# Assessment of the Knowledge and Attitude on HIV/AIDS Among Drivers' Wives

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## ABSTRACT

### Backgroud

It is generally accepted and well-documented that long distance drivers remain one of the key forces in the spread of HIV/AIDS as they are highly mobile and spending long hours on the road away from their families which makes them very likely to use the services of commercial sex workers (CSWs).

## Objectives

To identify the knowledge and attitude among Drivers' wives on HIV/AIDS.

#### Methods

A cross-sectional survey was conducted between August and September 2010 to assess the knowledge and attitude of drivers' wives on HIV/AIDS in Banepa, Dhulikhel and Panuti Municipalities, Kavre district central Nepal. Using social network sampling technique 248 drivers' wives were selected. Data were obtained using the structured and semi-structured questionnaire through interview technique. Verbal consent was taken before collecting data. Both descriptive and inferential statistics were computed.

## Results

Ninety six percent of the respondents heard of HIV/ AIDS. Majority (65.7%) of the sources of the information were television followed by radio (56.5%), friends (33.5%), husband (19.4%), newspapers (17.7%) and posters (17.3%). The educational status and economic status of the respondents show significant association. The parameters regarding attitude revealed statistical significant.

#### Conclusion

The age and ethnicity of the respondents did not exhibit the association with awareness on HIV/ AIDS whereas, educational status and economic status of the respondents and the parameters regarding attitude revealed statistical show significant association.

## **KEY WORD**

AIDS, attitude, drivers' wives, HIV, knowledge

# **INTRODUCTION**

It is generally accepted and well-documented that long distance drivers remain one of the key forces in the spread of HIV/AIDS as they are highly mobile and spending long hours on the road away from their families which makes them very likely to use the services of commercial sex workers (CSWs) in stop-over near major transportation routes.<sup>1</sup> The most common types of clients for the CSWs were drivers.<sup>2</sup> Although 96% of drivers have heard of AIDS, their knowledge of HIV transmission, risks and available preventive measures were quite low.<sup>3</sup> The drivers visiting sex workers at stop found an overall HIV prevalence of 56%; drivers as a group are highly sexually active for example 37% drivers visiting CSWs at stop stopped for sex with them, 42% practiced anal sex, < 25% used condoms during anal sex, 29% never used condoms with CSWs, and 13% used condoms with their wives.<sup>4,5</sup>

The CSWs perform sex in exchange for gifts or money and drivers believe that a personal relationship of sorts exists between them and they will be less likely to use a condom during sexual relations as their perception of low risks.<sup>6</sup> The resulting co-mingling of the two mobile, sexually active, high-risk populations elucidates high prevalence of HIV and STI rates in drivers and the subsequent spread of the disease to their wives.<sup>1,7</sup>

Women's lack of access to education or personal income perpetuate women's lower status and create even greater vulnerability to HIV infection.<sup>8</sup> Therefore, this study was conducted to identify the knowledge and attitude among Drivers' wives on HIV/AIDS.

# **METHODS**

A cross-sectional survey was conducted between August and September 2010 to assess the knowledge and attitude of Drivers' wives on HIV/AIDS. The area of study was Banepa, Dhulikhel and Panuti Municipalities, Kavre district of central Nepal. The target population of the study was the Drivers' wives of reproductive age group residing Banepa, Dhulikhel and Panuti Municipalities, Kavre district.

Two hundred and forty eight reproductive age group drivers' wives were selected using social network sampling technique.<sup>9</sup> The investigator initially provided training for all data enumerator and explained the objectives of the study for filling the questionnaire completely. The questionnaires were filled and edited for accurate, complete and errors free. The questionnaire having three sections: sociodemographic information, knowledge on HIV/ AIDS and attitude on HIV/ AIDS was used. Some questions had multiple responses from which each respondent was asked to select the most appropriate one. The questionnaire was prepared after an extensive literature search. The content validity of the questionnaire was obtained through the review of other questionnaires used in Nepal and abroad and by discussions with experts during the preparatory phase of questionnaire development. The construct validity of some of these content areas has been reported previously.

Data were collected using interview method by data collectors after having data collection training and involving for pre-testing of Nepali version questionnaire and subsequent revision.<sup>10,11</sup> Permission from institutional review committee (IRC) of the Kathmandu University School of Medical Sciences (KUSMS) and Nepal Transport Employees Organization (Yatayat Majdur Sangh) was taken before implementing the survey. Verbal consent for each respondent was taken before collecting data.

Data were edited at the same evening of the data collection by cross-checking from different interviewers. After categorization and entry, analysis was done in SPSS software version 16. Both descriptive (mean, standard deviation and proportion) and inferential ( $\chi$ 2) statistics were computed.

# RESULTS

Age, ethnicity, religion, educational status and economic status of the respondents were measured. The respondents were of mean age 29.55±8.21 years with minimum of 18 years and the maximum of 59 years (table 1).

Table 1. Socio-demographic findings.

Age in groups	Frequency	Percent
≤20 years	29	11.7
21- 30 years	132	53.2
31 - 40 years	65	26.2
≥ 41years	22	8.9
Total	248	100.0
Ethnicity of the respondents		
Brahmin/ Chhetri	118	47.6
Newar	53	21.4
Tamang/ Magar	58	23.4
Ethnic minority groups	19	7.7
Total	248	100.0
Religion of the respondents		
Hindu	227	9135
Buddhist	18	7.3
Christian	2	1.2
Total	248	100.0
Educational status		
Illiterate	83	33.5
Literate	165	66.5
Total	248	100.0

Ninety six percent of the respondents heard of HIV/ AIDS. For majority (65.7%), the sources of the information were television (Fig. 1). About 17 to 47 % of the respondents were familiar with the symptoms of AIDS. Knowledge on

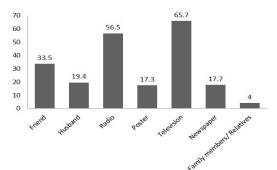


Figure 1. The sources of information on HIV/AIDS (%).

Table 2. Knowledge on HIV/ AIDS.

Symptoms of Symptoms of AIDS	Frequency	Percent
Chronic Diarrhea for more than 1 month	78	31.5
Loss of body weight	117	47.2
Long term fever and common cold	93	37.5
Vesicles or warts around mouth	39	15.7
Rashes in the skin	43	17.3
Transmission of HIV/ AIDS		
Through sexual intercourse	152	61.3
From affected mother to baby	127	50.2
From affected person's blood	124	50.0
From infected needles	103	41.5
Person's with multiple sexual partners	159	64.1
Baby delivered from the affected mother	102	41.1
From needle users among drug addicts	87	35.1
Through sexual intercourse	203	81.9
Modes of prevention of HIV/ AIDS		
Having single sexual partner	132	53.2
Use of condoms during sexual intercourse	103	41.5
Early treatment of STDs	94	37.9
Use of sterilized needle	67	27.0

transmission of HIV/ AIDS was from about 41 to 82 percent and the knowledge on the mode of transmission of STIs and HIV/ AIDS from about 27 to 53 percent (table 2).

To access the attitudes on HIV/ AIDS and behavior, a five scale raring scale from strongly agree, agree, neutral, disagree and strongly disagree with weight from 5 to 1 was implemented. There were questions including HIV/AIDS is caused due to the curse of God ( $4.40\pm0.82$ ), support is required for people affected with HIV/AIDS ( $4.33\pm0.77$ ), affected person should be isolated ( $4.10\pm0.86$ ), husband and wife should talk openly about HIV/AIDS ( $4.24\pm0.75$ ), should tell it to other people if one of your family member is affected from HIV/AIDS ( $4.13\pm0.81$ ), if any employee is suffering from HIV/AIDS then he/she should be fired from the job ( $4.35\pm0.93$ ), a child with HIV/AIDS should

Table 3. Attitude and behavior on HIV/ AIDS (n = 248).

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Practice on HIV/ AIDS	Mean ± SD	P value
HIV/AIDS is caused due to the curse of God	4.40±0.82	0.000**
Support is required for people affected with HIV/AIDS	4.33±0.77	0.000**
Affected person should be isolated	4.10±0.86	0.001**
Husband and wife should talk openly about HIV/AIDs	4.24±0.75	0.000**
Should tell other people if one of your family member is affected from HIV/AIDS	4.13±0.81	0.030**
If any employee is suffering from HIV/AIDS then he/she should be fired from the job	4.35±0.93	0.000**
A child with HIV/AIDS should be abandoned from school/ college	4.23±1.01	0.000**
Affected person should get treatment	4.15±0.95	0.000**
One should not be involved in community programmes of affected with HIV/AIDS	3.96±0.06	0.000**
HIV/AIDS is only transmitted to people having unsafe sex.	3.30±1.06	0.002**
Person who looks healthy is not affected by HIV/AIDS	3.60±1.03	0.333**
Hating people affected with HIV/AIDS should be stopped	4.25±1.00	0.000**
People suffered with HIV/AIDS should be treated well.	4.46±0.73	0.000**

\*significant at 0.05 level

\*\*significant at 0.01 level

be abandoned from school/college ( $4.23\pm1.01$ ), affected person should get treatment ( $4.15\pm0.95$ ), one should not be involved in community programmes if affected with HIV/AIDS ( $3.96\pm0.06$ ), HIV/AIDS is only transmitted to people having unsafe sex ( $3.30\pm1.06$ ), person who looks healthy is not affected by HIV/AIDS ( $3.60\pm1.03$ ), hating people affected with HIV/AIDS should be stopped ( $4.25\pm1.00$ ), people suffered with HIV/AIDS should be treated respectively ( $4.46\pm0.73$ ) (table 3).

The association between awareness on HIV/ AIDS and different variable were assessed. The age and ethnicity of the respondents did not exhibit the association with awareness on HIV/ AIDS whereas, educational status and economic status of the respondents show significant association on the awareness at 5% level of significant (table 4).

# DISCUSSION

This study was conducted to assess the knowledge and attitude on HIV/AIDS among drivers' wives. a high literacy rate, the proactive mass media, the emphasis on health renders the awareness on this sensitive issue.<sup>12</sup> Among 248 respondents, 94% heard of HIV/ AIDS which was similar

Table 4. Association among awareness on HIV/ AIDS and other variables.

	V/AIDS	P value
Yes	No	in χ2 test
29 (100)	0	
129 (97.7)	3 (2.3)	
60 (92.3)	5 (7.7)	0.113
20 (90.9)	2 (9.1)	
238 (96.0)	10 (4.0)	
115 (97.5)	3 (2.5)	
52 (98.1)	1 (1.9)	
53 (91.4)	5 (8.6)	0.209
18 (94.7)	1 (5.3)	
238 (96.0)	10 (4.0)	
s		
74 (89.2)	9 (10.8)	
164 (99.4)	1 (0.6)	0.000
238 (96.0)	10 (4.0)	0.000
226 (96.6)	8 (3.4)	
12 (85.7)	2 (14.3)	0.045
238 (96.0)	10 (4.0)	
	29 (100) 129 (97.7) 60 (92.3) 20 (90.9) 238 (96.0) 115 (97.5) 52 (98.1) 53 (91.4) 18 (94.7) 238 (96.0) 5 74 (89.2) 164 (99.4) 238 (96.0) 226 (96.6) 12 (85.7)	29 (100) 0   129 (97.7) 3 (2.3)   60 (92.3) 5 (7.7)   20 (90.9) 2 (9.1)   238 (96.0) 10 (4.0)   115 (97.5) 3 (2.5)   52 (98.1) 1 (1.9)   53 (91.4) 5 (8.6)   18 (94.7) 1 (5.3)   238 (96.0) 10 (4.0)   5 74 (89.2) 9 (10.8)   164 (99.4) 1 (0.6)   238 (96.0) 10 (4.0)   226 (96.6) 8 (3.4)   12 (85.7) 2 (14.3)

\*p< 0.05

(96%) to the study done in Burkina Faso.<sup>13</sup> Concerning the symptoms of HIV/ AIDS, 47.2% answered the loss of body weight, 37.5% responded long term fever and common cold, 31.5% thought chronic diarrhea for more than a month, 17.3% supposed rashes in the skin and 15.7% assumed vesicles and warts around mouth which was lower than a study done in India in which common symptoms of disease was answered by 80.1% of the respondents.<sup>14</sup> The association between awareness on HIV/ AIDS and different variable were assessed by  $\chi^2$  test. The age and ethnicity of the respondents did not exhibit the association with awareness on HIV/ AIDS whereas, educational status and economic status of the respondents show significant association at 5% level of significant.

In relation to the knowledge on the transmission of HIV/ AIDS, 81.9% reflected sexual intercourse, 64.1% signaled person's with multiple sexual partners, 51.2% indicated from affected mother to baby, 50.0% affected person's blood, 41.5% infected needles, 41.1% baby delivered from affected mother and 35.1% needle users among drug addicts that was similar to the study done in India where 82.78% of respondents responded that the sexual intercourse in the most common mode of transmission of HIV/ AIDS and a bit different from.<sup>14</sup> By contrast a study done in Ethiopia revealed that the perception of the mode of transmission were sexual intercourse 98.7%, using unsterile needles and blades 34.1%, blood transfusion 11.7%, breathing 1.6% and eating together 0.6%.15

Regarding the mode of prevention of HIV/ AIDS, 53.2% answered as having single sexual partner, 41.5% said use of condoms during sexual intercourse, 37.9% responded early treatment of STDs and 27.0% thought use of sterile needle which was similar to findings condom protects HIV/ AIDS 69.5%, AIDS is not treatable 66.0%, STD is treatable 78.1% and 45.9% respectively.<sup>1, 12, 13, 16</sup>

To appraise the attitudes on HIV/ AIDS and behavior, a five scale raring scale from strongly agree, agree, neutral, disagree and strongly disagree with weight from five to one was implemented. The mean score was 4.11±0.538 ranging from two to five with total mean score of 53.5. The questions; HIV/AIDS is caused due to the curse of God, support is required for people affected with HIV/ AIDS, affected person should be isolated, husband and wife should talk openly about HIV/AIDs, you should tell it to other people if one of your family member is affected from HIV/AIDS, if any employee is suffering from HIV/AIDS then he/she should be fired from the job, a child with HIV/ AIDS should be abandoned from school/college, affected person should get treatment, one should not be involved in community programmes if affected with HIV/AIDS, HIV/AIDS is only transmitted to people having unsafe sex, hating people affected with HIV/AIDS should be stopped and people suffered with HIV/AIDS should be treated were statistically significant at <0.01 level of confidence.

# CONCLUSION

The awareness on HIV/ AIDS for the vulnerable groups should be pursued. The age and ethnicity of the respondents did not exhibit the association with awareness on HIV/ AIDS whereas, educational status and economic status of the respondents show significant association at 0,05 level of confidence. The parameters regarding attitude revealed statistical significant at <0.01 level of confidence.

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