarding prevention of HIV/AIDS through condom use were 100% while through practicing single sexual partner exposure it was 98%.

Like wise, 74.5% of them knew that AIDS could be prevented by avoiding IV drugs and using sterilized needles and syringes.

Among class III participants, 99%, 98.5%, 67% and 66% knew that HIV/AIDS could be prevented by condom use, having single sexual partner, avoiding IV drugs and using sterilized needles and syringes.

Among class IV participants, all of them knew that HIV/AIDS could be prevented by condom use, having single sexual partner, avoiding IV drugs and using sterilized needles and syringes. Hence socio-economic status of participants was not related to their knowledge regarding prevention of HIV/AIDS among our study group.

35. Association between socio-economic status and attitude towards HIV patient among participants.

Socio-economic status	N	Sympathy/care		Neglect/avoid		Share kitchen/toilet	
		Number	%	Number	%	Number	%
II	102	94	92.1	08	7.8	06	5.8
III	284	196	69.0	88	30.9	84	29.5
IV	14	08	57.1	06	42.8	06	42.8

X^2=23.45, df = 2, p=0.000.
X^2=24.82, df = 2, p=0.000.
X^2=25.929, df = 2, p=0.000.

In the present study the positive attitude of the participants towards HIV patients increased with increase in their socio-economic status and proved to be statistically significant.

92%, 69% and 57% of the participants of class II, III and IV thought that they should show sympathy and give care to AIDS patient. Likewise, 5.8%, 29.5% and 42.8% of class II, III and IV participants thought that there is no harm in sharing kitchen and toilet with HIV/AIDS patients.

However, 7.8%, 30.9% and 42.8% of the participants of class II, III and IV revealed that they will neglect and avoid the HIV/AIDS patients.

36. Association between socio-economic status and habit of condom use with CSWs among participants.

Socio-economic status	N	Not used		Always used		Occasionally used	
		Number	%	Number	%	Number	%
II	102	12	11.7	34	33.3	56	54.9
III	284	38	13.3	170	59.8	76	26.7
IV	14	02	14.2	12	85.7	00	00

X^2=35.447, df = 4, p=0.000.

In the present study the habit of condom use with CSWs among participants had a very strong association with their socio-economic status and was statistically significant.

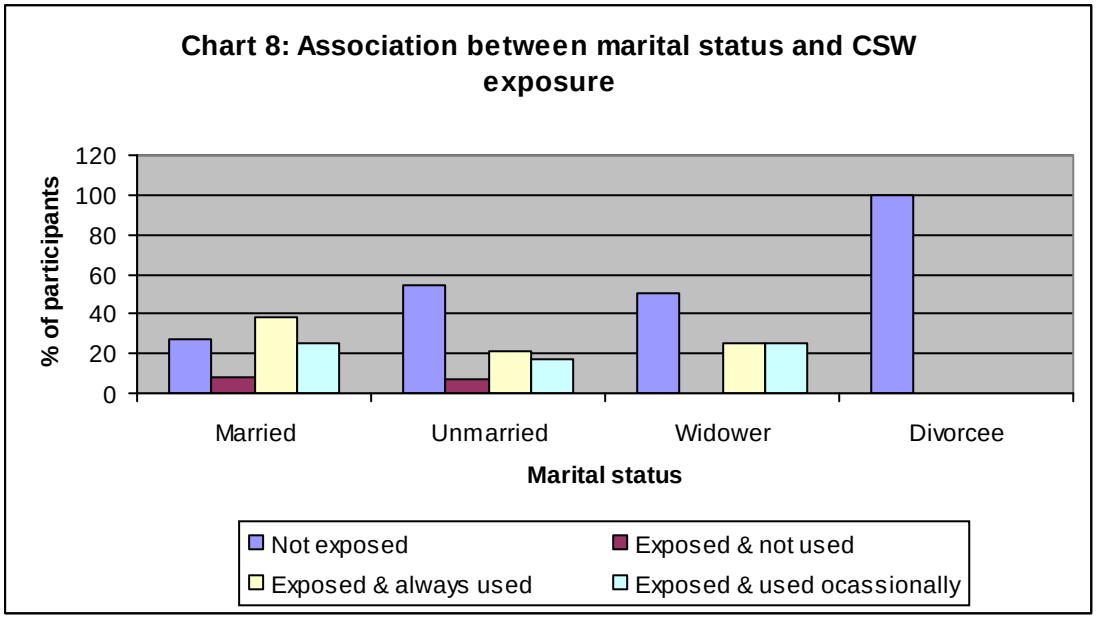
11.7%, 13% and 14% of the participants of class II, III and IV did not have the habit of condom use at the time of their sexual exposure to CSWs. 33%, 59% and 85% among each class of them always used condoms.

However, 54%, 26% of class II and III and none among class IV occasionally used condoms while having sex with CSWs.

37. Association between marital status and exposure to CSWs at dhabas and condom using behavior among participants.

Marital status	N	Not exposed to CSWs		Exposed & not used condoms		Exposed & always used condoms		Exposed & occasionally used condoms	
		Number	%	Number	%	Number	%	Number	%
Married	47	13	27.6	04	8.5	18	38.2	12	25.5
Unmarried	344	188	54.6	24	6.9	74	21.5	58	16.8
Widower	08	04	50	00	00	02	25	02	25
Divorcee	01	01	100	00	00	00	00	00	00

X^2=14.422, df =2, p=0.018.



In our study 27% of married, 54% of the unmarried, 50% of the widowers and one divorcee of the total participants were not exposed to commercial sex at all. While among those who were exposed 8.5% of married and 6.9% of unmarried did not use condoms with CSWs.

Among those who have used condoms 38% and 21% of married and unmarried group always used while, 25.5% and 16.8% of them occasionally used condoms during their sexual exposure to CSWs. Likewise, 25% each among widowers practiced always and occasional condom use and was statistically significant.

38. Association between duration of truck driving and habits among participants.

Duration of occupation	N	Alcohol use		IV Drugs		Smoking	
		Number	%	Number	%	Number	%
1-5 yrs	140	86	61.4	12	8.5	104	74.2
6-10 yrs	162	92	56.7	02	1.2	102	62.9
11-15 yrs	64	38	59.3	04	6.2	32	50
>15 yrs	34	20	57.5	00	00	25	75.7

X^2=6.73, df = 3, p=0.880.
X^2=11.438, df = 3, p=0.009.
X^2=13.911, df = 3, p=0.003.

In the present study the habits among participants increased with increase in their duration of truck driving and was statistically significant.

61%, 56.7%, 59% and 57.5% of them who were in occupation as truck drivers for below 5 years, 6-10 years, 10-15 years and above 15 years had the habit of alcohol use.

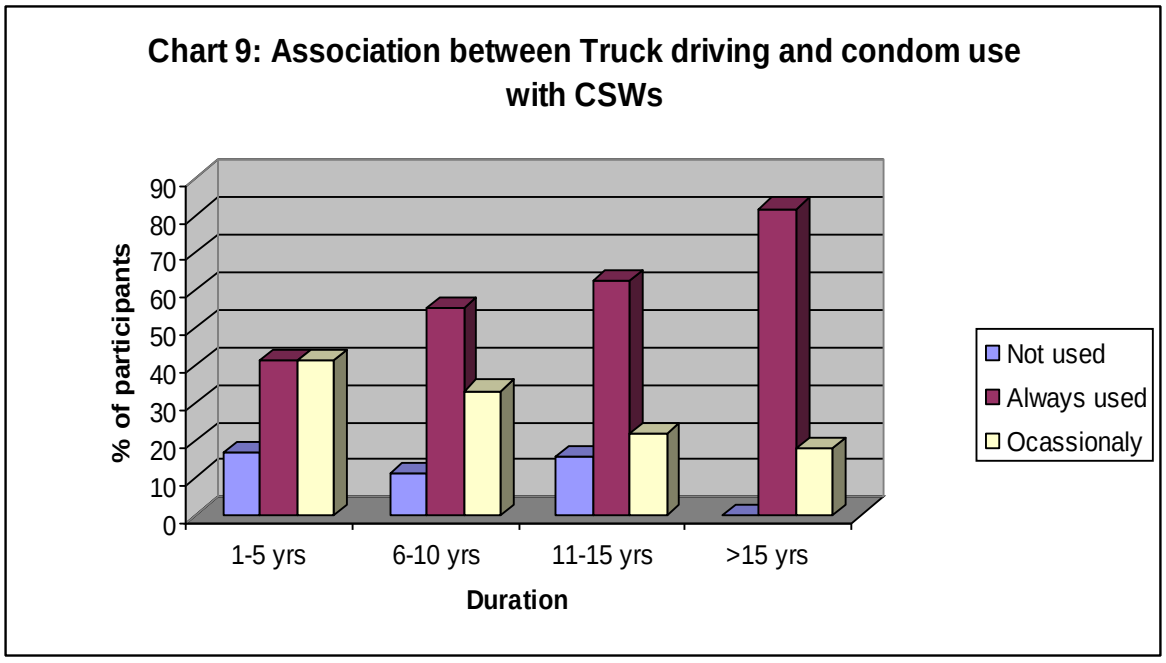
Likewise 8.5%, 1.2% and 6.2% in each category had abused IV drugs.

74%, 62%, 50% and 75.7% of them in each category were smokers.

39. Association between duration of truck driving and habit of condom use with CSWs among participants.

Duration of occupation	N	Not used		Always used		Occasionally used	
		Number	%	Number	%	Number	%
1-5 yrs	140	24	17.1	58	41.4	58	41.4
6-10 yrs	162	18	11.1	90	55.5	54	33.3
11-15 yrs	64	10	15.6	40	62.5	14	21.8
>15 yrs	34	00	00	28	81.8	06	18.1

X^2=25.145, df = 6, p=0.001.



In the present study among those who are exposed to commercial sex 41%, 55%, 62% and 81.8% of the participants with the driving experience of less 5 years, 6-10 years, 10-15 years and above 15 years had always used condoms with CSWs. While only 17%, 11%, and 15% in each category did not use condom at all during sex with CSWs. It was statistically significant.

40. Association between duration of stay away from home and habits among participants.

Stay (days/month)	N	Alcohol use		IV Dugs		Smoking	
		Number	%	Number	%	Number	%
Less than 10	96	62	64.5	02	2	58	60.4
10-20	290	160	55.1	14	4.8	192	66.2
More than20	14	14	100	02	14.2	14	100

X^2=12.772, df = 2, p=0.002.
X^2=4.497, df = 2, p=0.106.
X^2=8.551, df = 2, p=0.014.

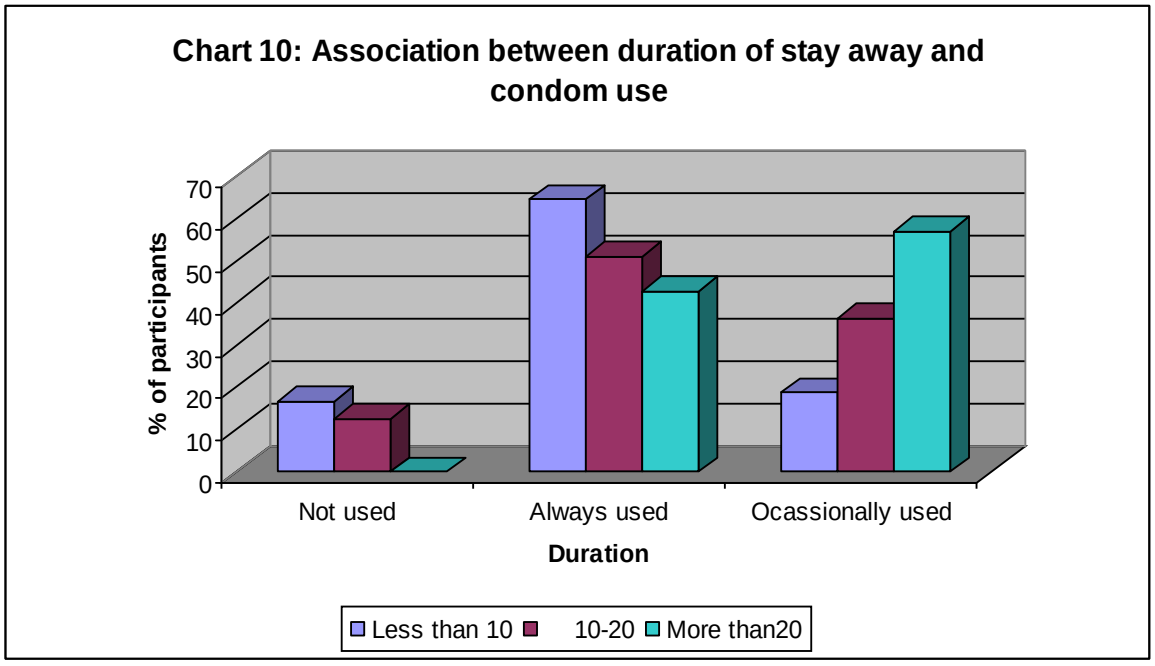
In the present study habits among participants increased with increase in their duration of stay away from home and was statistically significant. 64.5% used alcohol, 2% abused IV drugs, 60.4% smoked among those who stayed less than 10 days away from home as compared to 55%, 4.8% and 66% of those who stayed 10-20 days away from home.

However all of the participants who stayed more than 20 days away from home smoked and used alcohol and 2(14.2%) of them abused IV drugs.

41. Association between duration of stay away from home and habit of condom use among participants.

Stay (days/month)	N	Not used		Always used		Occasionally used	
		Number	%	Number	%	Number	%
Less than 10	96	16	16.6	62	64.5	18	18.7
10-20	290	36	12.4	148	51	106	36.5
More than20	14	00	00	06	42.8	08	57.1

X^2=15.164, df = 4, p=0.004.



In the present study 16(16.6%) and 36(12.4%) of those participants who stayed less than 10 days and between 10-20 days away from home did not used condoms at all during sexual exposure to CSWs but,64.5% and 51% of them each used always and 18.7% and 36.5% from each group used occasionally. Among those participants who stayed more than 20 days away from their home 42.8% had always used condoms while 57% of them used the condoms occasionally during their sexual exposure to commercial sex workers and it is statistically significant.

DISCUSSION

The present sstudy was a cross- sectional study done on truck drivers to know their knowledge, attitude regarding HIV/AIDS and the sexual practices among them.

A total of 400 truck drivers who stop their vehicles at dhabas nearby national highway-4 on the outskirts of Belgaum city were included in the study.

I. Socio-demographic characteristics of the study group.

Table No.1: Age of the participants

In our study majority of the truck drivers were below 40 years. 186(46.5%) of them belonged to age group of 21-30 and 183(45.75%) of them belonged to age group of 31-40. Mean age of the participants was 31.2 years.

In a similar study conducted at Jharkhand in 2007, 75% of the respondents were between the age group of 18-39, with the total mean age being 31.5years.[23]

In another study conducted at Pune-Ahmednagar Highway in 2006, mean age of truck drivers was 28.97 years.10.61% were less than 20 years of age, 47.35% were between 21-30years and 42.04% were more than 30 years of age.[24]

Table No.2: Residence of the participants

In our study majority of the participants 236(59%) were from semi-urban place. While among others the place of residence was rural and urban for 110(27.5%) and 54(13.5%) respectively.

Jharkhand study showed that 66 % were from rural areas. However, around two-fifths of the respondents were from city.[23]

Table No.3: Educational status of the participants

In our study, 48(12%) of the participants were illiterates. 184(46%) and 164(41%) had achieved primary and secondary schooling respectively. Only 4(1%) had finished college.

In a study conducted at Lahore, Pakistan in 2005, 51% of the respondents were illiterate, 33% had primary level education and only 16% received middle to matriculate level education.[30]

In Pune-Ahmednagar Highway, Maharashtra study, 24.39% drivers had studied primary, 64.66% had studied secondary school and rest had studied college.[24]

Table No.4: Marital status of participants

In the present study, majority of the participants 344(86%) were married and 47(11.8%) were unmarried. Out of the remaining 8 were widowers and only one was divorcee.

In Pakistan study 85% were married, whereas 15% were bachelors.[26]

In Pune-Ahmednagar Highway study, 65.37% were married and the rest were unmarried.[24]

Table No.5: Socio-economic status of participants

In our study, majority of the participants 284(71%) belonged to class III of socio-economic class, while 102(25.5%) and 14(3.5%) belonged to class II and class IV respectively.

Table No.6: Type of family of participants

In the present study 214(53.5%) belonged to nuclear family and the rest were from joint family.

Table No.7: Duration of occupation of participants

In the present study, majority of the truck drivers 75.5% were in occupation for less than 10 years. 40(35%) were in profession for less than 5 years and 162(40.5%) between 6-10 years.

64(16%) of them had an experience of more than 11 years but less than 15 years, while 34 were in the category of 16 years and above.

In Jharkhand study, 37 percent had been in their current occupation from one to five years and 50% from 6 to 15 years.[23]

In another study done on Bolivian truck drivers in 2007, the average duration of occupation of the participants was 11 years.[28]

Table No.8: Duration of stay away from home in a month among participants

In our study 1/3rd of the truck drivers stayed 10-20 days away from home per month and 1/4th were away from home for less than 10 days.

However, a minority of them i.e. only 14(3.5%) had spent more than 20 days away.

Jharkhand study revealed that 48% and 38% of the participants have spent less than 10 days and 10-20 days away from family per month respectively.[23]

Bolivian study showed that 65% of the participants had spent less than one week on the road at a time, 23% had spent 1 to 4 weeks on the road at a time, and 13% were away from home for over one month at a time. [28]

II. Knowledge of the participants regarding HIV/AIDS.

Table No.9: Distribution of participants based on awareness on HIV/AIDS

Awareness regarding AIDS was better than HIV in our participants. The percentage of them being aware AIDS was 73% and only 21% knew about HIV.

Pakistan study showed that awareness about HIV/AIDS among truckers was 81.2%.[30]

Maharashtra study revealed that 97.2% truck drivers were aware of HIV/AIDS.[24]

Table No.10: Source of information on HIV & AIDS among participants

90% of the drivers in this study got the information about HIV/AIDS through mass media. Less than 5% of the participants got the information through doctors and friends.

Where as in Maharashtra study, for 25% of the drivers the source of information regarding HIV/AIDS was peer group. [24]

Table No.11: Distribution of participants based on knowledge regarding mode of transmission of HIV/AIDS

Although 95% drivers had good knowledge about modes of HIV/AIDS transmission in our study, 50% of them were not aware of mother to child transmission. this is an important obstacle for taking precaution against AIDS.

Maharashtra study showed that 94.6% of the drivers were aware that HIV can be transmitted by heterosexual route, 86.2% were aware about transmission by contaminated needle and 84.4% were aware about transmission by blood transfusion. However knowledge about transmission from pregnant mother to her unborn child,

through breast-milk and homosexual route was less being 69.9%, 56.6% and 46.29% respectively. The results of this study were similar to our study.[24]

Where as in Jharkhand study, 75% of the drivers knew that HIV could be transmitted through sexual contact and through blood transfusion. Mother to child 69% and through breast feeding 54%. [23]

Table No. 12: Knowledge regarding misconceptions among participants

In the present study misconceptions regarding modes of transmission of HIV existed in less than 50% of the participants.164 (41%) and 172(43%) answered that mosquito bite and kissing could spread HIV. While more than 50% felt that Socializing/caring and sharing meals with HIV patient will transmit the disease.

In Jharkhand study, 39% of the participants had one or the other misconceptions about transmission like mosquito bite, sharing meals.[23]

Where as in Maharashtra, 26.5% of truck drivers felt that AIDS can be transmitted by sharing meals, 53% stated that it can be spread by mosquito bite and 51.24% were of the opinion that AIDS can spread by using same toilet. This was similar to our study findings.[24]

In all the studies although the knowledge of different modes of transmission of HIV/AIDS was very good, misconceptions continue to exist among the truck drivers.

Table No.13: Distribution of participants based on knowledge regarding life-long association of HIV/AIDS

Truck drivers being high risk group can be more careful regarding their exposure to HIV/AIDS only if they are aware that it is a life long disease. This unfortunately was less than 50% in our study and as low as 21% in Jharkand study.23

Table No.14: Knowledge regarding symptoms of HIV/AIDS among participants

In our study more than 70% of the participants had the knowledge that AIDS will lead to loss of weight, prolonged fever and chronic diarrhea.

Similarly in Maharashtra study more than 75% of the participants had knowledge that AIDS will lead to weight loss.[24]

Table No.15: Distribution of participants based on knowledge regarding investigations of HIV/AIDS

Around 95% of our study participants knew that HIV/AIDS can be detected through blood investigation and the rest felt that apart from blood HIV/AIDS can be detected in urine, stool and saliva also.

Table No.16: Knowledge regarding prevention of HIV/AIDS among participants

In the present study majority of the participants had good knowledge regarding prevention of AIDS. More than 98% told that condom use, avoiding multiple sexual partners and avoiding sex with CSWs will prevent the disease transmission. Where as almost 70% felt avoiding IV drug addiction and using sterilized needles/syringes will prevent the disease transmission. This good knowledge could be attributed to role of NACO through mass media.

In a similar study conducted at China in 2002, 70% of the study sample believed that using condoms was effective way to prevent AIDS.[34]

In another study at Uganda, 90% truck drivers knew that the best way to avoid AIDS was to be sexually monogamous. 36% of them were willing to use condoms to reduce the risk of AIDS which matched with our study findings.[37]

Unlike our findings in Pakistan study only 50% of the truck drivers knew that needles had a role in the spread of HIV/AIDS. Two third of the truck drivers did think that monogamy and condom use is an effective method for AIDS prevention.[26]

Table No.17: Distribution of participants based on knowledge regarding treatment of HIV/AIDS and VCTC

In our study majority of the participants had good knowledge regarding treatment of HIV/AIDS. 95.5% knew that there is treatment for the illness.

134(33.5%) had heard about VCTC and its functions.

Similar to our findings in Maharastra study, 97.2% truck drivers were aware of HIV/AIDS treatment.[24]

III. Attitude of participants regarding HIV/AIDS.

Table No.18: Distribution of participants based on their willingness to get tested for HIV/AIDS among participants

In our study only 39(9.75%) were willing to get tested for HIV/AIDS and the rest did not want to undergo the test. Fear of disclosure or the consequences like social problems might have mattered for their rejection to the test.

Table No.19: Reasons for not informing his HIV status to others among participants

In our study around 70% participants expressed that social problems were the main reason for not informing their HIV status to others while fear of out casting from

family and community and fear of losing job were other explanations by rest of the respondents.

Table No.20: Attitude of participants toward HIV patients

75% of the participants were willing to give sympathy/care and share kitchen/toilet with the HIV/AIDS patients while 25% were of opposite opinion that they will neglect and avoid the HIV/AIDS patients.

This was almost similar to Jharkhand study findings.[23]

Where as in Pakistan study none of the participants were willing to share the room with HIV patients or give care to them, which could be because of their poor knowledge about transmission of HIV/AIDS.[26]

Table No.21: Distribution of participants based on genital problems

In the present study genital discharge and itching were the most common problems the participants suffered.

5% and 1.5% of the truck drivers had genital ulcers in every 6 months and 12 months respectively. 10% and 28.5% had discharge and itching in every 6 months while 22(5.5%) and 2(0.5%) had them in every 12 months respectively.

Habit of long duration of sitting on the seats to drive as well as their high risk sexual behavior due to long stay away from home were the reasons for increased prevalence of STIs among them.

In a similar study done at Jharkhand about 8% of the participants had genital discharge or ulcers/sores in the 12 months.[23]

The study on Bolivian truck drivers revealed that 19% of the truckers reported having had one or the other type of STI. [28]

Another study conducted at New Delhi revealed that 35% of the participants reported either urethral discharge or genital ulcers.[35]

Table No.22: Distribution of participants based on personal habits

The prevalence of alcohol abuse was 48% among our study group. While for smoking it was 37.5%.

4.5% of them abused IV drugs and all of them practiced sex under IV drug influence.

Similar to our findings in Jharkhand study, 64 percent of the respondents had consumed alcohol. 4% percent of the respondents reported injecting drug use.[23]

IV. Sexual behavior of participants regarding HIV/AIDS.

Table No.23: Age at 1st sexual exposure among participants

In our study 10 participants had their 1st sexual exposure when they were 17 year old. Majority 240(60%) of them got exposed between 18-20 years. The rest of them had their 1st experience between 21-23 years. Median age of respondents at first sex was 19.2 years.

In Jharkhand study, median age of respondents at first sex was 18 years.[23]

Pakistan study revealed that 42.3% of the participants had experienced their 1st sexual exposure before the age of 21.[32]

Table No.24: Distribution of participants based on exposure to CSWs at dhabhas

In the present study half of the participants were not exposed to commercial sex workers. Among those who visited CSWs, 28(7%) did not use condoms at all during sex. This makes them the highest risk group.

Among them who visited CSWs 23.5% always used the condoms and 18% used occasionally.

As against our study findings in Andhra Pradesh study in 2007, 58% of the respondents reported consistent condom use when visiting a commercial sex worker.[32]

Another study at Thailand showed that about 40% of the subjects visiting CSWs used condoms inconsistently or not at all. However, 28% of them claimed occasional use and 14% never used condoms.[36]

Table No.25: Practice of other type of sex apart from vaginal route among participants

In our study 44(11%) and 18(4.5%) of the truck drivers practiced anal and oral sex respectively. 30(7.5%) of them practiced both of them apart from the vaginal sex. In South African study 37% of all men always stopped for sex along the highway and 42% practiced anal sex, with less than 25% reporting the use of condoms during anal sex. This was quite high compared to our study.[27]

Table No.26: Distribution of participants based on association between educational status and knowledge regarding HIV/AIDS

The overall knowledge of the participants regarding HIV/AIDS increased with increase in their educational status and proved to be statistically significant.

Among the illiterates 14(29.16%) had heard of HIV, 36(75%) had heard of AIDS and only 8(16.67%) knew the cause of AIDS is a virus. In the group of primary level of education, 18% had heard of HIV, 92% had heard of AIDS and 34(18%) knew the cause of AIDS.

In the group of secondary level of education, 35% had heard of HIV, 98% had heard of AIDS and 48(29%) knew the cause of AIDS. While among those of college level of education knowledge about HIV/ AIDS was 100% except only one person failed to tell the correct cause of AIDS.

In Jharkhand study, 50% of the participants had studied secondary schooling. Among them 86% were aware of the disease.[23]

Maharashtra study showed that 24.39% drivers who had studied primary, 64.66% of secondary and 97.2% college educated truck drivers were aware of HIV/AIDS.[24]

Table No.27: Distribution of participants based on association between educational status and knowledge regarding transmission of HIV/AIDS

The knowledge of the participants regarding transmission of HIV/AIDS increased with increase in their educational status and proved to be statistically significant.

Among the illiterates 46(95%), 42(87%) and 16(33%) knew that sexual contact, blood contact and vertical transmission from mother to her child are the routes of transmission of HIV/AIDS. In higher level of education groups the knowledge of transmission was much higher with 100% sexual contact. For blood contact the knowledge was 91.30%, 97.56% and 100% among the participants of primary, secondary and college level of education respectively. Knowledge regarding vertical transmission was 50%, 60% and 50% among the participants of primary, secondary and college level of education.

Table No.28: Association between educational status and misconceptions regarding transmission of HIV/AIDS among participants

In our study the misconceptions of transmission of HIV/AIDS among study group did not have much co-relation with their educational status and was statistically not significant. 29% of illiterates, 38%and 48% of the group with primary and secondary level of education thought that mosquito bite could transmit the disease. Likewise, 40% and 48% of the group with primary and secondary level of education 67% and 69% of primary, 58% and 63% secondary level of education group thought that socializing and sharing meals with a patient of HIV/AIDS could transmit the disease. Hence, misconceptions still existed in truck drivers which stresses upon need for still intensive education to them. Role of doctors and health workers in educating them appears to be less and hence needed to be strengthened.

The Maharashtra study revealed that, 37.6% of truck drivers who had studied primary felt that AIDS can be transmitted by sharing meals, 46.4% of them stated that it can be spread by mosquito bite and 59.4% were of the opinion that AIDS can spread by using same toilet. While 24.6%, 57.9% and 54.6% of the participants with secondary education felt that it can be transmitted through sharing meals, mosquito bite and sharing toilet respectively.12.9%. 38.7% and 12.9% of the participants who had studied college felt it can be transmitted through sharing meals, mosquito bite and sharing toilet respectively.[24]

Table No.29: Association between educational status and knowledge of prevention of HIV/AIDS among participants

Among the illiterates 87.5%, 81%, 66% and 58% were aware that condom use, having single sexual partner, avoiding IV drugs and using sterilized needles/syringes could prevent the transmission of HIV/AIDS. While 91%, 92%, 59.7% and 59.7% with primary level of education knew that condom use, having single sexual partner, avoiding IV drugs and using sterilized needles/syringes could prevent the transmission of HIV/AIDS.

97%, 92%, 82.9% and 82.9% with secondary level of education knew that condom use, having single sexual partner, avoiding IV drugs and using sterilized needles/syringes could prevent the transmission of HIV/AIDS. However, Knowledge among participants with college level of education was 100% expect 3 out of 4 drivers told that practicing of single sexual partner would prevent HIV/AIDS.

Hence knowledge of prevention of HIV/AIDS increased with increase in educational status of truck drivers and was statistically significant.

In the study conducted at Pune-Ahmednagar highway 47(68.1%) of truck drivers who have studied primary level of education, 159 (86.8%) with secondary level education and 26 (83.9%) who had studied college agreed that use of condoms does prevent spread of AIDS.[24]

Table No.30: Distribution of participants based on association between educational status and attitude towards HIV patients

Among the illiterates 30(62.5%) told that they will give sympathy and care for HIV patients as well as 41% of them were of the attitude that sharing kitchen and

toilet will not harm them. Likewise, 76%, 75% and 23%, 24% of them with primary and secondary level of education felt that caring and sharing with HIV patient will not harm. This was true for college level education also.

Attitude of the participants in case of showing sympathy and care as well as sharing kitchen and toilet with HIV/AIDS patients increased with their educational status and was statistically significant.

The Jharkhand study showed that 34% of the participants felt that families would accept another member if s/he was infected with HIV, and 25% felt that the community would also accept such persons.[23]

Table No.31: Distribution of participants based on association between educational status and habit of condom use with CSWs

8% of the illiterates, 16.4% and 9.7% of primary and secondary level education participants and 50% of college level education participants did not use condoms during sex with CSWs.

58% of illiterates,45%aand 63% of primary and secondary level of education always used condoms. While 33%, 38% and 26% of illiterates, primary and secondary level educational status participants only occasionally used condoms during their sexual exposure with CSWs. In case of group with college level of education participants it was 50%.

Hence in our study habit of condom use with CSWs among participants increased with increase in their educational status and was statistically significant.

The Pune-Ahmednagar highway study revealed that 6.79% had used condom every time they visited CSW while 60.49% drivers had never used condoms while visiting CSW. Those who always used a condom 63.6% had studied college. 27.8%

had studied secondary level of education. Of them who had never used a condom 24.5% had studied primary, 69.4% secondary and 6.1% had studied college.

Educational status was found to be significantly associated with condom use.[23]

Table No.32: Association between socio-economic status and knowledge regarding HIV/AIDS

In the present study 40(39.2%), 46(45%) and 30(29%) of the participants of socio-economic class II have heard of HIV, AIDS and cause of AIDS. Likewise, 76(26.7%), 78(27.2%) and 48(16.9%) of them belonging to category III of socio-economic status have heard of HIV, AIDS and cause of AIDS. 14% of class IV category have heard of AIDS. None of the participants of class IV knew about HIV or its cause.

The association was statistically significant.

In Pakistan study monthly income of the most truck drivers averaged between Rs. 2,500-5,000. Awareness about HIV/AIDS was 81.2%.[30]

Table No.33: Distribution of participants based on association between socio-economic status and knowledge regarding transmission of HIV/AIDS

In our study the knowledge of the participants regarding transmission of HIV/AIDS increased with increase in their socio-economic status and proved to be statistically significant.

Among the participants of class II of socio-economic status 100%, 96% and 68.6% knew that sexual contact, blood contact and vertical transmission from mother to her child are the routes of transmission of HIV/AIDS. Among class III, 100%, 92.2% and 45.7% % knew that sexual contact, blood contact and vertical transmission

are the routes of transmission of HIV/AIDS. Knowledge regarding sexual transmission and vertical transmission was little less (85.7%) among class IV participants. However, all of them knew that HIV can be transmitted through blood contact.

The Pakistan study revealed that seventy-seven percent of the truck drivers had a monthly income of Rs. 6000 or less. It was found that 50% of the truck drivers did not know whether needles had any role in the spread of HIV/AIDS.[26]

Table No.34: Distribution of participants based on association between socio-economic status and knowledge regarding prevention of HIV/AIDS

In our study the knowledge among the class II socio-economic status participants regarding prevention of HIV/AIDS through condom use were 100% while through practicing single sexual partner exposure it was 98%.

Like wise, 74.5% of them knew that AIDS could be prevented by avoiding IV drugs and using sterilized needles and syringes.

Among class III participants, 99%, 98.5%, 67% and 66% knew that HIV/AIDS could be prevented by condom use, having single sexual partner, avoiding IV drugs and using sterilized needles and syringes.

Among class IV participants, all of them knew that HIV/AIDS could be prevented by condom use, having single sexual partner, avoiding IV drugs and using sterilized needles and syringes.

Hence socio-economic status of participants did not play any role in their knowledge regarding prevention of HIV/AIDS among our study group. Mass media, IEC materials and NGOs had played their role in increasing the knowledge among our study group.

The Pakistan study revealed that two third of the truck drivers did think that monogamy and condom use is an effective method for AIDS prevention.[26]

Table No.35: Distribution of participants based on association between socio-economic status and attitude towards HIV patients

In our study the positive attitude of the participants towards HIV patients increased with increase in their socio-economic status and was statistically significant. 92%, 69% and 57% of the participants of class II, III and IV thought that they should show sympathy and give care to AIDS patient. Likewise, 5.8%, 29.5% and 42.8% of class II, III and IV participants thought that there is no harm in sharing kitchen and toilet with HIV/AIDS patients.

However, 7.8%, 30.9% and 42.8% of the participants of class II, III and IV revealed that they will neglect and avoid the HIV/AIDS patients.

Similar to our study results in Pakistan study an association between low socio-economic status and high negative attitude towards persons with AIDS was found to exist.[26]

Table No.36: Distribution of participants based on association between socio-economic status and habit of condom use with CSWs

In the present study the habit of condom use with CSWs among participants had a very strong association with their socio-economic status and was statistically significant.

11.7%, 13% and 14% of the participants of class II, III and IV did not have the habit of condom use at the time of their sexual exposure to CSWs. 33%, 59% and 85% among each class of them always used condoms.

However, 54%, 26% of class II and III and none among class IV occasionally used condoms while having sex with CSWs.

In the study on Bolivian truck drivers, the truckers earned an average net salary of $363 per month (range $208 - $672), four times higher than the Bolivian per capita income. About one-third (31%) said that they had never used condoms. Of those who had used condoms, 57% had used them but not recently and the remaining 43% had used condoms within the last month. 19% truckers reported having had an STI. [28]

Although the habit of condom use was good in our study group as compared to other study findings. Efforts should still be made to reach goal of 100% by NGOs, doctors, health workers and through mass media and need to be directed towards lower socio-economic group.

Table No.37: Distribution of participants based on association between marital status and exposure to CSWs at dhabas and condom using behavior

In our study 27% of married, 54% of the unmarried, 50% of the widowers and one divorcee of the total participants were not exposed to commercial sex at all.
While among those who were exposed 8.5% of married and 7% of unmarried did not use condoms with CSWs.

Among those who have used condoms 38% and 21% of married and unmarried group always used while, 25.5% and 16.8% of them occasionally used condoms during their sexual exposure to CSWs.

Jharkhand study reported that a little less than three-fourths of the respondents reported that they were currently married. 9% separated from their spouses or were

widowers. One-fourth of the respondents were unmarried. Among them, 50% of married and 80% of unmarried participants had sex with CSW's. Consistent condom use was 12.5% among both of them.[23]

Hence habit of condom use was high in our study group as compared to this study.

Maharashtra study reported that 65.37% of the participants were married. 57.24% of truck drivers had exposure to CSWs. Out of 57.24% truck drivers who gave history of CSW exposure only 6.79% had used condom every time.[24]

Table No.38: Distribution of participants based on association between duration of truck driving and habits

In the present study all the three habits among participants increased with increase in their duration of occupation and was statistically significant.

61%, 56.7%, 59% and 57.5% of them who were in occupation as truck drivers for below 5 years, 6-10 years, 10-15 years and above 15 years had the habit of alcohol use.

Likewise 8.5%, 1.2% and 6.2% in each category had abused IV drugs.

74%, 62%, 50% and 75.7% of them in each category were smokers.

Jharkhand study revealed that about 37 percent of the participants had been in their current occupation from one to five years and 50% from six to 15 years. Among them 64 percent of the respondents had consumed alcohol. Habitual alcohol consumption before sex was 10%. 4% percent of the respondents reported injecting drug use.[23]

Table No.39: Distribution of participants based on association between duration of truck driving and habit of condom use with CSWs

In our study 81.8% of the participants with the duration of truck driving of above 15 years had always used condoms with CSWs as compared to only 41% of them who drove for less than 5 years. While 17% and 15% in each category did not use condom at all during sex with CSWs. It was statistically significant.

Hence habit of condom use increased with increase in their driving experience among our participants.

As against our study results in the study conducted on Bolivian truck drivers, about one-third (31%) who drove for more than a decade said that they had never used condoms. Of those who drove their trucks for less than a decade, 57% had used condoms occasionally and 43% had used them always.[28]

Table No.40: Distribution of participants based on association between duration of stay away from home and habits

64.5% of participants used alcohol, 2% abused IV drugs, 60.4% smoked among those who stayed less than 10 days away from home as compared to 55%, 4.8% and 66% of those who stayed 10-20 days away from home.

However all of the participants who stayed more than 20 days away from home smoked and used alcohol and 2(14.2%) of them abused IV drugs.

So, habits among participants increased with increase in their duration of stay away from home and was statistically significant. Factors like loneliness, family

tension, frustration of tire some work etc. were the reasons for more habits in those who stayed for more time away from home.

``Similar observations were made in the study on Bolivian truck drivers. Half of participants (47%) drank alcohol daily and 58% smoked in the group spending less than a week away from home. While, 68% and 73% of the truckers who spent around a month outside home had the habit of drinking alcohol and smoking tobacco respectively.[28]

Table No.41: Distribution of participants based on association between duration of stay away from home and habit of condom use

In our study 16(16.6%) and 36(12.4%) of those participants who stayed less than 10 days and between 10-20 days away from home did not used condoms at all during sexual exposure to CSWs but, 64.5% and 51% of them each used always and 18.7% and 36.5% from each group used the condoms occasionally with CSWs.

Among those participants who stayed more than 20 days away from their home 42.8% had always used condoms while 57% of them used the condoms occasionally during their sexual exposure to commercial sex workers and was statistically significant.

In Maharashtra study, of the 148 truck drivers who stayed away from home between 10 - 20 days per month, 50.7% gave history of CSW exposure.80.6% truck drivers who stayed away from home for more than 20 days gave history of CSW exposure. 21% and 14% in each group always used condoms with CSWs.[23]

Hence exposure to CSWs without the use of condoms has increased with increase in duration of stay away from their home in both the studies.

CONCLUSION

Truck drivers being the high risk group are the important source of infection of HIV/AIDS. Although efforts are being made by government and non-government agencies for educating this group, there is a scope for better strategy which will change the behavior of them.

In the present study, mean age of the truckers was 31.2 years with majority of the participants from semi-urban places. Most of them were married and belonged to class III of socio-economic status. Three-forth of them had an experience of less than 10 years in their profession. Participants who had heard about HIV and its cause were much less as compared to those who had heard about AIDS. Although the knowledge of different modes of HIV/AIDS transmission was good, half of the drivers did not know about mother to child transmission. Misconceptions still existed in half of the drivers.

Most of the participants expressed that social problems are the main reason for not informing their HIV status to others. Most of them were willing to give sympathy/care and share kitchen/toilet with the HIV/AIDS patients. Genital discharge and itching were the most common problems the participants faced, about half of the truck drivers used alcohol during their sexual exposure to CSWs and a few abused IV drugs. In spite of good knowledge about different modes of transmission of HIV 1/4th of the drivers did not use condoms on exposure to CSWs.

Most of them got exposed to sex between 18-20 years and for majority of drivers it was CSWs. The knowledge of the participants regarding HIV/AIDS, its symptoms, modes of transmission and prevention increased with increase in their educational status. However knowledge regarding vertical transmission, IV drug use

and contaminated syringes/needles as modes of transmission was less. Attitude of them towards people with AIDS did not have strong association with their education level. However, condom using behavior in case of unprotected sex increased.

Participants of higher socio- economic class had good knowledge of the disease and low-risk behaviors as compared to those in the lower socio- economic group. Their attitude towards persons with AIDS did not change much with their socio- economic class.

More number of married truckers used condoms when their sexual exposure to CSWs as compared to unmarried group. Exposure to commercial sex and habit of condom use with CSWs increased with increased experience of drivers in their occupation.

Habits of alcohol use, smoking and IV drug abuse had positive association with duration of stay away from home of the participants. Likewise, their risk taking behaviors like not using condoms or occasional use of them while exposure to CSWs increased with increase in their duration of stay away from their homes.

Results of our study indicate the need for health education measures which will stress upon the parent to child transmission of HIV. Different strategies are needed to be evolved to make condoms easily available for the truck drivers.

SUMMARY

The present cross-sectional study was conducted on truck drivers visiting any of 5 'dhabas' situated in the outskirts of Belgaum city to know the knowledge, attitude and sexual behavior of long distance truck drivers who pass through National highway-4**.**

This study was carried out for a period of one year from Jan-2007 to dec-2007. A total of 400 truck drivers were included in the study.

Demographic profile

In our study majority (92.25%) of the truck drivers were below 40 years. Mean age of the participants was 31.2 years.

Majority of the participants 236(59%) were from semi-urban and 27% were from rural area. 12% of the participants were illiterates, 46% had finished primary level of education.

Majority of the participants (86%) were married, 71% belonged to class III of socio-economic status and 53.5% belonged to nuclear family. 3/4th of the truck drivers had an experience of less than 10 years in their profession and stayed 10-20 days away from home per month.

Knowledge of the participants regarding HIV/AIDS.

In our study only 21% had heard of HIV as compared to 73.5% who had heard of AIDS and 90% of them got this information from mass media.

More than 95% of the truckers had good knowledge about modes of transmission of HIV/AIDS, half of them knew that HIV/AIDS as a disease is life long associated.

More than 70% knew that AIDS will lead to loss of weight and prolonged fever.90% of the truckers told that blood investigations will help in detecting AIDS.

Almost all drivers told that condom use, avoiding multiple sexual partners and avoiding sex with CSWs will prevent the disease transmission. However, knowledge regarding transmission through blood contact and un-sterilized syringes/needles was only 70%. Misconceptions regarding modes of transmission of HIV like mosquito bite and kissing existed in less than 50% of the participants.

In our study majority i.e. 95.5% of the participants had good knowledge regarding treatment of HIV/AIDS. 33.5% knew about ICTC and its functions.

Attitude of participants regarding HIV/AIDS.

In our study only 9.75% truckers were willing to get tested for HIV/AIDS. 68.5% participants expressed that social problems are the main reason for not informing their HIV status to others.

3/4th of the participants were willing to give sympathy/care and share kitchen/toilet with the HIV/AIDS patients. Genital discharge and itching were the most common problems the participants faced, 28.5% of them had genital itching in every 6 months.

We found that 48% of the truck drivers used alcohol during their sexual exposure to CSWs, 4.5% abused IV drugs and all of them practiced sex under IV drug influence.

Sexual behavior of participants regarding HIV/AIDS.

In our study 2.5% of participants had their 1st sexual exposure when they were 17 year old. 60% of them got exposed between 18-20 years. Among those who were exposed to CSWs, 7% did not used condoms at all during sex. 7.5% of the truckers practiced both anal and oral sex apart from the vaginal sex.

In the present study the overall knowledge of the participants regarding HIV/AIDS increased with increase in their educational status. Among the illiterates 95%, 87% and 33% knew that sexual contact, blood contact and vertical transmission from mother to her child are the routes of transmission of HIV/AIDS and improved with their level of education. 29% of illiterates, 38%and 48% of the group with primary and secondary level of education thought that mosquito bite could transmit the disease. More than 2/3rd of the truckers knew about various modes of HIV prevention except knowledge regarding IV drug use and contaminated syringes/needles as modes of transmission was less.

Among the illiterates 62.5% told that they will give sympathy and care for HIV patients. Likewise, 76%, 75% and 23%, 24% of them with primary and secondary level of education felt that caring and sharing with HIV patient will not harm.

In our study 8.33% of the illiterates, 16.4% and 9.7% of primary and secondary level education participants and 50% of college level education participants did not use condoms during sex with CSWs.

45% of the participants belonging to class II of modified B.G.Prasad socio-economic status and 14% of class IV had heard of AIDS. Among the participants of class II of socio-economic status 100%, 96% and 68.6% knew that sexual contact, blood contact and vertical transmission from mother to her child are the routes of

transmission of HIV/AIDS. Among class III participants, 99%, 98.5%, 67% and 66% knew that HIV/AIDS could be prevented by condom use, having single sexual partner, avoiding IV drugs and using sterilized needles and syringes.

7.8%, 30.9% and 42.8% of the participants of class II, III and IV revealed that they will neglect and avoid the HIV/AIDS patients. 11.7%, 13% and 14% of the participants of class II, III and IV did not have the habit of condom use at the time of their sexual exposure to CSWs.

Among those who were exposed to CSWs 8.5%, 6.9% in married and unmarried group did not use condoms with CSWs. 25.5% and 16.8% of them occasionally used condoms.

Among those who are exposed to commercial sex 41%, 55%, 62% and 81.8% of the participants with the duration of occupation of less 5 years, 6-10 years, 10-15 years and above 15 years had always used condoms with CSWs.

While only 17%, 11%, and 15% in each category did not use condom at all during sex with CSWs.

64.5% used alcohol, 2% abused IV drugs, 60.4% smoked among those who stayed less than 10 days away from home as compared to 55%, 4.8% and 66% of those who stayed 10-20 days away from home.

In our study 16(16.6%) and 36(12.4%) of those participants who stayed less than 10 days and between 10-20 days away from home did not used condoms at all during sexual exposure to CSWs but,64.5% and 51% of them each used always and 18.7% and 36.5% from each group used occasionally.

These findings stress upon the need for health education to these truck drivers so as to increase their knowledge regarding HIV/AIDS as well as to limit their high risk behavior.

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ANNEXURE – I

PROFORMA

1. Name :
2. Age :
3. Place of Residence : Rural / Semiurban / Urban
4. Educational Status : Illiterate / Primary / Secondary / College / Post Graduate
5. Marital status : Unmarried / Married / Widower / Divorcee
6. Educational status of spouse : Illiterate / Primary / Secondary / College / Post Graduate
7. Income of the family / month : Rs. _____
8. Type of family : Nuclear / Joint
9. Truck driver since : _____
10. Number of days stayed away From home per month : less than 10 days / 10 to 20 days / more than 20 days
11. Have you heard of HIV : Yes / No
    If yes, from whom _____
12. Have you heard of AIDS : Yes / No
    If yes, from whom _____
13. Do you know the difference between HIV / AIDS :Yes/No/Don't Know
    If yes, What is the difference between HIV and AIDS
14. How HIV is caused
    Specify a. Bacteria :Yes/No/Don't Know
    b. Virus :Yes/No/Don't Know

c. Fungus :Yes/No/Don't Know

d. Protozoa :Yes/No/Don't Know

e. If any other specify _____

15. Do you know how HIV / AIDS is transmitted :Yes/No/Don't Know
from one to another person

If yes, a. Sexual contact :Yes/No/Don't Know

b. Multiple sexual Partners :Yes/No/Don't Know

c. Blood transfusion :Yes/No/Don't Know

d. IV Drug addicts sharing needles :Yes/No/Don't Know

e. Using unsterilized needles and syringes :Yes/No/Don't Know

f. Mother to child :Yes/No/Don't Know

g. HIV positive mother breast feeding baby :Yes/No/Don't Know

h. Mosquito bite :Yes/No/Don't Know

i. Kissing :Yes/No/Don't Know

j. Socialising/caring the HIV / AIDS patient :Yes/No/Don't Know

k. Sharing meals with HIV / AIDS patient :Yes/No/Don't Know

l. If any other, Specify _____

16. Once a person is infected with HIV / AIDS how long can
he transmit the infection to his sexual partner _____

17. Do you know whether HIV / AIDS causes

a. Loss of weight Yes/No/Don't Know

b. Prolonged fever Yes/No/Don't Know

c. Continuous diarrhoea Yes/No/Don't Know

d. If any other, Specify _____

18. Is it possible to detect HIV / AIDS through investigation Yes/No/Don'tKnow

If yes, specify a. Blood investigation Yes/No/Don't Know

b. Urine investigation Yes/No/Don't Know

c. Stools investigation Yes/No/Don't Know

d. Saliva investigation Yes/No/Don't Know

e. If any other, Specify _____

19. Are you willing to get tested for HIV / AIDS Yes/No/Don't Know

20. If you are tested positive will you inform others Yes/No

20.1 If Yes, a. Wife Yes/No

b. Parents Yes/No

c. Children Yes/No

d. Friends Yes/No

e. Relatives Yes/No

f. If any other, Specify _____

20.2 If No, why ? _____

21. Is it possible to prevent HIV / AIDS Yes/No/Don't Know

If yes, a. Using condom Yes/No/Don't Know

b. Having single sexual partner Yes/No/Don't Know

c. Not visiting CSW's Yes/No/Don't Know

d. Avoiding IV drug addiction Yes/No/Don't Know

e. Using sterilized needles and syringes Yes/No/Don't Know

f. If any other, Specify _____

22. When did you have sex for the first time ? _____

23. With whom did you have it ? _____

24. Do you visit a. CSW Yes/No

b. MSM Yes/No

c. Others Yes/No

25. Have you ever been provided with the girls for sexual enjoyment at the Dhabas Yes/No

If Yes, Are you in the habit of using condoms during the sexual act with them Yes/No

If Yes, a. Always Yes/No

b. Occasionally Yes/No

26. During the last 3 months have you suffered from any of the following genital problems

a. Genital ulcers Yes / No

b. Genital discharge Yes / No

c. Itching Yes / No

d. Warts Yes / No

e. If any other specify _____

How often do you get it _____

27. Do you use condoms in case of unprotected sex Yes / No

If Yes, a. Always Yes / No

b. Occasionally Yes / No

28. Do you practice any other type of sex apart from vaginal Yes / No

If Yes, a. Anal Yes / No

b. Oral Yes / No

29. Personal habits

a. Alcohol intake Yes / No

If Yes, How long _____

If yes, Do you use it at the time of sex Yes / No

b. IV drug abuse Yes / No

If Yes, How long _____

If yes, Do you use it at the time of sex Yes / No

c. Smoking Yes / No

If Yes, How long _____

If Yes, Do you use it at the time of sex Yes / No

30. If an IV drug abuser, 30.1 Sharing with other Yes / No

30.2 Changing syringes and needles every time ? Yes / No

31. If you come to know that some of your family member or a relative or friend is suffering from HIV / AIDS, then will you,

a. Give sympathy to him/her Yes/No/Don't Know

b. Give caring to him/her Yes/No/Don't Know

c. Neglect him/her Yes/No/Don't Know

d. Avoid him/her Yes/No/Don't Know

e. Share kitchen / toilet with him/her Yes/No/Don't Know

32. Is there any treatment for HIV / AIDS Yes/No/Don't Know

33. Are you aware that if husband is HIV positive he can spread disease to his wife and later to his child if she becomes pregnant. Yes/No/Don't Know

34. Have you heard of voluntary counseling and testing centre for HIV / AIDS Yes/No/Don't Know

35. Would you like to know more about HIV / AIDS Yes/No

ANNEXURE – II

CONSENT FORM

"**Knowledge and attitude regarding HIV/AIDS infection among the truck drivers – A one year cross-sectional study".**

PURPOSE OF STUDY

The purpose of the study is to learn about what truck drivers know and what is their attitude regarding HIV/AIDS and how is their sexual behaviour. The study will be under the supervision of **Dr. Vijaya Naik** **M.D., D.P.H**

The study is intended to interview those truck drivers who drive along National Highway No. 4 passing through Belgaum.

PROCEDURE

If you are willing, you will be asked questions during the interview. The interview will take 30 minutes. You will be asked about what you know about HIV / AIDS infection, your attitude towards the disease and your sexual behaviour.

CONFIDENTIALITY

Your answers are kept secret. Your name and contact information will never be identified to anyone outside of the study.

BENEFITS

You are being asked to be a part of this study since it will help us to know the knowledge regarding HIV / AIDS and to formulate an information, education and communication package to these truck drivers.

RISK

No risks are involved

ALTERNATIVES

If you decide not to participate in the study, you can quit at any time.

FINANCIAL INCENTIVES FOR PARTICIPATION

You will not receive any payment for participation in this study.

CONTACT

If you have any questions regarding the study, you may contact the study investigators **Dr. Vijaya Naik** **M.D., D.P.H**, Vice-Principal and Professor, Department of Community Medicine Mobile No: 94481 91532, or **Dr. Kantesh Shidaraddi**, Postgraduate Student Mobile No: 98860 25706, Dept of Community Medicine, Jawaharlal Nehru Medical College, K.L.E. Academy of Higher Education and Research (DU), Belgaum 10.

If you have any questions about your right as a study participant, you may contact Dr. **V. D. Patil** **M.D., D.C.H.**, Principal and Chairman, Jawaharlal Nehru Medical College, Institutional Ethics Committee on Human Subjects Research, Jawaharlal Nehru Medical College, K.L.E. Academy of Higher Education and Research (DU), Belgaum 10. Tel: 0831 247 1350

AUTHORISATION TO PUBLISH RESULTS

Results of this study may be published for scientific purposes or presented to scientific groups. However you will not be identified.

VOLUNTARY PARTICIPATION

Being a part of this study is voluntary. Also, you may refuse to answer any question or end the interview at any time without any punishment or effect on you. You are free to ask questions about the study and your rights as a participant. No one will contact you again for this study.

STATEMENT OF CONSENT

I volunteer and consent to participate in this study. I have read the consent or it has been read to me. The study has been fully explained to me and all my questions are being answered.

Signature _____

(Or left hand thumb impression)

Witness _____

Signature _____

Signature of Doctor _____

Date _____

ABBREVIATIONS

3. 1= Rural, 2= Semiurban, 3= Urban.

4. 1= Illiterate, 2= Primary, 3=Secondary, 4= College, 5= Post graduate.

5. 1= Unmarried, 2= Married, 3= Widower, 4= Divorcee.

6. 1= Illiterate, 2= Primary, 3=Secondary, 4= College, 5= Post graduate.

7. Grades as per modified B.G.Prasad classification.

8. 1= Nuclear, 2= Joint.

10. 1= Less than 10 days, 2= 10 -20 days, 3= more than 20 days.

11 1= Not heard, 2= Mass media, 3= Friends, 4= Family and relatives, 5= Doctor.

13. 1= Don't know, 2= Both are same, 3=HIV is reason for AIDS.

14. Y= Yes, N= No, D= Don't know (Applicable to all).

16. 1= Life long association, 2= No life long association, 3= Don't know.

21. 1= Social problems, 2= Fear of abandance from family, 3= fear of losing job.

24. 1= Wife, 2= CSW, 3= MSM, 4= Animals.

26. 1= Not provided with CSWs at Dhabas,

    2= Provided and not used condoms during sex with them,

    3= Always used condoms during sex with them,

    4= Occasionally used condoms during sex with them.

27. N= No genital problems,

    Frequency in months = Had genital problems.

28. 1= Not used at all.

2= Used always.

3= Used occasionally.

29. 1= No other sexual practice,

2= Anal,

3= Oral,

4= Both.

30. N= Not used,

Duration in years = used.

Y= Yes, N= No.

(Applicable to 31, 32.)

34. Y= Yes, N= No, D= Don't know.

(Applicable to 33, 35,36,37,38).

	Age
	Place
	Education
	Marital status
	Education of spouse
	socio-economic status
	Type of family
	Duration of occupation
	Stay away from home
	Knowledge of HIV,from whom
	Knowledge of AIDS,from whom
	Diff. b/w HIV&AIDS
Bacteria	Cause of HIV/AIDS
Virus	
Fungus	
Protozoa	
Others	
Sexual contact	Transmission of HIV/AIDS
Multiple sexual parters	
Blood transfusion	
IV drug abuse	
Unsterilised syringes &needles	
Mother to child	
Breast feeding	
Mosquito bite	
Kissing	
Socialising & caring	
Sharing meals	
Others	
	Knowledge of life long association of AIDS
Loss of weight	Knowledge about symtoms
Prolonged fever	
Chronic diarrhoea	
Others	
Blood	Knowledge about investigations
Urine	
Stool	
Saliva	
Others	
	willng to get tested
Wife	If +ve, whom will you inform
Parents	
Children	
friends	
relatives	
Friends	
Relatives	
Others	

	If no, why?
Condoms	Knowledge about prevention
Single sexual partner	
Avoid sex with CSW	
Avoid IV addiction	
Usage of sterilised needles & syringes	
Others	
	Age at first sexual exposure
	With whom?
CSW	Do you visit
MSM	
Others	
	Exposure to CSWs at dhabhas
Genital ulcers	Genital problems
Discharge	
Itching	
Warts	
Others	
	Condom use during unprotectd sex
	Other sexual praccticcs
	Alcohol use
With sex	
	Smoking
With sex	
	IV drug abuse
With sex	
Sharing with others	IV usage behavior
Changing syringes&needles	
Sympathy	Attitude towards HIV patient
Care	
Neglecting	
Avoiding	
Sharing kitchen&toilet	
	Treatment awareness
	Awareness of HIV spread to wife & children
	Awareness about VCTC
	Willing to know more about HIV/AIDS