Knowledge, attitude and practice about STD/ HIV AIDS among the health attendant staffs of a Tertiary Level hospital of Eastern Nepal

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Abstract

Background: Knowledge, attitudes and practices (KAP) surveys are possibly the most frequently used studies in health-seeking behaviour research. Health care workers serve as key players in the prevention and management of diseases. Their perceptions, attitudes and practices have implications for the management of diseases in both health centers and communities. Objective: To assess knowledge, attitude and practice towards STDs among health attendant staffs (health aids and health attendants) of BPKIHS. Methods: This is a descriptive cross sectional study. The study population was Health attendants and Health aids workers working in different departments of BPKIHS. Modified structured questionnaire was used for data collection. SPSS version 11.5 was used for data entry and analysis. Results: 180 Health attendants and Health aids working in different departments of BPKIHS participated in the study. 29% belonged to 30-34 age groups. 86% of study population had heard about STD/HIV/AIDS. 29% expressed that having intercourse without using condoms is known as unprotected sex. Unprotected sexual habits (40.6%), using mask, gloves while working (30%) were methods listed for prevention of transmission of STDs/HIV/AIDS. Conclusion: Majority were from 30-39 years group.86% had heard about STDs/HIV/AIDS. The commonest method to protect from STDs/HIV/AIDS were listed as avoiding multiple sex partners and use gloves and mask while working

Keywords: BPKIHS, health attendant, health-seeking behaviour.

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Introduction

The term sexually transmitted diseases denote disorders that are principally spread by intimate contact¹. These diseases are not merely acute illnesses, but may lead to serious complications^{2,3}. The risk of HIV spread and acquirement have both increased by a factor of 10 in the existence of untreated STDs.4 HIV/AIDS is a global epidemic and is considered one of the greatest public health problems both in developed and developing world. Though Nepal is considered as a "lowincidence" country in terms of HIV infection, recent sero-prevalence data suggest that HIV/STIs infections have increased significantly in the last five years which is attributable to an active sex trades, low levels of condom use, increasing number of HIV among intravenous drug users substantial male labour migration. 5,6,7 It has been demonstrated that increased knowledge about AIDS is not a predictor for behavioral change, although knowledge about the disease is a prerequisite for change. 8,9,10,11 The study done by Husain MFA et al12 showed that knowledge and attitudes was reasonably good but improvement is required with respect to management of STDs & HIV. In other study 13 in rural hospitals in South Africa among health workers showed that the majority of the sample had medium level of knowledge about HIV/AIDS and about 75% had positive attitude towards the caring for patients with HIV/AIDS and 5.9% had very negative attitude. Uprety D et.al.¹⁴ showed that STIs and HIV/AIDS are high, although the level of knowledge seems to differ according to education, gender, and area of residence

To formulate the preventative strategy of nation towards HIV/AIDS/STD, KAP should be assessed at different levels. The health aids and health attendants are assumed to have good knowledge and practice with regards to transmission of HIV and STDs as they interact with them on a daily basis and form a vulnerable group. So far the KAP surveys/ cross sectional studies of the country haven't touched on this. So, this study is expected to give information on this particular group of workers.

Methods

This is a cross sectional study conducted by department of General Practice Emergency Medicine and School of Public Health and Community Medicine of BPKIHS from July-September 2012. Sample unit were all health attendants and health aids working at different departments of B.P. Koirala Institute of Health Sciences. Health aids and attendants are non-technical supporting staffs working in hospital for patient transport, waste management, cleaning and helping nursing staffs and doctors. According to the department of personal administration record

there are a total of 200 health aids and health attendants are currently employed. questionnaire in Nepali was developed focusing on knowledge, attitudes. practice related questions on STD/HIV/ AIDS. Both open ended and closed questions were included. The data was collected employing one on one interview techniques by the researchers maintaining total privacy and confidentiality. The following variables were studied:

Knowledge: source of information, definition, transmission, symptoms/presentation, prevention.

Attitude: sexual practice, working with high risk or infected colleagues, condom use participate in awareness programmes, sex education in schools.

Practice: health seeking behaviour, condom use, needle pricks, use of standard precautions related to STDs/HIV/AIDS.

Collected data was checked, rechecked and edited at the end of each day of data collection. Coding and categorization was done. SPSS version 11.5 computer software was used for data entry and analysis. Prior to entry in SPSS program a database was formed mentioning, label, value and criteria of the variables. The data were summarized by frequency, percentage. Correlations statistics was done to see correlation among knowledge, attitude and practices.

Ethical clearance was obtained from ethical board of BPKIHS. Informed consent was taken from the each respondent prior the study, by explaining the objectives of the study. Their right of refusal to participate in this study was respected. The confidentiality of the information was maintained and used for the purpose of the study only.

Results

The sample size was 200 with a response rate of 90% (180).

Table 1: Socio-demographic profile of study population (n=180)

Characteristics	Frequency (n)	Percentage (%)
1. Age in years		
20-24	5	2.8
25-29	32	17.8
30-34	51	28.3
35-39	28	15.6
40-44	26	14.4

45 and above	38	21.1
2. Gender		
Male	61	33.9
Female	119	66.1
3. Religion		
Hindu	158	87.8
Buddhism	11	6.1
Others	11	6.1
4. Ethnicity		
Brahmin	32	17.8
Chettri	27	15.0
Dalit	45	25.0
Hill janjati	47	26.1
Teraijanjati	29	16.1
5. Language spoken		
Nepali	138	76.7
Rai/Limbu	10	5.6
Maithili	19	10.6
Others	13	7.2
6. Marital status		
Married	166	92.2
Divorce	3	1.7
Single	11	6.1
7. Literacy status		
Illiterate	21	11.7
Primary	55	30.6
Secondary	102	56.7
Higher secondary and above	2	1.1
8. Years worked experiences		
1-14 years	134	74.4
15 years and above	46	25.6
9. Heard about STDs/HIV/AIDS		

Yes	155	86.1
No	25	13.9

Table 1 shows the socio demographic descriptors of the population studied. 28.3% of the study population belonged to 30-34 age group; the mean age of the study population was 36.77 (SD 9.028). Females were predominately more (61.1%) than males (33.9%). Majority of them were of Hindu religion (87 %). The distribution of study population by ethnicity showed that hill Janjati (Rai, Limbu, Gurung, Magar) were 26.1%, Dalits (BK, Pariyar, Musar) were 25.0%,

plains (terai) Janjati (Tharu, Shah, Yadav)16.1%, Brahmin 17.8% and Chhetri 15.0%.

Majority (92.2%) of the respondents were married. Literacy status showed that majority were literate up to secondary level (56.7%), only 11.7% were illiterate. Classified by work experience, 74.4% had worked here above 14 years. 86% of study population had heard about STDs/HIV/AIDS.

Table 2: Knowledge regarding STDs/HIV/AIDS among study population*

Characteristics	Frequency (n)	Percentage (%)*
1. What do you understand by unprotected sex?		
Without using condom while having sex	52	28.9
Multiple sex partners	51	28.3
Bad works	4	2.2
Don't know	65	36.1
Infectious diseases	8	4.4
2. What do you understand by sexually transmitted		
disease?		
Unprotected sex without using Family planning	75	41.7
Methods	42	23.3
Infectious disease(HIV/AIDS, Hep B Syphilis)	5	2.8
Itching over genital organ	2	1.14
Diseases transmitted by blood	43	23.9
Don't know		
3. Which are sexually transmitted diseases		

HIV/AIDS	117	65.0
Don't Know	41	22.8
Syphilis	46	25.6
Hepatitis B	25	13.9
Gonorrhea	23	12.8
Leprosy	4	2.2
4. Causes of STD/HIV/AIDS		
Don't Know	110	61.1
Who have multiple sex partners	44	24.4
Recurrent genitourinary problem	53	29.4
5. Symptoms of STDs/HIV/AIDS		
Genitourinary symptoms	77	42.8
Weight loss ,weakness loss of appetites	58	32.2
Prolong diarrhea/wound infection	36	20.0
Prolong high grade fever	19	10.6
Don't Know	66	36.7
6. How STDs/HIV/AIDS can transmitted to others		
From unprotected sex	110	61.1
Via Syringe	94	52.2
Through blood transfusion	110	61.1
Don't know	15	8.3
From mother to child	4	2.2
Drinking and smoking with infected persons	3	1.7

^{*% \$ 100} because of multiple responses

Table 2 shows knowledge regarding definition of unprotected sex and causes of STDs/HIV/AIDS. Unprotected sex was defined as sexual intercourse without using condom by 29% followed by sex with multiple partners by 28%. More than one third respondents said they didn't know "what is unprotected sex". Causes listed for STDs/HIV/AIDS were multiple genitourinary infections (29%) followed by multiple sex partners (24.4%). Symptoms were listed as genitourinary symptoms (42.8%) like itching over genital region, per vaginal discharge, wound infection around genital organs, lower abdominal pain in females.

Table 3: Attitude towards STDs/HIV/AIDS among study population (N=180)

Characteristics	Frequency (n)	Percentage (%)
1.Aware of any HIV/AIDS services available at your		
workplace	116	64.4
Yes	64	35.6
No		
2.Willing to work with a co-worker who is HIV-positive		
Yes	129	71.7
No	51	28.3
3.Sexual knowledge should be included in school		
curriculum	171	95.0
Yes	9	5.0
No		

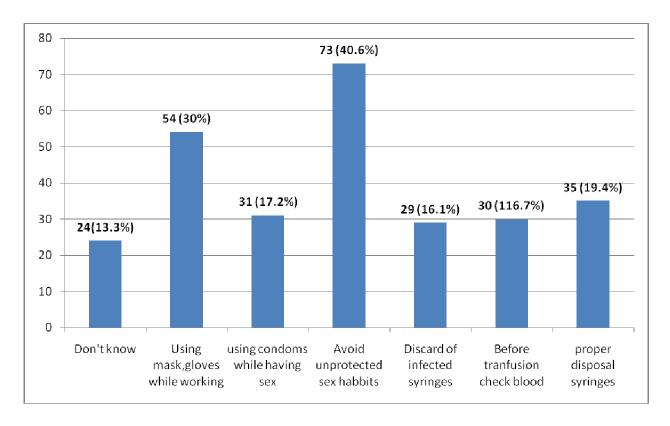


Fig 1: What do you do to prevent yourself from acquiring HIV/AIDS*

Table.4: Practices towards STDs/HIV/AIDS among study population*

Characteristics	Frequency (n)	Percentage (%)*
1.Standard precaution methods you use in work		
Proper uses and dispose of syringes	13	7.2
Using mask	60	33.3
Using gloves while handling	65	36.1
Wearing gluons and boot	35	19.4
Auto clamp of instrument	7	3.9
2. Advice you will give to your friends if you suspect		
STDs		
Go to the hospitals and treat	124	68.9
Go for Blood Test	26	14.4
Don't donate blood	15	8.3
Don't know	22	12.2

Table 3 and 4 shows the awareness and health services available for managing these conditions. Most of the study population knew that there are services available for HIV/AIDS in their workplace (64.4%). Almost two thirds were willing to work with co-workers who were HIV-positive. 95% agreed that sexual education must be included in the school curriculum. Avoiding unprotected sexual habits (40.6%), using mask, gloves while working (30%) and proper dispose of

syringes (19.4%) were listed as prevention strategies for HIV/AIDS. (see figure 1). Use of gloves while handing waste products of hospitals (36.1%) and using mask while working in wards (33.3%) were the commonest methods preferred for standard precautions. When we asked what advice you will give to your friends if you suspect STDs, majority suggested going to hospitals or other centres for management (83%).

Table 5: Diagonal matrix correlations among variables

Variables	Knowledge		Attitude		Practice	
	r	р	r	р	r	р
Age	-0.183	0.014	-0.042	0.578	-0.025	0.739
Years' work	0.004	0.961	0.159	0.033	-0.068	0.367

experiences						
Knowledge	1.00	-	0.42	<0.001	0.175	0.019
Attitude	0.427	<0.001	1.00	-	0.233	0.002
Practice	0.175	0.019	0.233	0.002	1.00	-

Correlation is significant at the 0.05 level (2-tailed).

Table 5 shows the relationship among knowledge, attitude, and practice with age, and work experiences of respondents. Correlation analysis with age showed a negative relationship position knowledge (r= -0.183), attitude (r= -0.042), practices (r=-0.025). Years of experiences had positive relation with knowledge (r=0.004), attitude (r=0.159) but showed negative relationship with practices (r=-0.068) but correlation with attitude (p=0.033) and practices (p=0.367) was significant.

Discussion

The objective of the study was to assess knowledge, attitude and practice towards STDs among health attendant staffs (health aids and health attendants) of BPKIHS. The response rate was 90%. Majority of the study population were from the age group 30-34 years with mean age of the study population was 36.77 years and having 14 years of experience working time and majority were literate. It indicates the predominant workers are young and are literate.

The results of this survey indicate that people were aware that it was knowledge about

infectious disease. The knowledge about condom as a preventive strategy was high among health attendants. The knowledge about routes of transmission was satisfactory among them. Most the study respondents said that STDs/HIV/AIDS can transmit to others by unprotected sex and through blood transmission. More than 86% study population knew about the STDs/HIV/AIDS. These findings supports the result of Behaviours Surveillance Surveys under taken by NACO (NACO-2001), Ganguli et al. (2002)¹⁵, Kumar et al. (1996)^{16,} Singh et al., (2002)¹⁷. The study done in China by Wu zet al18 showed that knowledge about route of transmission was low among health workers.

In our study majority of the respondents had aware about the services provided in institution and it is good to hear that they are willing to work with co-workers who are HIV positive, which shows good attitude amongst health attendants and they eagerly told that sexual education must include in school level, so that their children can know about this types of disease and infection. In study done by Timilshina N et al¹⁹ among auxiliary health workers including nurses showed that there

was significant difference in health workers perceptions about people living with HIV/AIDS and many health workers would not like to operate on HIV/AIDS.

In our study majority had knowledge about the preventive methods to protect from STD/HIV/AIDS. More than half of the study population expressed that avoiding multiple sex partners and wearing gloves and mask while handling waste materials are the most preventive methods. The study done Sadob A.E et.al²⁰ among health care workers showed that most of the study population had knowledge and preventive about HIV/AIDS.

Correlation of level of health attendants' knowledge, attitude and practices showed that increasing age had lesser level of knowledge and not negative attitude about STD/HIV/AIDS patients. Although the practices were not found to be satisfactory among higher age group, it was not statistically significant. Increasing year of experiences can have better attitude towards STDs/HIV/AIDS. The study done by Mulaudzi1 M V et.al. 13, showed that about 77% nurses had positive attitude caring for HIV/AIDS patient, while 6% had very negative attitude .The study done SadobA.E²⁰ showed that, health worker had positive attitude towards HIV/AIDS patient if the source of infection was from blood transfusion and from infected mother to baby. This study was based on a sample of health attendant staffs in a single hospital of B.P.

Koirala Institute of Health Sciences, Dharan in Sunsari districts of Eastern Nepal, which limits the generalization of the results. Regardless, these findings raise concerns about health attendant' knowledge, attitudes and practices in STDs/HIV/ AIDS.

Conclusion

In conclusion, majority of study population were ages 30-44 years group, majority had good knowledge about STDs/HIV/AIDS. Most of them had worked in BPKIHS about 15 years. About two third were willing to work with a co-worker who is HIV-positive. Finally, the study population had basic knowledge about the STDs/HIV/AIDS but with growing working experiences they are neglecting the safety practices methods while working. Some of the respondents still hesitated to answers on STDs/HIV/AIDS issues.

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