International Journal of Community Medicine and Public Health
Halder T et al. Int J Community Med Public Health. 2024 Nov;11(11):4346-4353
http://www.ijcmph.com
pISSN 2394-6032 | eISSN 2394-6040

DOI: https://dx.doi.org/10.18203/2394-6040.ijcmph20243297

Original Research Article

A cross-sectional study of knowledge and stated practices regarding HIV among truck drivers in Basirhat health district, West Bengal

Tanudipta Halder[1], Jayita Pal[2], Priya Debnath[1], Manoj Ghosh[3]*

[1]Institute of Public Health Kalyani, Kalyani, West Bengal, India
[2]Department of Epidemiology, All India Institute of Hygiene and Public Health, Kolkata, West Bengal, India
[3]Division of Yoga, Centre for Integrative Medicine and Research, Manipal Academy of Higher Education, Manipal, Karnataka, India

Received: 25 August 2024
Revised: 03 October 2024
Accepted: 07 October 2024

***Correspondence:**
Dr. Manoj Ghosh,
E-mail: mg.prahlad@gmail.com

ABSTRACT

Background: HIV is an important public health problem throughout the world as well as in India and truck drivers are a vulnerable population. A cross-sectional study was designed aiming to assess the knowledge and stated practices of truck drivers regarding HIV transmission, and prevention of its associated factors in Basirhat Health District, West Bengal.
Methods: This study employed a rigorous cross-sectional design to assess the knowledge and practices of 111 truck drivers in Basirhat Health District, West Bengal, regarding HIV. Participants were selected using simple random sampling from parking zones and Dhaba. Data were collected through face-to-face interviews using a structured questionnaire.
Results: The study uncovered intriguing insights into the knowledge and practices of truck drivers regarding HIV/AIDS. While the majority of participants had heard about HIV/AIDS, around half of the participants demonstrated good knowledge of HIV/AIDS. Surprisingly, misconceptions prevailed, including the belief that mosquitoes can transmit HIV. Participants displayed limited knowledge of AIDS symptoms and preventive measures, with uncertainty surrounding free HIV testing locations and free treatment availability. Alarmingly, a staggering 88.29% of truck drivers had never sought HIV testing, citing various reasons.
Conclusions: The study underscores the necessity of targeted interventions to address knowledge gaps and promote safe sexual practices among truck drivers in the Basirhat Health District. Health workers and media campaigns can play a pivotal role in increasing awareness and prevention of HIV/AIDS among this population.

Keywords: Bridge population, Eastern India, Knowledge and practice, Sexually transmitted disease

INTRODUCTION

HIV (human immunodeficiency virus) remains one of the major public health issues across the world. According to WHO report 38.4 million people living with HIV in 2021.[1] HIV is responsible for causing a chronic immune system disease, called AIDS (acquired immunodeficiency syndrome). HIV is transmitted through blood, semen, or vaginal fluids and due to this reason, it is a type of STD (sexually transmitted infection).[1] As per the recent report of the World Health Organization (WHO) at the end of 2021, more than 38.4 million worldwide are living with HIV.[1] This report has also shown that 650,000 individuals died from HIV and more than 1.5 million people have acquired HIV in 2021. Similarly, it has been reported in 2021 that more than 24 lakh people are living with HIV and around 62.97 thousand people died from HIV in

India.[2] A survey conducted by the India Health Action Trust (IHAT) has shown that in India, the HIV epidemic continues to be concentrated among High-Risk Groups.[3] On the other hand, a recent study has revealed that West Bengal in India, is a low-prevalent state with high vulnerability to HIV as it accounts for more than 6% of the country's load of HIV infection.[4] In this particular context, it has been reported that West Bengal, Bihar, Gujarat, and Uttar Pradesh are estimated to have more than 100,000 HIV-positive cases and these states together account for 22% of HIV infections in India.[5] From these statistics, it has been understood that the high prevalence of HIV is a public health concern also in West Bengal.

The prevalence of HIV has been declining in India in the last few years but some groups of people such as female sex workers, men having sex with men of other transgender communities and truck drivers are still vulnerable to HIV.[6] However, previous relevant studies and reports have shown that truck drivers are prone to HIV or AIDS in different countries. For instance, a new report has shown that in the Uttar Pradesh (UP) state, around 4,425 truck drivers were screened for HIV/AIDS and 19 of them tested HIV positive.[7] Similarly, a study conducted in 2020 has concluded that truckers with relatively lower education and those staying away from home in India are at higher risks of HIV infections. According to this study, 1%-7% of long-distance truck drivers suffer from at least one sexually transmitted infection, mainly HIV. Thus, this particular group of people contribute to the concern of the HIV epidemic in India.[8] These studies have indicated that the majority of truck drivers in this country are not aware of the transmission, outcomes and even prevention of HIV.[8,9] Taking these issues into consideration, our study focused on the assessment of knowledge levels and stated practices and their associated factors among truck drivers in eastern India.

To assess the knowledge levels and stated practices regarding HIV/AIDS among truck drivers. To identify sociodemographic factors associated with knowledge levels and stated practices regarding HIV/AIDS among truck drivers.

METHODS

Study duration

A cross-sectional study was conducted from March 2023 to June 2023.

Following this method, quantitative data had been collected directly from the participants at a single point in time.

Inclusion criteria

The study population consisted of truck drivers who had been in the profession for more than 6 months were travelling through the Basirhat Health District in West Bengal and given consent to participate had been included in the study.

Exclusion criteria

Truck drivers who had previously participated in similar types of study were excluded.

Data collection

Data related to knowledge and stated practices of truck drivers regarding HIV/AIDS transmission and prevention were collected visiting truck parking zones and dhabas in Basirhat Health District, West Bengal.

Specific parking zones at the Ghojadanga border, Basirhat, and dhabas within the Basirhat locality were chosen where trucks were present during the data collection period. During the daytime, the study was conducted at the selected parking zones, while in the evening, the dhabas served the same purpose. The parking zones and dhabas were purposively selected based on the criteria of having more than 10-12 trucks and truck drivers present. From these chosen locations, the truck drivers were randomly selected. The sample size was calculated by using Cochran's formula, where the prevalence of truck drivers with good knowledge in West Bengal (p) was 52.4% (29), allowable error (d) 10%, Z for 95% confidence interval 1.96. Assuming a non-response rate of 10%, the calculated minimum sample size comes to 107.

A pretested predesigned structured questionnaire was used as the main tool in this survey to assess the knowledge level and practices among truck drivers regarding HIV/AIDS transmission and prevention. A total of 36 close-ended questions were designed which consist of sections like socio-demographic information, knowledge level on HIV/AIDS transmission and prevention, and behavioural practices related to HIV/AIDS prevention. The demographic section of this questionnaire focused on age, religion, caste, highest level of education, monthly income, relationship status, year of profession and frequency of staying outside the home. The knowledge section consisted of questions on modes of transmission, prevention methods, and misconceptions about HIV/AIDS. The behavioural section of this questionnaire assessed condom use, regular testing, avoidance of risky behaviours and other sexual activities of the participants.

The questionnaire was first prepared in English. Then it was translated into Bengali by a linguistic expert keeping semantic equivalence. Thereafter, to check the translation, it was retranslated into English by two independent researchers who were unaware of the first English version. The face validity of each item was checked from previous research in the presence of public health experts.

They also decided the content validity of each domain. Reliability was checked by the test-retest method.

Statistical analysis

Pretesting followed by pilot testing was done to eliminate any ambiguity or duplicity. Microsoft Excel 2019 (Microsoft Corporation, Redmond, WA, USA) and IBM SPSS Statistics software Version 20 (IBM Corp., Armonk, NY, USA) were used as the tools for the purpose of data analysis in this study. Using MS Excel, the percentage and frequency graphs were generated using descriptive statistics. Additionally, SPSS software was used to carry out the inferential statistical analyses. All the tests were two-tailed with p value <0.05 being considered significant throughout the analyses. The knowledge questions and practice questions were scored and for regression analysis, the scores had been categorised dichotomously by median split. Bivariate analyses were performed to find out the determinants of knowledge and stated practices.

Ethical approval

The study had been approved by the Institutional Ethics Committee of the Institute of Health and Family Welfare, West Bengal (IHFW/IEC/2809 dated 13/04/2023). Informed written consent had been taken from every participant before introducing the questionnaire.

RESULTS

The study sample consisted of individuals with an age range of 19 to 55 years, with a mean age of 32.63 years (SD=7.85). The sample was predominantly composed of Muslims (63.96%) and the general category by caste (59.46%). The majority of participants were married (85.59%) and attained upper primary education (34.23%) or secondary education (20.72%). The monthly income of participants varied between Rs. 5,000 and Rs. 60,000, with a mean income of Rs. 15,288.29 (SD=Rs. 7107.47). The majority of participants (67.57%) reported a monthly income of Rs. 15,000 or less. In terms of experience as a truck driver (in number of years) the mean was found to be 10.26 years (SD=7.40 years). A larger proportion of participants (59.46%) had experience of 10 years or less, while 40.54% had more than 10 years of experience (Table 1).

The majority (65.8%) reported being in a sexual relationship only with their wife. A smaller proportion (11.7%) reported engaging in sexual relationships with both their wife and commercial sex workers (CSWs). Some participants (9.0%) admitted to having extramarital sexual affairs. Among the unmarried participants, a few (3.6%) reported having affairs with girls. A minority of participants (1.8 %) indicated having sexual relationships exclusively with CSW. Only 8.1% of the participants reported not being currently involved in any sexual relationships. A significant proportion (38.7%) reported travelling almost every day for their work followed by 24.3% who reported travelling several times a week. Some participants (13.5%) mentioned travelling a few times a month for work. Among the total 111 participants, 89 individuals (80.2%) reported that they had heard about HIV/AIDS. For those who have heard about HIV/AIDS, they mentioned multiple sources from which they acquired their knowledge. The most common sources were friends or family, (73.0%) followed by information from health workers and television or radio (23.6% each) followed by the internet or phone (19.1%); while 6.7% mentioned that they had heard of HIV/AIDS from school. Regarding the nature of HIV/AIDS, 64% of the respondents correctly identified HIV as a sexually transmitted disease. Furthermore, 18% correctly recognized that HIV is caused by a virus.

Some participants had misconceptions about HIV, as 4.5% of them believed it is transmitted through mosquito bites, 2.7% believed it is transmitted through saliva, and 1.8% believed it is caused by bacteria. Regarding HIV transmission modes, the most well-known mode of transmission reported by the participants is through unprotected sexual contact (71.2%). The next most recognized modes are through blood transfusion (40.5%), sharing razor blades (35.1%) and sharing needles (34.2%). Awareness of HIV transmission from mother to child during pregnancy, childbirth, or breastfeeding is relatively lower, with only 12.6% correctly identifying it. Other modes, such as shaking hands (9.0%) sharing food (27.9%), and hugging (7.2%) were perceived incorrectly as possible means of HIV transmission. About 27.9% of truck drivers indicated that they did not know how HIV is transmitted. About 11.71% of the participants in the study were found to have other misconceptions about HIV transmission.

Regarding common symptoms, the findings indicate a substantial lack of knowledge, as the majority of participants (65.8%) responded that they did not know about the symptoms. Among the recognized symptoms, rapid weight loss was the most commonly identified (25.2%) followed by repeated attacks of fever lasting for more than one month (15.3%); while smaller proportions correctly identified persistent cough (9.0%), loss of appetite (4.5%), and persistent diarrhea (0.9%) as symptoms of AIDS. More than half of the study subjects (58.6%) identified that HIV can be prevented. Regarding preventive measures, the majority of participants (46.8%) did not have any idea how it could be prevented. The most commonly recognized preventive measure was abstinence from sex (36.9%), using condoms during sexual intercourse (29.7%), and not sharing needles or syringes or razor blades (15.3%). A common misconception regarding the prevention of HIV was refraining from hugging which was reported by 7.2% of participants.

Regarding diagnosis, the majority (51.4%) mentioned that a blood test is used for HIV diagnosis, while 37.8% of the

participants reported not knowing the appropriate diagnostic method for HIV. Among the participants who knew the appropriate diagnostic test, the majority (53.2%) reported that free HIV testing is available in the government health sector, while 41.4% did not know whether free testing is offered by the government health sector or not. More than half of the study subjects (62.2%) reported that they can get tested at government hospitals. Private hospitals or clinics were also mentioned as testing locations by 34.2% of the participants. A smaller proportion of participants mentioned NGOs (5.4%) and mobile health units (1.8%) as potential testing locations while 10.8% of the participants did not know where they could get tested. Almost 1/3rd of the respondents said that testing was never required for single sexual partnered individuals while 9% of the respondents reported that testing was required at least once in a lifetime for single sexual partnered individuals whereas 1% of the respondents reported that testing was required at least once in a lifetime for multiple sexual partnered individuals.

Table 1: Socio-demographic characteristics of the study sample (n=111).

Variables	Numbers (%)	Range	Mean (SD)
Age (years)			
≤32	62 (55.86)	19-55	32.63 (7.85)
>32	49 (44.14)		
Religion			
Hindu	40 (36.04)		
Islam	71 (63.96)		
Caste			
General	66 (59.46)		
SC	16 (14.41)		
ST	6 (5.41)		
OBC	23 (20.72)		
Education			
Illiterate	16 (14.41)		
Primary	21 (18.92)		
Upper Primary	38 (34.23)		
Secondary	23 (20.72)		
Higher Secondary	11 (9.92)		
Graduation	2 (1.80)		
Marital status			
Married	95 (85.59)		
Unmarried	16 (14.41)		
Monthly income (Rs.)			
≤15000	75 (67.57)	5000-60000	15288.29 (7107.47)
>15000	36 (32.43)		
Experience as a truck driver (years)			
≤10	66 (59.46)	1-31	10.26 (7.40)
>10	45 (40.54)		

Table 2: Determinants of HIV knowledge among truck drivers (n=111).

Socio-demographic variables	Sub-groups	Knowledge level		Chi-square test			OR (95% C.I.)
		Good	Bad	χ^2 value	df	P value	
Age (years)	>32	25	24	3.997	1	0.046	2.188 (1.010–4.738)
	≤32	20	42				
Religion	Hinduism	21	19	3.711	1	0.054	2.164 (0.981-4.778)
	Islam	24	47				
Caste	General	24	42	1.178	1	0.278	0.653 (0.302-1.412)
	Others	21	24				
Education	Illiterate	7	9	0.080	1	0.777	1.167 (0.400-3.400)
	Literate	38	57				
Marital status	Unmarried	5	11	0.669	1	0.413	0.625 (0.201-1.940)
	Married	40	55				
Monthly income	≤Rs. 15000	35	40	3.600	1	0.058	2.275 (0.964-5.370)
	>Rs. 15000	10	26				

Continued.

Socio-demographic variables	Sub-groups	Knowledge level		Chi-square test			OR (95% C.I.)
		Good	Bad	χ^2 value	df	P value	
Experience as a truck driver (years)	≤10	25	42	0.730	1	0.393	0.714 (0.330-1.547)
	>10	20	24				
Travel outside home district	Frequently	32	39	1.677	1	0.195	1.704 (0.758-3.831)
	Rarely	13	27				

Table 3: Risky sexual behaviours of truck drivers (n=111).

Items	Yes number (%)	No number (%)
Having a sexual partner other than wife	40 (36.04)	71 (63.96)
Visits sex workers	16 (14.41)	95 (85.59)
Use of condom during sex	14 (12.61)	97 (87.39)
Ever shared needles or syringes or razor-blade	7 (6.31)	104 (93.69)
Ever had a blood transfusion	1 (.90)	110 (99.10)

Table 4: Association between HIV knowledge level and stated practices.

Score variable	Knowledge sub-groups	Variables of practices		Chi-square test			Odds ratio (95% C.I.)
				χ^2-value	df	P value	
		Use of condom					
		Yes	No				
Knowledge Score	Good	3	42	2.428	1	0.119	0.357 (0.094-1.362)
	Bad	11	55				
		Test For HIV					
		Yes	No				
	Good	9	36	5.028	1	0.025	3.875 (1.113-13.489)
	Bad	4	62				
		Safe sexual relationship					
		Yes	No				
	Good	31	14	0.974	1	0.324	0.651 (0.277–1.530)
	Bad	51	15				
		Stated practices					
		Good	Bad				
	Good	45	0	79.886	1	0.000	7.333 (3.996–13.458)
	Bad	9	57				
		Risky behaviour					
		Yes	No				
	Bad	55	11	1.385	1	0.239	2.050 (0.609–6.900)
	Good	41	4				

Regarding treatment, the majority of respondents (63.1%), correctly identified that HIV can be treated with medication from a registered doctor. It is worth noting that none of the respondents mentioned seeking treatment from quack doctors or traditional healers (Ojha). Nevertheless, a significant portion of participants, 27 individuals (24.3%), expressed uncertainty about how HIV can be treated, also majority (90.1%) of the respondents reported not knowing the specific duration of the medication. More than half of the participants (56.8%) believed that they could obtain HIV medication free of cost from government facilities, whereas 38.7% expressed uncertainty or lack of knowledge regarding the availability of free HIV medication from government facilities. Regarding prognosis, only 27.9% believed that HIV patients can live a normal life. Among those who believed that HIV patients can live a normal life, the majority (54.84%) indicated that a certain period of time on antiretroviral therapy (ART) is required for an HIV patient to live a normal life. Less than half of the individuals (36.0%) believed that a complete cure for HIV is possible. Regarding participants understanding of HIV-related mortality, the majority of respondents (52%) correctly disagreed with the notion that a person dies immediately after being infected with HIV. Among those who disagreed with immediate death, less than half of the subjects (45.61%) recognized the increased chances of death for individuals who have not received treatment since their diagnosis. Additionally, a notable percentage (14.04%) acknowledged that the risk of death is higher for those who have further complications related to HIV. The participants' knowledge scores in this study ranged

from 0 to 30, with a mean score of 10.38 and a standard deviation of 7.15, resulting in a total knowledge score of 38. Among all the study participants, 48.65% were found to have a good knowledge of HIV. Bivariate analyses revealed that participants aged >32 years had a higher proportion of good knowledge compared to those aged <=32 years ($\chi2$=3.997, df=1, p=0.046, OR=2.188, 95% CI=1.010-4.738) (Table 2).

Regarding sexual behaviour, 36.04% of participants reported having sexual partners other than their wives, indicating a potential risk for extramarital sexual activities. Furthermore, 14.41% of the participants admitted to visiting sex workers, indicating engagement in high-risk sexual behaviour. Only 6.31%, reported sharing needles, syringes, or razor blades (Table 3). The majority (88.29%) of the truck drivers reported that they had never sought HIV test because they had no recognizable symptoms of HIV/AIDS and/or not did not feel at risk and/or lack of information and/or fear of stigma/discrimination.

Around 12% of the truck drivers had gone for HIV testing. All of them had been found to be negative for HIV status (Figure 1). There was a statistically significant association between the testing for HIV and the sub-groups based on knowledge score. There was also a strong association between knowledge score and stated practices ($\chi2$=79.886, degree of freedom (df)=1, p=0.000). However, there was no statistically significant association between stated practices and socio-demographic factors as revealed by bivariate analyses (Table 4).

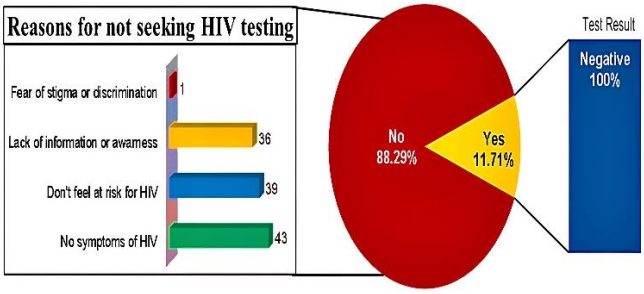

Figure 1: HIV test seeking behaviour among truck drivers.

DISCUSSION

The findings of this study indicated that the majority (80.2%) of participants heard about HIV/AIDS, demonstrating a relatively high level of awareness among this group. These findings are important in terms of preventing and managing the spread of the disease. Similar findings were demonstrated in some previous studies.[10-12] Regarding the sources of HIV/AIDS knowledge among the participants, friends or family were the most commonly mentioned sources, with 73.0% of respondents obtaining information from this group. Health workers and television or radio were also frequently mentioned as sources of HIV/AIDS knowledge, with 23.6% of the participants reporting each of these sources. These findings align with the findings in regards to the importance of the media and targeted campaigns in increasing awareness and knowledge regarding HIV.[13-15]

The main findings of the study revealed that truck drivers in the Basirhat Health District had a moderate level of knowledge regarding HIV, with a wide variation in individual scores. Less than half of the participants (48.65%) demonstrated good knowledge of HIV. The analyses of the data revealed significant gaps in knowledge and understanding of HIV/AIDS among the surveyed population. These knowledge gaps were observed in various aspects, including the transmission, prevention, symptoms, and treatment of HIV/AIDS. A considerable number of respondents lacked awareness of modes of transmission, with some respondents (4.5%) erroneously associating it with mosquito bites. Misconceptions were found to be a bit higher in other studies conducted in India (18.8%) or in another study from Burkina Faso (23.3%).[10,16]

It was observed that the majority of participants were aware of unprotected sexual contact (71.2%) as the primary mode of transmission, along with the risks associated with sharing blood-contaminated items such as razor blades and needles. However, there is a need for improvement in understanding the transmission of HIV from mother to child during pregnancy, childbirth, or breastfeeding, as well as dispelling misconceptions regarding non-transmissible modes such as shaking hands, sharing food, and hugging. There was a significant proportion of participants who reported not knowing how HIV is transmitted.

In the study, a considerable number of respondents correctly identified HIV as a sexually transmitted disease (64%) and acknowledged its viral cause (18%). In contrast, all truck drivers interviewed were aware of HIV/AIDS in an on Solapur Highway conducted in 2018.[17] A majority of participants acknowledged that HIV can be prevented but there was a significant proportion who expressed uncertainty. The most recognized preventive measures were abstinence from sex (36.9%) and using condoms (29.7%). Regarding the availability of free HIV testing in the government health sector, a majority of participants believed it to be accessible, but a significant number were unsure. It was compounded by the fact that they didn't know about free medications available for HIV treatment. Government hospitals were recognized as the primary testing location, followed by private hospitals or clinics. However, there was also a notable proportion of participants who were uncertain about where to get tested. Similarly, in a study conducted in Faridpur, it was seen that only 13.2% of respondents were aware of where HIV testing could be conducted.[12]

Among the participants, 36.04% reported having sexual partners other than their wives, indicating a potential risk for extramarital sexual activities. Additionally, 14.41% of the participants admitted to visiting sex workers, indicating engagement in high-risk sexual behaviour. A survey conducted in West Bengal found that approximately 86% of truck drivers reported engaging in sexual activity with a casual female partner other than their wives within the past 6 months.[8]

These findings highlight the need for targeted interventions to address risky sexual practices and promote safe sex education. A low percentage of consistent condom use during sexual intercourse as found in this study raised concerns about inadequate protection against HIV and other STIs. Approximately one-third of truck drivers consistently utilized condoms during sexual activity, according to a study conducted in Burkina Faso.[10] In this study, age was found to be significantly associated with HIV knowledge, though in the study from Burkina Faso, there was no significant correlation between the two.[10] However, in the same study it was also seen that older drivers tended to engage in safer practices. This highlights the need for targeted educational efforts to address the knowledge gaps among younger populations.

In terms of behaviours, individuals with good knowledge were more likely to undergo HIV testing compared to those with poor knowledge, indicating the positive influence of knowledge on testing behaviours. However, no significant association was found between knowledge level and condom use or engaging in safe sexual relationships. In another study, similar results were found.[18] This suggested that factors beyond knowledge alone may impact these behaviours, highlighting the importance of comprehensive sexual education and behaviour change interventions. On the other hand, individuals with good knowledge demonstrated significantly higher adherence to good practices overall, emphasizing the positive impact of knowledge on promoting healthy behaviours related to HIV prevention and management. Surprisingly, there was no significant association between risky behaviour and knowledge level, indicating that knowledge alone may not be sufficient to deter individuals from engaging in risky behaviours.

This study had its own limitations. The study findings might not be generalisable to other areas or populations. A multi-centric study might have provided more insights. As the survey depended on self-reported questionnaires, recall bias is not uncommon to affect the findings or participants might be influenced by social desirability, introducing bias. A cross-sectional study cannot help in establishing a causative role.

CONCLUSION

The findings of this study have revealed significant gaps in knowledge, risky sexual behaviour and limited access to HIV/AIDS services among participants. One of the key concerns highlighted by the study is the lack of knowledge and the prevalence of misconceptions about HIV/AIDS symptoms, prevention methods, and treatment options.

This emphasizes the necessity for targeted campaigns that provide accurate information, dispel myths and improve overall knowledge about HIV/AIDS. Efforts should be made to expand free testing options in government health sectors and increase awareness about testing locations. Risky sexual behaviour, including extramarital activities and visiting sex workers, as well as low rates of condom usage and limited understanding of safe sex practices were prevalent. To address these behaviours, interventions should be developed and implemented, focusing on promoting safe sexual practices, emphasizing the importance of condom usage, and fostering healthy relationships. Implementing comprehensive education programs, targeting high-risk behaviours, and strengthening free testing availability can create a well-informed society with preventive measures and support for those affected. Continuous research is crucial for developing effective strategies in the fight against HIV/AID.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. HIV and AIDS. 2024. Available at: https://www.who.int/news-room/fact-sheets. Accessed on 10 August 2024.
2. National AIDS control organization, ICMR-National institute of medical statistics. India HIV estimates fact. MoHFW, GoI. 2021. Available at: https://naco.gov.in/sites. Accessed on 10 August 2024.
3. 15 years of journey-technical assistance to implement targeted interventions for HIV Prevention. India Health Action Trust (IHAT). 2023. Available at: https://www.ihat.in/resources. Accessed on 10 August 2024.
4. Ganguly S, Chakraborty D, Goswami DN. HIV/AIDS epidemic in West Bengal: An overview. J Fam Med Prim Care. 2018;7(5):898–902.
5. World bank. 2023. HIV/AIDS in India. Available at: https://www.worldbank.org/en/news/feature. Accessed on 10 August 2024.
6. Rao A, Patil S, Kulkarni PP, Devi AS, Borade SS, Ujagare DD, et al. Acceptability of HIV oral self-test among truck drivers and youths: a qualitative investigation from Pune, Maharashtra. BMC Public Health. 2021;1;21(1):1931.
7. Hindustan Times. HIV cases in Unnao: Hub of migrant workers, truck drivers make this UP district a high-risk area. 2018. Available at:

https://www.hindustantimes.com. Accessed on 10 August 2024.
8. Biswas S, Chakraborty D, Ghosh P, Kumar P, Adhikary R, Saha MK. HIV Risk profile and its socio-demographic correlates among long-distance truckers in West Bengal, India: Evidence from national HIV sentinel surveillance 2017. Indian J Public Health. 2020;64:8.
9. Diversity in HIV epidemic transitions in India: An application of HIV epidemiological metrices and benchmark. Plos One. 2013. Available at: https://journals.plos.org. Accessed on 10 August 2024.
10. Poda GG, Sanon GS. HIV/AIDS knowledge, attitudes and practices among truck Drivers in Burkina Faso. J Clin Res HIV AIDS Prev. 2015;19;2(2):18–27.
11. García PJ, Fazio B, Bayer AM, Lizarraga AG, Chiappe M, La Rosa S, et al. Sexual health knowledge and practices and STI/HIV prevalence among long-distance truck drivers in Peru. SAGE Open Med. 2017;12;5:2050312117746308.
12. Sadhya, Islam A, Shamim S, Ahmed N, Rahman M. Knowledge and awareness about the risk of HIV/AIDS among truck drivers of a selected area. Faridpur Med Coll J. 2010;1;5:46–9.
13. LaCroix JM, Snyder LB, Huedo-Medina TB, Johnson BT. Effectiveness of mass media interventions for HIV prevention, 1986–2013: A Meta-analysis. JAIDS J Acquir Immune Defic Syndr. 2014;15;66:329.
14. Hamid AM, Sule GM. Media campaign exposure and HIV/AIDS prevention: 1980–2020. In: AIDS updates - recent advances and new perspectives. Intech Open. 2021. Available at: https://www.intechopen.com/chapters/75675. Accessed on 10 August 2024.
15. Wakefield MA, Loken B, Hornik RC. Use of mass media campaigns to change health behaviour. Lancet. 2010;9;376(9748):1261–71.
16. Pundhir A. Awareness and Knowledge of HIV/AIDs among Truck drivers: A Pilot Study. 2015. Available at: https://www.researchgate.net. Accessed on 10 August 2024.
17. Yadav A, Gupta H, Yadav J. Human immunodeficiency virus, sexually transmitted disease awareness and condom usage among long-distance internal truck drivers in Pune, India. HIV AIDS Rev. 2018;5;17.
18. Beaman ML, Strader MK. STD patients' knowledge about AIDS and attitudes toward condom use. J Community Health Nurs. 1989;1;6(3):155–64.

Cite this article as: Halder T, Pal J, Debnath P, Ghosh M. A cross-sectional study of knowledge and stated practices regarding HIV among truck drivers in Basirhat health district, West Bengal. Int J Community Med Public Health 2024;11:4346-53.