Himalayan Seasonal Migration and STI/HIV Infection: A Case Study among Seasonal Migrants in Kathmandu from Dolpa District, Nepal

Shedain PR[a], Joshi AB[b] and Bhattarai KD[b]

Abstract

Introduction Dolpa is the biggest district of Nepal. Prevalence of Sexually Transmitted (STD) is very high and around 40 to 60 percent people of upper Dolpa take resort to Seasonal migration during the winter season.

Objectives To assess knowledge, attitude and practices, and prevalence of STI/HIV.

Methods The study was conducted among upper Dolpa's winter migrant to Kathmandu during November 2005 to Febraury 2006. Focus group discussions were held among the migrants. Estimation showed that about 200 people migrated to Kathmandu out of which 107 attended the research clinic. Among them, 68 met the criteria but only 65 agreed to participate. The participants were subjected to Scheduled questionnaire, clinical examination and laboratory testing.

Results The focus group discussion revealed that sex is not a taboo within their group. However, it is strictly prohibited outside the group. People migrate within and outside the country. Traditional surgery is widely practiced within their territory, on the way and their destinations. 44.6 percent had heard about condom. 92.3 percent had never used condom. 1.5 percent respondents occasionally used condom for protection against STI/HIV. 73.2 percent of the respondents' age at first marriage was 20 to 24 years. 82 percent had experienced sex at the age of 9 to 19. The serological finding showed that 38.7 percent of male and 35.3 percent of female respondents were infected with Hepatitis B virus although HIV and Syphilis were found to be non-reactive.

Conclusion The Himalayan migration can be considered as a high risk factor for STI/HIV infection.

Keywords Himalayan seasonal migrants, STI/HIV and Dolpa Nepal.

Introduction

The Himalayan region occupies 15 percent of the total area and 7 percent of the total population in Nepal. Dolpa is the biggest district that lies in the Himalayan region and occupies 5 percent area of the country. Prevalence of Sexually Transmitted Diseases (STD) is very high in Dolpa district. 0.65 percent of the total outpatient department's clients suffered from STD, which was 0.05 percent in the mid-western development region and 0.08 percent at the national level (1).

Not a single research on STI/HIV and Himalayan seasonal migration is available in Nepal. Although studies have been conducted on certain groups - Truck driver, economical seasonal migrants to India, Commercial sex worker (CSWs), intravenous drug user's (IDUs), and males having sex with males (MSM).Priority has not been given to Himalayan seasonal migration (mostly due to climatic reason) and their families. Such contextual study can help in problem identification, policy formulation and implementation of the program on HIV/AIDS. The research attempted to explore the risk factors of STI/HIV infection among seasonal migrants to Kathmandu from Dolpa district during winter season from November 2005 to February 2006.

Corresponding Author: Dr. Purusotam Raj Shedain, **E-mail:** shedaindr@hotmail.com, **P.O. Box:** 13130, **Phone:** 977-1-4467376, 9841323924, [a]Ministry of Health and Population, District Health Office, Accham; [b]Institute of Medicine, TU, Maharajgunj, Kathmandu Nepal.

Methodology

The main sources of data were focus group discussion, questionnaires and serological test. An estimation of the seasonal migrants was done with the help of NGO Action Dolpo, a local community-based organization named Shey Dolpo Service Center and local opinion leaders. Ethical consent was taken from Institute of Medicine, Tribhuvan University, Kathmandu. The participants were invited to a clinic at Boudha with their social networking. Informed voluntary consent was taken and counseling was given to the respondents.

Estimation showed that about 200 people migrated to Kathmandu out of which 107 attended the research clinic. Of them, 68 met the criteria however only 65 agreed to participate. The participants were subjected to clinical examination, scheduled questionnaire and laboratory testing. The laboratory investigations were conducted for Rapid Plasma Reagin (RPR) test and Treponema Pallidum Haemagglutination Assay (TPHA) to identify Syphilis; the Hepatitis B Surface Antigen (HBsAg) tests to identify Hepatitis B Virus; and HIV tests to identify Human Immunodeficiency Virus. Data from scheduled questionnaire and laboratory tests were analyzed with the help of SPSS 11.5 for window.

Results

General characteristics

Overall, 83 percent of the respondents were found illiterate. Females were more illiterate (94.1%) than males (71%). The highest percentage of the respondents was in the age group of 35-39 years (58.5%) followed by 25-29 years (15.45%) and 20-24 years (10.8%). The least number of migrants was from age group 15-19 years (6.2%). The most dominant ethnic groups were Lama (50.8%) and Gurung (44.6%). Most of the respondents (95.4%) were Buddhists; around five percents were Bhombho followers.

The majority of the respondents' age at first migration was 15 to 24 (61.5%) followed by 25 to 34 (16.9%), below 14 (10.8%) and 45 to 59 years (4.6%).

More than half of the respondents (58.5%) arrived in Kathmandu within 6 to 10 days. Another one-fourth (26.2%) required 11 to 15 days while about one-tenth (12.3%) required more than 15 days to arrive in Kathmandu.

Table 1 shows that the majority of the respondents (73.2%) were in the age group of 20-24 at first marriage followed by the age cohorts (14.3%) of 25 –29 and 15-19 years (10.7%).

Table 1: Respondents' age at first marriage by age group

Age at first marriage	Male Number (%)	Female Number (%)	Total Number (%)
15-19 years	2 (7.1)	4 (14.3)	6 (10.7)
20-24 years	22 (78.6)	19 (67.9)	41 (73.2)
25-29 years	3 (10.7)	5 (17.9)	8 (14.3)
Don't know	1 (3.6)	-	1 (1.8)
Total	28(100.0)	28(100.0)	56 (100.0)

A very high percentage (72.3%) of the respondents were currently married, very low percentage (3.1%) separated, about one-tenth (9.2%) widow/widower and others (15.4%) unmarried.

The major type of the marriage was monogamous (76.9%), followed by polyandry (6.2%) and polygamy (1.5%).

The majority of the respondents who came to Kathmandu were from middle class (44.6%), about one-third from lower class (29.2%) and one fourth (26.2%) from rich class, according to the wealth ranking. The highest percentage (53.8%) of the respondents came from joint family; one-third (35.4%) from nuclear family and one-tenth were alone. The majority of the respondents (81.5%) stayed in upper Dolpa only for 6 to 9 months. Some 14 percent stayed there for less than 5 months. Only about 5 percent stayed for 9 to 12 months. It shows that life in upper Dolpa is extremely mobile in nature.

The majority (73.2%) of the respondents' age at first marriage was 20 to 24 years but pre-marital sexual activities started earlier. More than half (62.5%) started their sexual activities at the adolescent age (9 to 19 years) and 82 percent male respondents experienced sex at the age of 9 to 19 years (Table 2).

Table 2: Age at first sexual intercourse

Age at first sexual intercourse	Male Number (%)	Female Number (%)	Total Number (%)
9-14	4 (13.8)	-	4 (7.1)
15-19	20 (69.0)	11 (40.7)	31 (55.4)
20-24	3 (10.3)	12 (44.4)	15 (26.8)
25-30	2 (6.9)	4 (14.8)	6 (10.7)
Total	29(100.0)	27(100.0)	56(100.0)

Only three percent respondents used condom in their first sexual intercourse. A majority of them had their first sexual experience with their neighbors. More than two-thirds of the male respondents (74.2%) were engaged in extra-marital sexual relationship during the past one-year. Female participants seemed less involved in extra-marital sexual relationship (5.9%).

About 97 percent males used alcohol either daily or at least once a week and 50 percent female respondents used alcohol in the same manner. About 3 percent used Ganja but no one used other drugs like Bhang, Chares, Dhaturo, Opium, papaya flower, Phensidyal/codine/ heroin, herbals and other chemicals. Similarly, there were no injecting drug users (IDUs) and no homosexuals.

A very small fraction of the respondents (21.5%) had heard of gonorrhea and HIV/AIDS. No one had heard of syphilis. An overwhelming number of respondents (92.3%) had never used condom. Less than half of the respondents (44.6%) had heard about condom. Consistent use of condom was absolutely non-exisistent. Only a small fraction (9.2%) of the population can get condom within half an hour. Although 7.7 percent used condom for various purposes, only 1.5 percent respondents occasionally used condom for protection against STI/ HIV/AIDS.

Most of the male respondents (61.29%) had problems of burning urination followed by genital ulcer and sore (41.9%), and discharge from urethra. About one-thirds (35.48%) did not have any symptoms of STI. The major female problems were burning urination (44.12%), lower abdominal pain (41.18%), and genital discharge (35.9%). About half of the respondents did not have any STI symptoms (44.12%).

About one-fourth (23%) of the symptomatic participants had gone for treatment. Traditional healers/Amchis were the most accepted health care providers. More than half of the female (57.1%) and half of the male respondents (50.0%) were treated by Amchis.

The majority of the respondents, who heard of HIV/ AIDS, were not willing to provide care to HIV/AIDS infected person (85.7%), not willing to share food (71.4%) and keep the victims in their previous job (57.1%).

Serological findings

The highest percentage (58.5%) of HBsAg reactive respondents was found in the age group of 35 to 39 years. But positive ratios were higher in the age group of 20 to 24 years (1.33), and 25 to 29 years (1.5) (Table 3).

Table 3: Age group distribution of HBsAg

Age group	Hepatitis B Surface Antigen Non-reactive Number (%)	Reactive Number (%)	Total Number (%)
15-19	4 (9.8)	-	4 (6.2)
20-24	3 (7.3)	4 (16.7)	7 (10.8)
25-29	4 (9.8)	6 (25.0)	10 (15.4)
30-34	3 (7.3)	2 (8.3)	5 (7.7)
35-39	26 (63.4)	12 (50.0)	38 (58.5)
40-44	1 (2.4)	-	1 (1.5)
Total	41(100.0)	24(100.0)	65(100.0)

Male respondents were more HBsAg- reactive (38.7%) than female (35.3%) respondents. Agricultural and Livestock - raising occupation were found more affected by HBV than other occupational group. (Table 4)

Table 4: HBsAg by occupation

	Hepatitis B Surface Antigen		
	Number	Non-reactive	Reactive
Agriculture	51	30	21
Livestock-raising	38	23	15
Service (private/govt.)	3	1	2
Business	18	13	5
Handicraft production	7	5	2
Non-agricultural labor	1	1	-
Amchi	1	1	-

The highest number (n=11) of HBsAg-reactive respondents was found in medium class, though rich class has highest proportion (0.47) of reactivity than other classes. The least proportion of reactivity was found in lower class (0.26).

Focus Group Discussion Findings

The migrants who are rich descend to Kathmandu, those who are skillful to make sculpture, stone caving and chanting lama mantras go to Tibet and the middle and poor class people migrate to various parts of the country and abroad - Tibet and India - taking loan from merchants.

The diseases of reproductive tracts are named, classified and treated by the Amchis (local doctor). The lower abdominal problem is known as Dhanski (Dha-cold, Khi-disease). The other common diseases are Segbow (burning urination), Phonnet (male genital problems), Shyadhu (swelling scrotal), Khaldum (back pain) and a host of other names that differ from place to place. Thikpa is another problem that is characterized by loss of appetite, distension of abdomen, dark urine, and yellow in the conjunctiva and body. For every disease, they have their own method of treatment.

Amchhis practice traditional surgery in their original places, during the migration and stay at the destination though procedures are not safe. There are various cultural practices like polyandry, Chhotti and Nghelues. Chhotti is a local custom of singing, dancing and entertainment at night by the young girls and boys. Nghelues are illegitimate children accepted by the society and an indicator of unsafe sexual relationship. Still there are 10 to 15 percent of Nghelues under 15 years. Modern health services are not accessible to the local people.

Discussion

The winter migration from upper Dolpa has been going on from time immemorial. Only 18.5 percent of the respondents had food sufficient for the whole year. It is a factor that triggers seasonal migration. Winter migration from upper Dolpa is extremely high though it is not only to avoid cold. People also migrated for pilgrimage, to meet their relatives/friends, for trade, and employment purpose. Some migrants (7.7%), traveled to India from Kathmandu during the winter season. Specially, those who are poor, migrate to Tibetan Drokapa community. Seasonal migrants descended to lower part of the Dolpa where they had close relationship or "Esta"[2].

A study conducted in lower Dolpa among Jacknes (caretakers of mule, horse, and yak) found that they were HBsAg and VDRL reactive by 12.5 percent and 20 percent respectively[2]. People from upper Dolpa migrate to other places of the neighboring districts namely; Jumla, Rukom, Salyan, Myagdy, Mustang and Pokhara.

Of those who migrated to Kathmandu, only 29.2 percent migrated with their spouse or family, others (70.8%) migrated either alone or with their relatives/friends. FGD revealed that those who were coming with others than spouse and family were vulnerable to unsafe sexual relationship. Similarly, those who migrate to Tibetan nomadic Drokpa community are also vulnerable. The community has open and unsafe sexual practices. Some ten percent of children under 15 were still Nghelues in upper Dolpa. It can be considered as a product of unsafe sexual relationship outside the marriage.

About three-fourth (76.9%) of the respondents had not heard of STI/HIV/AIDS. Only 21.5 percent had

heard of HIV/AIDS. Use of alcohol was common among the respondents (74.2 % males used alcohol daily). A large majority of respondents (74.2 % males) indulged in sex with others than wife and sex workers. Sex with commercial sex workers was not found among the migrants. And what is most important for them is that marriage and sex with Rhongbo (lower belt people) is shameful in their community and it is strictly prohibited by their culture.

A study conducted in BPKIHS Dharan showed HBsAg reactive rate in hospital was 5 percent (4). A study conducted in Solukhumbu district (in Himalayan Sherpas') found that HBsAg reactive rate was 1.9 percent (5). On the other hand, for Tibetans, HBsAg reactive rate was 19.1 percent (6). According to similar studies done in Surkhet valley, HBsAg reactive rate was 8.8 percent, and 6.6 percent in the hospital and general population respectively (7). In a study done in Kathmandu Medical College Teaching Hospital, 2.5 percent were found to be reactive for HBsAg (8).

The prevalence of hepatitis B infection is nearly double than that of Tibetan, higher than national average, higher in male and productive age group, lower in young and older age groups, higher in earlier age group migrants and more frequent migrants, higher in those who have more cattle and among the rich class. The HIV and syphilis were not found reactive in serological test. It means it does not rule out the infection in general population. The probability is that respondents were pre-informed about nature of the study and the sick usually do not leave their home in upper Dolpa.

Conclusion

The Himalayan seasonal migration, which is characterized by earlier sexual activities, late marriage, unsafe sexual relationship, lack of STI/HIV/AIDS awareness, alcoholic habit, wide practice of unsterilized surgical procedures, high prevalence of HBV infection and winter seasonal migration in broad range, can be considered as risk factor for STI/HIV infection.

Recommendations

A special vaccination program (e.g., mop-up, vaccination to contact person) should be launched to protect people from chronic infection and carrier. Causes of high prevalence of HBV infection should be investigated because modes of transmission of HIV infection are similar to HBV infection.

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