

# Perceived Risk of HIV Infection among Spouses of Migrant Workers and Non-migrants in Bardiya District, Nepal

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## ABSTRACT

Mobile people are at risk of contracting Human Immunodeficiency Virus (HIV) infection and transmit the infection to their spouses. The transmission of HIV is increasing from bridge population such as migrant workers to general population. A cross sectional comparative study was conducted in Bardiya district to assess perceived risk of HIV infection among spouses of male migrant workers and non-migrants in 2009. The proportionate simple random sampling method was adopted to select the respondents of migrants. Samples of non-migrants were selected by matching age with spouses of migrants at the nearby houses. Face to face interview was conducted with 294 women by using semi-structured questionnaire. Twelve in-depth interviews were conducted by using in-depth interview guidelines. Data entry was done by using Epi-info 3.5 version and; editing and analysis was done by using SPSS 13.0 for window. Almost all respondents (98%) had knowledge on unsafe sex as a mode of transmission. Only two-fifth (39%) of the respondents perceived risk of infection from their spouses. Sixty seven percent spouses of migrant perceived risk of infection where as only 12% of non-migrants perceived. The occupation and mobility status of husbands were statistically significant with risk perception of HIV infection. Spouses of migrants were 15 times more likely to perceive risk of HIV infection than spouses of non-migrants people. Half (50%) of spouses of migrants and one fourth (27%) of non migrants had ever made demand for condom to use with them however few respondents from both group made demand for condom to prevent STI. This low level of risk perception and low demand for condom to prevent STI is the real challenge to stop the HIV transmission from mobile workers to their spouses and children.

**Key words:** HIV/AIDS transmission, Migrant workers, Spouses, Perceived risk

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## INTRODUCTION

Both internal and international temporary migrations are common in Nepal. The reasons of migration are employment, business, study and religious visit. From the findings of literature, migrant people are known as vulnerable population for HIV infection. The proportion of housewives is increasing among the new cases of HIV in Nepal. According to the national level record, total cumulative HIV/AIDS cases were 16262 in August, 2010.<sup>1</sup> Among them, the highest prevalence was among client of sex workers (44.4%) followed by housewives i.e. 25.8%.<sup>1</sup> About 800,000 people cross the southern border as seasonal labor migrant to India every year and approximately 350,000 migrate from one part of Nepal to another for wage earning.<sup>2</sup> A large proportion of women appear to have acquired the virus from regular partners who acquired the HIV during paid sex.<sup>3</sup> The consequence of their loneliness and distance from their wives, migrant workers are prone to establish sexual relationships with commercial sex workers (CSWs). They are likely to contract HIV infection and carry the infection to their spouses who again could transmit it to their babies.<sup>2</sup> This helps spread of HIV infection to general population through the bridge population. In Nepal, housewives and their children are considered low risk population.<sup>4</sup> However transmission of HIV to this group has been increasing from high risk group such as female sex workers, and migrants have been working as bridge between

these two population.<sup>2</sup> A hospital based study of HIV patients at Seti Zonal Hospital, in far western Nepal, stated that more than 50% of the cases were housewives, 38.8% were migrant workers and 10% were dependent children.<sup>5</sup> This situation indicates that how the so called low risk population is being victim for the sin of their spouses. A study conducted by Family Health International declared that high-risk behavior among labor migrants is responsible for 50% of Nepal's HIV burden.<sup>6</sup>

## METHODS

A cross sectional comparative study was designed to assess the perceived risk of HIV infection among spouses of male migrants workers and non-migrants in Bardiya district from May to November in 2009. The study population was the spouses of male migrants and non-migrant people. From the ten higher migrants prevalent VDCs of Bardiya district, three VDCs were selected by lottery method. The proportionate simple random sampling method was adopted to select migrant respondents. The spouses of the non-migrants were selected by matching age with spouses of migrants at the nearby houses. For the collection of the information, researcher conducted face to face interview for household survey with 294 women (147 from migrants and same from non-migrants) by using semi-structured questionnaire. Data were entered in Epi-info 3.5 version and; data editing and

analysis was done by using SPSS 13.0 for window. Researcher conducted twelve in-depth interviews with the spouses of migrant and non-migrant with the help of guideline.

**RESULTS**

**Demographic Information**

The mean age of the respondents was 26.5 years (SD=4.7 years). Among total respondents, 74.8% were literate. Among migrant workers, 78.9% were international migrants. Among the international migrants 65.5% had been working in India.

**Awareness on Mode of Transmission and Method of Prevention of HIV/AIDS**

Almost all respondents had knowledge on unsafe sex as mode of transmission of HIV/AIDS. Nearly, third -fourth respondents said that the use of condom as a preventive method of HIV infection.

**Table 1: Awareness on Mode of Transmission and Prevention of HIV/AIDS (N=294)**

Characteristics		Non-migrants		Migrants		Total	
		No.	%	No.	%	No.	%
Mode of transmission	Unsafe sex	141	95.9	146	99.3	287	97.6
Method of prevention	Condom use	91	61.9	128	87.1	219	74.5

**Risk Perception on Transmission of HIV Infection from Husbands**

About half (44.6%) of the respondents were ever worried that they might get HIV infection from husbands in their life. More spouses of migrants were worried for infection ((72.8% vs. 16.3%). Among worried, 5.4% of the respondents mentioned chance of transmission very unlikely, 36.1% somewhat and 3.1% very likely. The levels of possibility of HIV transmission were dichotomized into two categories as no chance at all and very unlikely into “no” and somewhat and very likely into “yes”. Thus, two-fifth (39%) of the respondents perceived risk of infection. Sixty seven percent spouses of migrants perceived risk of infection where as only 12% of non-migrants perceived.

**Table 2: Risk Perceptions on Transmission of HIV Infection from Husbands (N=294)**

Characteristics		Non-migrants		Migrants		Total	
		No.	%	No.	%	No.	%
Worried for infection	Yes	24	16.3	107	72.8	131	44.6
	No	123	83.7	40	27.2	163	55.4
Possibility of transmission	No chance at all	123	83.7	40	27.2	163	54.4
	Very unlikely	7	4.8	9	6.1	16	5.4
	Somewhat	17	11.5	89	60.5	106	36.1
Perceived risk of infection	Very likely	0	0.0	9	6.1	9	3.1
	Yes	17	11.6	98	66.7	115	39.1
	No	130	88.4	49	33.3	179	60.9

Qualitative information supports the finding of quantitative information that more spouses of migrants perceived risk of infection from husbands. Most spouses of migrant were

worried for the infection because their husbands lived and worked outside from home.

*“Nowadays I am suffering from itching in genitalia and I am feared that it may be the disease he transmitted to me.” A 35 years illiterate spouse of migrant. “... .. is not a good place because there are several brothels and cheap prostitutes who might transmit HIV to my husband also. Every time, I think we will go for blood checkup after his arrival but when he comes it happens (sexual relation). I have not asked condom with him to use for us.” A 20 years spouse of migrant.*

**Socio-demographic Characteristics and Perceived Risk of Infection**

All socio-demographic factors were statistically insignificant with the perceived risk of infection except mobility status of husband and occupation. Housewives and those who involved in agriculture were more likely to perceive risk than those involved in business and service (OR=4.7, CI=1.6-13.8). Spouses of migrants were 15 times more likely to perceive risk of HIV infection than spouses of non-migrant people.

**Table 3: Socio-demographic Characteristics and Perceived Risk of Infection (N=294)**

Characteristics	Perceived Risk				P value	OR (CI)
	No		Yes			
Age	≤ 20 years	15	57.7	11	42.3	0.53
	21 to 30 years	125	59.5	85	40.5	
	> 30 years	39	67.2	19	32.8	
Education	Illiterate	42	56.8	32	43.2	0.40
	Literate	137	62.3	83	37.3	
Occupation	Housewife/ Agriculture	153	58.0	111	42.0	4.7 (1.6-13.8)
	Business/Service	26	86.7	4	13.3	Reference
Mobility status	Non-migrant	130	88.4	17	11.6	Reference
	Migrant	49	33.3	98	66.7	15.3 (8.3-28.2)
Destination of migration	India	20	26.3	56	73.7	0.12
	Other countries	18	45.0	22	55.0	
	With in Nepal	11	35.5	20	64.5	
Duration of migration	≤ 5 years	19	33.9	37	66.1	0.27
	5-10 years	16	27.1	43	72.9	
	>10 years	14	43.8	18	56.3	

**Perceived Risk of Infection and Condom Use**

Relation of perceived risk of infection and condom use was statistically insignificant among non-migrants (OR=0.8, CI=0.3-2.4) however it was significant among migrants (OR=2.8, CI=1.4-5.7). Migrants are more likely to use condom if they perceived risk.

**Table 4: Perceived Risk of HIV Infection and Condom Use across Mobility Status**

Perceived risk of infection	Condom use		OR (CI)	
	Yes	No		
Non-migrants	Yes	6	11	0.8 (0.3-2.4)
	No	50	76	Reference
Migrants	Yes	56	41	2.8 (1.4-5.7)
	No	16	33	Reference

**Negotiation on Safe Sex with Husband**

Some (3.4%) respondents had known that their husbands had extramarital relationship and one-third (29%) suspected that they might have extramarital relationship. In some cases, husbands themselves told their wives about their extramarital relationship. “My husband said me that he had gone to prostitute very few times with friends.” A 29 years spouse of migrants. More than half (56.8%) of respondents suggested their husbands not to have extramarital relationship. Of total, 66 (22.4%) respondents also suggested to have condom during extramarital relationship. A 24 years spouse expressed her view as “I said to him if you have to keep extramarital relation, go with condom in your pocket, save your life and mine and don’t make our children orphan.” Of total, 38.8% had ever demanded condom with husbands to use with them. Demand for condom was higher among spouses of migrants (50% vs. 27%). Among those who made demand, only one-third made it to prevent STI.

**Table 5: Negotiation on Safe Sex with Husband**

Characteristics		Non-migrants	Migrants	Total
Suggestion on safe sex	Yes	45 (30.6)	122 (83.0)	167 (56.8)
	No	102 (69.4)	25 (17.0)	127 (43.2)
Type of Suggestions	No extramarital relation	45 (100.0)	122 (100.0)	167(100.0)
	Condom use	10 (22.2)	56 (45.9)	66 (39.5)
Demand for condom	Yes	40 (27.2)	74 (50.3)	114 (38.8)
	No	107 (72.8)	73 (49.7)	180 (61.2)
Reason for demand	To prevent pregnancy	39 (97.5)	40 (54.1)	79 (69.3)
	To prevent STI	1 (0.7)	34 (45.9)	35 (30.7)

Note: values in parenthesis indicate percentage

**DISCUSSION**

The study revealed that all respondents knew unsafe sex as mode of transmission of HIV/AIDS. However, Spouses of

**CONCLUSION**

*Almost all had knowledge on unsafe sex as mode of transmission of HIV however only two-fifth perceived risk of it. Spouses of migrants were 15 times more likely to perceive risk of HIV infection than spouses of non-migrants people. More than four-fifth spouses of migrants and one-third of non-migrants suggested their husband on safe sex. Only half of spouses of migrants and one fourth of non migrants had ever made demand for condom to use with them however very few made it to prevent STI. This low risk perception and low demand for condom to prevent STI among spouses is the real challenge to stop the HIV transmission from mobile workers to their spouses and children.*

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migrants had better knowledge on mode of transmission and methods of prevention. Similar to the study, a study conducted in Mexican States reported that the migrant population had better knowledge of the transmission of HIV through sexual practices.<sup>7</sup>

Only two-fifth of the women perceived risk of HIV infection from their husbands in their marital life.

It was significantly higher among spouses of migrants than among the spouses of non-migrant. Spouses of migrants thought that their husbands might establish extramarital sexual relationship with other women and prostitutes while being away from home. Similar result was found in a study conducted in Arizina State that spouses of migrants were more worried about the infection.<sup>8</sup> In a similar type of study conducted in Viet Nam, wives trusted their husbands in the matter of their sexual behavior because most important thing was to bring money home, and being away from home and wife, they could not prohibit them from having sexual relation with CSWs.<sup>9</sup>

Use of condom has its triple protection such as prevention from pregnancy, prevention from HIV, and prevention from infertility in woman.<sup>10</sup> For a long period, condom had been used primarily for contraception, not for disease prevention and condom use rates are generally low among the population.<sup>11</sup> Half of spouses of migrants and one fourth of non migrants had ever made demand for condom to use with them however very few made it to prevent STI. Similar to this study, a study in China found that it was found unthinkable to propose condom use with spouses as a safer sex measure.<sup>11</sup> More than half respondents had given suggestion on safe sex to their husbands and more respondents from migrants had suggested using condom during extramarital relationship. It means spouses of migrants seem to be acceptable to their husbands’ extramarital relationship if they prevent transmission of HIV by using condom during extramarital relationship. The study reveals low level of risk perception and low demand for condom to prevent STI among spouses which favors HIV transmission to them.

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