HIV/AIDS related High Risk Behavior among Tourism Industry Associated Boatmen in Dal Lake Kashmir, India

Ashfaq Ahmad Bhat[1], Yasmeen[2], Beenish[3], Ashiq Rashid[4]

ABSTRACT

Introduction: The global epidemic of HIV/AIDS spreads differently in different geographic locations, depending primarily on the prevalence of high risk sexual behavior and IV drug abuse. Behavioral surveillance has been used as a tool to assess the risk of spread of HIV /AIDS in a community, based on the type and pattern of high risk behavior present in that community. Tourism related activities are known to predispose people to high risk behavior, thus increasing their vulnerability to HIV/AIDS. The present study aimed to assess the IV drug abuse and sexual high risk behavior among a potential bridge population of tourist industry associated boatmen (shikara) in the famous Dal Lake of Kashmir.

Material and Methods: Out of about a thousand shikaras which operate in the Dal Lake routinely a 10% sample was selected using systematic random sampling method. Questionnaire based on WHO guidelines for behavioral surveillance was used for in-depth face to face interview with 108 respondents.

Results: The respondents were all males, mostly adults (mean age 33.2 years), poorly educated (literacy level 38%) and mostly married (68.5%). Two respondents (1.85%) reported IV drug abuse in last one year but without needle sharing. Twelve respondents reported unprotected non-regular sex in last one year(11.11%). Awareness of HIV/AIDS and modes of transmission was very high except about mother to child (only 63%). There were misconceptions about spread by food (31.48%), social contact (19.44%) and mosquito bites (65.74%). Risk perception by persons practicing high risk behavior was only 50% and there was minimal exposure to interventions (5%).

Conclusions: The study has revealed IV drug abuse, involvement in casual and commercial sex, low perception of risk and little exposure to interventions. These findings indicate that there is a strong need to initiate targeted interventions with this group as has been done by National AIDS Control Organization with various high risk groups in the country. Adequate publicity needs to be given to ICTCs & the reason for under-utilization of their services needs to be assessed.

Keywords: HIV/AIDS, Tourism, Boatmen, High Risk Behavior

INTRODUCTION

HIV/AIDS has started with obscure beginnings of CDC reporting clustering of immunodeficiency in male homosexuals 1n 1981 to emerge as a global epidemic, infecting millions of people and impacting socio-economic development in poorest of the nations. In the developed world it has emerged as a cause of chronic health problems including re-emergence of Tuberculosis, the two of them working like a deadly duo. The National AIDS Control Organization is the leading organization which aims at reversing the epidemic and enhancing the capability of the country to respond to the epidemic on a long term basis. Among the various interventions planned at the country level, surveillance plays an important role in understanding the dynamics of spread of HIV/AIDS and planning the control strategies accordingly. The various types of surveillance conducted for HIV/AIDS include sero-surveillance, sentinel-surveillance, AIDS case surveillance, and Behavioral surveillance. Behavioral Survey is considered as an early warning tool for predicting the spread of HIV/AIDS in any population or geographic region since behavior is the engine which drives the HIV epidemic.[1] The role of tourism industry associated persons as bridge population for bringing HIV from the high risk groups to the general population is also well established.[2,3] The tourism industry associated boatmen, locally known as the shikara walas develop a close liaison with the tourists who stay in Dal for longer periods or who are frequent visitors to this place, so much so that many of them can speak fluent English, French, German & other languages even though they have not had any formal schooling & do not know how to read & write. This occupational group could potentially serve as a bridge population for spread of HIV/AIDS and thus should be a focus for targeted intervention programs. The current study aims to provide a baseline data for such an undertaking.

MATERIAL AND METHODS

The study was conducted in the Dal Lake area of the Srinagar District of J&K. The study participants included the tourism industry associated boatmen locally known as shikara wala. The total no of active shikaras in the Dal Lake is around

[1]Associate Professor Community Medicine, SKIMS Medical College Bemina Srinagar J&K, [2]Associate Prof, Community Medicine, SKIMS Medical College Bemina Srinagar J&K, [3]Lecturer, Community Medicine, SKIMS Medical College Bemina Srinagar J&K, [4]Senior Resident, Community Medicine, SKIMS Medical College Bemina Srinagar J&K,

Corresponding author: Dr Ashfaq Ahmad Bhat, Associate Professor Community Medicine, SKIMS Medical College Bemina Srinagar J&K

How to cite this article: Bhat AA, Yasmeen, Beenish, Rashid A. HIV/AIDS related high risk behavior among tourism industry associated boatmen in Dal Lake Kashmir, India. International Journal of Contemporary Medical Research 2020;7(10):J1-J4.

DOI: http://dx.doi.org/10.21276/ijcmr.2020.7.10.12

BY-NC-ND

a thousand, increasing or decreasing by the tourist demand, which is at its peak in the summer season and at its lowest during the winter season.

Inclusion criteria: All the boatmen currently paddling the shikaras in the Dal Lake and having been in the profession for at least past six months and giving consent for the interview.

Exclusion criteria: Those boatmen who have been in the profession for less than six months and those not giving consent for the interview.

Sampling procedure: A 10% sample of the boatmen currently having shikaras in the Dal Lake were taken as the sample size. The participants were chosen by systematic random sampling, the first shikara being chosen as a random number and the subsequent ones by adding 10 to the first number. A total of 120 respondents were interviewed in the study and after filtering incomplete responses, 108 responses were evaluated for the study.

Instrument: The study was done by in-depth face to face interviews with the target population using the questionnaire based on WHO guidelines and Family Health International's instrument for Behavioral surveillance surveys.[4,5]

Parameters: The parameters studied included:

1. Respondent profile
2. IV drug use
3. sexual behavior & condom usage
4. STD's: awareness, symptoms & treatment seeking behavior
5. Awareness of HIV/AIDS, routes of transmission and modes of prevention
6. Exposure to interventions.

STATISTICAL ANALYSIS

Statistical analysis was done using standard statistical methods. The variables assessed were categorical (nominal scale), dichotomous(two responses only) or polychotomous (more than two responses). Statistical analysis was done using proportions/percentages.

RESULTS

The socio-demographic characteristics studied in this group revealed that they were all males with mean age of 33.2 years, the literacy level was low (38%) and majority of them were married (68.51%). Two of the respondents reported IV Drug Abuse in the past one year (1.85%), but there was no needle sharing among the IV Drug users.

Majority of the respondents were sexually active (71.3%) with 28.57% reporting non-regular sex in past one year. 16.67% of the respondents had had contact with non- commercial partner/s, and 9.26% had contact with Commercial Sex Worker/s in the past one year.

The awareness about condoms among the Shikara Walas was high. All the 77 sexually active respondents had heard of the male condom (100%) but only 48.05% had ever used a male condom though all of them reported that condoms were easily available and it would take them less than one hour to fetch a male condom. Consistent condom usage with the spouse was low (10.31%), however 60% of the Shikara Walas who had sex with CSW/s reported consistent condom usage & all of them reported condom usage at last sex with a CSW while 22.22% reported consistent condom usage with NCP/s and 27.78% reported condom usage at last sex with a non-commercial partner. (Table 1)

Although 48.15% of the Shikara Walas had heard of STDs only 3.70% could correctly mention two or more symptoms of STDs, while 9.26% mentioned vague & non-specific symptoms like pain, weakness & impotency. Only 4 respondents (5.19%) reported having had symptoms of STD in past one year out of which two (50%) sought treatment from an Allopathic Doctor, one attended a Govt Hospital (25%) and one (25%) went to a traditional healer. (Table 2)

All the 108 respondents had heard of HIV/ AIDS and knew that it can be transmitted from person to person. All the respondents (100%) knew that HIV/AIDS can be spread by sexual intercourse, 88.88% respondents knew that it can be transmitted by blood transfusion, 92.59% knew that HIV/AIDS can spread by sharing of needles & syringes and only 62.96% respondents were aware of the Mother to child transmission. There were a significant number of misconceptions about modes of transmission. 31.48% Shikara Walas said it can spread by sharing meals, 19.44% said it can spread by ordinary social contact while another 65.74% thought that HIV/ AIDS can spread by mosquito bites. (Table 3)

All 108 shikara walas were aware of the fact that i) abstinence & ii) being mutually faithful to single sexual partner could protect a person from getting HIV /AIDS. 96.30% of the

Total No of respondents	No of respondents who ever had sexual intercourse in their life	No. of respondents reporting non-regular sex in past one year	No of respondents reporting unprotected non-regular sex in past one year
108 (100%)	77 (71.3%)	22 (20.37%)	12 (11.11%)

Table-1: Summary of Sexual behavior & Condom usage.

Respondents aware of symptoms of STDs				Total No of respondents who had heard of STDs
none	One correct symptom	Two or more correct symptoms	Vague symptoms like pain/ weakness/ fever/ impotency	
16(14.81%)	22(20.37%)	4(3.70%)	10(9.26%)	52(48.15%)

Table-2: Awareness of symptoms of STDs

S No	Awareness/ misconceptions of routes of transmission of HIV/ AIDS	
1.	Sexual intercourse	108 (100%)
2.	Blood transfusion	96(88.88%)
3.	Syringes & needles	100 (92.59%)
4.	Mother to child	68 (62.96%)
5.	Sharing Food	34 (31.48%)
6.	Touching/ breath /Social contact	21 (19.44%)
7.	Mosquito bites	71(65.74%)

Table-3: Awareness/misconceptions about routes of transmission of HIV/AIDS

Total No of respondents	No of respondents reporting unprotected non-regular sex in past one year	No of respondents perceiving risk of acquiring HIV / AIDS	Risk Perception %
108	12 (11.11%)	6 (5.55%)	50%

Table-4: Perception of Risk

Total No of respondents	Seen billboard/ poster/ leaflet on HIV/ AIDS	Approached for education on HIV/ AIDS	Participated in program/ meeting/ campaign on HIV / AIDS	Received a free medical checkup for HIV / AIDS
108	6 (5.55%)	6(5.55%)	0	0

Table-5: Exposure to interventions in the past one year

respondents were aware that consistent condom usage can protect a person from getting HIV /AIDS. Awareness about the possibility of a confidential HIV test in Shikara Walas was high with 96.30% respondents saying it was possible but only 2 respondents (1.85%) had ever had an HIV test done, even though 20.37% respondents had had unprotected non-regular sex in the past one year. Only half of Shikara Walas who had indulged in un-protected non-regular sex in the past one year perceived themselves as being at risk of getting HIV/ AIDS. (Table 4)

Only 6 out of 108 respondents reported having seen a bill board/ poster /leaflet on HIV/ AIDS, and the same proportion reported that they were personally approached for education on HIV/AIDS, none of the respondents had participated in / attended a meeting / campaign/ program on HIV/ AIDS and none of them had received a free medical check-up for HIV/ AIDS. (Table 5)

DISCUSSION

Kashmir is the place known world over for its picturesque sceneries, meadows, mountains & lakes and attracts tourists from all parts of the country and the whole world. In Srinagar, Dal Lake is one of the favorite destinations of tourists, which affects the local population in many ways, one of them being probably increasing their vulnerability to HIV/ AIDS (due to the risk behaviors they & their lifestyle produce in the local population). There are a number of occupational groups associated with the tourism industry in Kashmir & especially in & around the Dal Lake; Shikara walas being one of them. Shikara is a small well decorated boat used to ferry tourists in all the major lakes of Kashmir (Dal Lake, Wular Lake, Nigeen Lake etc). A shikara ride in Dal Lake is one of the memorable experiences of the tourists who visit Kashmir from within the country and abroad. Current study assessed HIV/AIDS related High Risk Behavior among Tourism Industry Associated, Boatmen in Dal Lake Kashmir The socio-demographic characteristics studied revealed that they were all males with mean age of 33.2 years, literacy level low (38%) and majority of them were married (68.51%), (71.3%) respondents were sexually active with 28.57% reporting non-regular sex in past one year. 16.67% of the respondents had had contact with non- commercial partner/s, and 9.26% had contact with Commercial Sex Worker/s in the past one year.

In our study 48.15% Shikarawala's had heard of STD's and however only 3.7% could correctly mention two or more symptoms of STD's while 9.2% mentioned vague and non specific symptoms like pain, weakness and impotency. A community bases cross-sectional study done by Baruah et Al[6] in Adolescents living in urban slums found that 74.7% adolescents were aware of STD's. Among them 48.3% were aware of urethral discharge, (36.8%) pelvic pain, (31.0%) genital ulcers and infertility (27.6%) as symptoms of STD. The findings from our study suggest the need to increase awareness among the high risk groups about the symptoms of STD's so that the interventions can be availed at the earliest.

In our study awareness about condom use as a mode of prevention for STD, s was high. All the Sexually Active Respondents (77) had heard of condom. Consistent condom usage with the spouse was low (10.31%), however 60% of the Shikara Walas who had sex with CSW/s reported consistent condom usage & all of them reported condom usage at last sex with a CSW. The finding of awareness about condom as a mode of prevention is comparable to the findings of other community based studies. Rai et al[7] have reported 72.9%, Garg et al[8] reported 39.2% and Sogarwal et al[9] reported 4.8% awareness for the condom's as a method of prevention of STD's.

All the 108 respondents in our study had heard of HIV/ AIDS

and knew that it could be transmitted from person to person. All the respondents (100%) knew that HIV/AIDS can be spread by sexual intercourse, 88.88% respondents knew that it can be transmitted by blood transfusion. 92.59% knew that HIV/AIDS can spread by sharing of needles & syringes and only 62.96% respondents were aware of the Mother to child transmission. These findings are similar to a study by **Kath**ad M et al[10] done to assess the awareness levels of HIV among first year MBBS Students. All the medical students were aware about the modes of transmission of HIV. Our results were similar to the study done by Kiran et al[11]in which 100% respondents were aware of unprotected sex as the route of transmission, 94.12% regarded contaminated needles and syringes and 95.09% blood transfusion. However in our study 65.74% thought that HIV/ AIDS can spread by mosquito bites. This is in sharp contrast to the study done by Kathad M et al[10] in whom only 2% of the students stated that HIV could be transmitted by mosquito bite.

In our study 5.5% respondents had got awareness about HIV/ AIDS from poster,s/leaflets or had approached for education on HIV. However none of the participant had participated in the campaign or meeting on HIV.Also none of the respondent had received free medical checkup for HIV infection. Study done by R Amarley Edwin[12] and Poddar A K et al[13] regarding source of awareness on HIV showed that majority of the students had heard about HIV/AIDS from television and radio. These observations suggest the need for orienting our health care system and especially our gross root level health workers in organizing awareness programme's and free medical camps with special focus on high risk groups in order to supplement the role of mass media in generating awareness about the disease at large.

CONCLUSION

The findings of involvement in casual and commercial sex, lack of accurate knowledge about the symptoms of STD's, little exposure to interventions indicate that there is a strong need to initiate targeted interventions (TI Program) with shikara walas as has been done already by the National AIDS Control Organization with various other high risk groups like truck drivers and migrant laborers etc. Since awareness is the main factor in prevention of STD there is an urgent need to increase the awareness about STD especially among low socio-economic, illiterate people of the community using all methods of intensive information, education and communication activity. Also orienting our health care system and especially our Gross Root Level health workers in organizing Awareness programme's and free medical camps for screening people with symptoms of STD's, with special focus on high risk groups. Adequate publicity needs to be given to Integrated Counseling and Testing Services (ICTC) & subsequent research for under-utilization of their services needs to be assessed.

REFERENCES

1. World Health Organization; www.who.int/hiv/pubs/surveillance/estimating_ populations_HIV_risk/en/hiv_surveillance_report_2000017.pdf
2. HIV/AIDS and tourism; Forsythe S. AIDS Anal Afr.;1999;9:4-6
3. The contributing role of tourism in the HIV/AIDS epidemic in the carribean; Orisatoki R O, Oquintibeju OO, Truter EJ; Niger J Med. 2009;18;143-48
4. Behavioral surveillance survey guidelines from Family Health International website www.fhi360.org/en/HIV AIDS/Pub/guide/bssguidelines.htm.
5. Sexual and reproductive health and HIV/AIDS risk perception in the Malawi tourism industry. Bisika T. Malawi Med J. 2009;21:75-80.
6. Baruah A, Bishnu Ram Das, Abu Hasan Sarkar. Awareness about sexually transmitted diseases among adolescents in urban slums of Jorhat district. International Journal Of Medical Science And Public Health 2016;5: 2373-2377.
7. Rai T, Aggarwal P, Kandpa SD. Knowledge, attitude, practice among adolescents regarding STD in urban slums. Indian J Community Health 2011;23:26–8.
8. Garg S, Singh MM, Nath A, Bhalla P, Garg V, Gupta VK, et al. Prevalence and awareness about sexually transmitted infections among males in urban slums of Delhi. Indian J Med Sci 2007; 61:269–77.
9. Sogarwal R, Bachari D. Awareness of women about STDs, HIV/AIDS and condom use in India: Lessons for preventive programmes. Health Popul: Perspect Issues 2009; 32:148–58.
10. Manish M. Kathad, Jay R. Patwa, Riddhi Patel, Siddharth K. Patel, A comparative study on HIV/AIDS awareness among medical and non-medical students of Gujarat. International Journal of Community Medicine and Public Health 2018;5:xxx-xxx.
11. Kiran N, Arun J, Bhagyashri J, Rajashekhar K, Shashikant N, Anjana B. A cross-sectional study of hiv/aids awareness among paramedical students of BIMS, Belgaum. J Adv Res Med Sci Former J Adv Res Biol Sci. 2013;5:336–40.
12. RAmalraj Edwin,Chadrashekhar Nirmala Solomon Sunithi,Ganapathy,P Sambandam Raja. First year medical students AIDS knowledge and Attitude.IJCM 1995;20:52-53.
13. Poddar A, K poddar Saha D, Mandal R N. Perception about AIDS Among residents of Calcutta slums. Indian Journal of Public Health 1996;40:15-17.

Source of Support: Nil; **Conflict of Interest:** None

Submitted: 14-08-2020; **Accepted:** 01-10-2020; **Published:** 31-10-2020