Knowledge, perception and belief about HIV/AIDS among health care provider of provincial level hospital outside Kathmandu valley of Bagmati province

Sajal Twanabasu[1], Bhusan Kumar Subedi[2], Sujina Maskey[3], Surendra Prasad Bhatta[4], Dinesh Regmi[5], Ram Chandra Rijal[6]
[1]Pediatrician, [2]Internist, [4]Obstetrician & Gynecologist, [5]General Practitioner, Dhading Hospital, Dhading, Nepal; [3]Medical Officer, Patan Hospital, Patan Academy of Health Sciences, Lalitpur, Nepal

ABSTRACT

Introduction: Stigmatized health care providers are the strongest hindrances in effectively responding to HIV. This study is conducted to evaluate Human immunodeficiency virus (HIV)/Acquired immunodeficiency virus (AIDS) related knowledge, perception and belief of health care providers working at Dhading hospital, Dhading, Nepal.

Method: This is a cross sectional study conducted from 1st to 15th December 2023 among the health professionals of Dhading hospital using a google form questionnaire which consisted of questions related to socio-demographic profile, knowledge regarding testing, transmission along with perception and belief related to HIV/AIDS.

Result: Out of 135 respondents, 101 (74.8%) responded among which 59.4% were females and 98% had education of secondary level or above. Majority (>90%) of the participants demonstrated adequate knowledge on questions related to transmission of HIV/AIDS. However, only 75.8% respondents were aware of voluntary counseling and treatment (VCT) with 73.27% still believing HIV/AIDS is a taboo in Nepal.

Conclusion: Knowledge, perception and belief of the health care provider is encouraging at Dhading Hospital. Studies like this help to identify gaps and in making appropriate intervention to eliminate stigma and discrimination prevalent among healthcare workers.

Keywords: AIDS, Dhading, HIV, knowledge, stigma

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CORRESPONDENCE
Dr. Sajal Twanabasu
Pediatrician, Dhading Hospital, Dhading, Nepal
Email: sajal.twanabasu@gmail.com

INTRODUCTION

Human immunodeficiency virus (HIV) and Acquired immunodeficiency virus (AIDS) is still a major health problem. Globally around 39 million people are living with HIV/AIDS.[1] Around 30,300 people living with HIV in Nepal and around 0.13% of total adult population in Nepal is infected with HIV.[2] Acquired Immunodeficiency syndrome (AIDS) is caused by a retro-virus Human immunodeficiency virus (HIV). AIDS is a chronic manageable condition with treatment however potentially life threatening without treatment. HIV attacks the immune system resulting in the progressive deterioration of the immune system leading to immune deficiency. Stigma and discrimination associated with HIV is highly prevalent across the globe.[3] The discrimination related to AIDS is probably because of its relation with sexual behavior, intravenous drug abuse resulting in the negative attitude among the general population. Stigma usually discourages people from seeking HIV prevention information, testing, and treatment, due to fear of rejection from health services, thereby contributing to new infections and ultimately poor health outcomes.[4 5]

HIV/AIDS related stigma is also largely prevalent among health care providers. This is probably because of lack of awareness among health care provider, fear of transmission because of contact during procedure, medication or other routine care due to inadequate knowledge about route of transmission and association of HIV/AIDS with sexual behavior.[6]

When health professionals are stigmatized, it directly affects the quality of service delivered by them. It discourages HIV related health seeking behavior that adversely affect testing and detection of new cases; adherence of people living with HIV (PLHIV) to antiretroviral therapy (ART) along with other care and support. It might be a major drawback in achieving sustainable development goal of ending the epidemic of HIV/AIDS by 2030.

Dhading hospital is providing HIV related care through ART clinic from which 128 PLHIV patients are getting services among which 10 are children below 14 years. Few years back, HIV positive pregnant females used to be referred to a tertiary level hospital for delivery with the fear of transmission. However, delivery of PLHIV patient was conducted recently. The attitude of the health care provider towards HIV patients is improving. People living with HIV stigma index 2011 showed that 7% of the PLHIV have experienced denial from the service due to their HIV status. No such study is available from the secondary level hospital at periphery. Hence, this study is conducted to evaluate HIV/AIDS related knowledge, perception and belief of health care provider working at Dhading hospital.

METHOD

This is a cross-sectional quantitative study done at Dhading hospital which is a 50 bedded provincial hospital located in a rural setup. Sample units were the entire health care providers working at Dhading Hospital. Study commenced after approval from the hospital administration. A google form questionnaire was sent to doctors, nurses, paramedics, pharmacists, lab technicians, radiographers and helpers. Data was collected from 1st to 15th of December 2023. The questionnaire consisted of four parts. Questionnaire was self-formulated from the frequently encountered scenario or questions that reflects knowledge, perception and belief of the health care provider. Questions were in English language. Google forms were sent to the participants in a hospital social media group. Personal messages were further sent for re-enforcing maximum participation. Part A related to respondent's socio-demographic background, part B related to basic knowledge regarding transmission of HIV/AIDS, part C related to testing and part D related to perception and belief about HIV/AIDS. All questions in the "Google form" were designed to be obligatory answered, so we did not have incomplete questionnaires. Data obtained were entered in a Microsoft excel 2016 which was also used to express data in frequency, mean and percentage.

RESULT

One hundred thirty-five health professionals were approached for the study, out of which, only 101 (74.8%) responded.

Most of the respondents were female 61 (59.4%). Majority follow Hindu religion 92 (91.08%) (Table:1) 99 (80.2%) had higher level education, 18 (17.8%) had secondary level education and only 2 (2%) had education below secondary level. 57 (56.4%) of the participants were doctors and nurses and the remaining were other health care providers. All the respondents have heard about HIV/AIDS (Table 1).

Table 1. Socio-demographic profile of respondents

Characteristics	N (%)	Characteristics	N (%)
Sex		Post	
Male	40 (40.6%)	Doctor	19 (18.8%)
Female	61 (59.4%)	Nurses	38 (37.6)
Religion		Paramedics	15 (14.9%)
Hindu	92 (91.08%)	Lab technicians	6 (5.9%)
Buddhism	4 (3.96%)	Pharmacists	4 (3.9%)
Christianity	5 (4.96%)	Radiographers	3 (2.9%)
Education level		Physiotherapist	1 (0.9%)
Higher level	81 (80.2%)	Anesthesia assistant	1 (0.9%)
Secondary level	18 (17.8%)	Hospital manager	1 (0.9%)
Below secondary level	2 (2%)	Helpers	13 (12.9%)
		Have you heard about HIV/AIDS?	
		Yes	101 (100%)

Table 2. Knowledge regarding transmission of HIV/AIDS

Characteristics	N (%)	Characteristics	N (%)
HIV AIDS can only be transmitted to intravenous drug users, migrant workers, prostitutes and homosexuals?		Can HIV be transmitted by using the same toilet seat as an infected person?	
True	37 (36.6%)	Yes	5 (4.95%)
False	64 (63.4%)	No	93 (92.07%)
		Don't Know	3 (2.98%)
Can HIV be transmitted from an infected mother to a newborn baby?		Does use of condoms decrease HIV/AIDS?	
Yes	96 (95.04%)	Yes	93 (92.07%)
No	5 (4.96%)	No	3 (2.97%)
Can HIV be transmitted by a mosquito bite?		Don't know	5 (4.95%)
Yes	10 (9.9%)		
No	89 (88.1%)		
Don't know	2 (1.9%)		

Table 3. Knowledge regarding HIV testing

Characteristics	N (%)	Characteristics	N (%)
HIV testing:		Is VCT important for prevention and control of HIV/AIDS?	
Has to be prescribed by a physician	35 (34.7%)	Yes	88 (87.1%)
Is provided to anyone free of charge	66 (65.3%)	No	2 (2%)
Have you heard about voluntary counseling and testing (VCT)?		No idea	11 (10.9%)
Yes	76 (75.2%)	Have you ever tested HIV/AIDS?	
No	25 (24.8%)	Yes	71 (70.3%)
Do you know where Voluntary counseling and treatment (VCT) is provided?		No	30 (29.7%)
Yes	76 (75.2%)		
No	25 (24.8%)		

Table 2 shows knowledge of respondents regarding transmission of HIV/AIDS. More than 90% correctly responded in questions regarding transmission of HIV through mosquito bite, sharing the same toilet seat, use of condom and transmission from infected mother to a newborn.

34.7% of the participants think HIV testing should be prescribed by a doctor and only 75.2% of the participants were aware of VCT. 29.7% of the respondents have never tested for HIV/AIDS.

Majority of the participants (73.27%) believe HIV/AIDS is still a taboo in Nepal. Around 95.05% of the respondents think more awareness is still required with 92.08% with the opinion that we should advocate for the rights of PLHIV.

DISCUSSION

Fast track approach is adopted by Nepal in National HIV Strategic Plan 2021-2026 towards ending the AIDS epidemic as a public health problem by 2030 through achieving the ambitious 95-95-95 targets by 2026 i.e. identify 95% of the estimated PLHIV, treat 95% of people diagnosed

Table 4. Perception and belief regarding HIV/AIDS

Characteristics	N (%)	Characteristics	N (%)
Do you think that person immediately die as soon as he/she gets infected?		Is it necessary to isolate a person affected by HIV from the general population?	
Yes	4 (3.96%)	Yes	7 (6.93%)
No	97 (96.04%)	No	94 (93.07%)
Have you ever discussed HIV/AIDS related topics with your parents?		Do you think, HIV/AIDS is still a taboo in Nepal?	
Yes	52 (51.5%)	Yes	74 (73.27%)
No	49 (48.5%)	No	27 (26.73%)
Have you ever discussed HIV/AIDS related topics with your friends?		Is it shame for someone to have HIV/AIDS?	
Yes	95 (94.05%)	Yes	18 (17.82%)
No	6 (5.95%)	No	83 (82.18%)
Do you believe everyone should ask his or her partner to test HIV before first sexual intercourse?		Do you think more awareness regarding HIV/AIDS is necessary?	
Yes	52 (51.49%)	Yes	96 (95.05%)
No	24 (23.76%)	No	5 (4.95%)
Maybe	25 (24.75%)	Do you believe we should advocate for the rights of PLHIV?	
		Yes	93 (92.08%
		No	8 (7.92%)

with HIV and attain viral load suppression for 95% of PLHIV on ART. To attain this target from the current 83%, 66% and 32% respectively, there is a need to reduce disparities in access to care and treatment by addressing issues like stigma and discrimination, gender based violence. Stigmatized attitude of health care providers due to fear is a major barrier and needs to be addressed.

Response rate was 74.8% of the total employee, which is satisfactory. Female respondents (59.4%) were more compared to male (40.6%) and Hindu was the most followed religion (91.08%) with few following Christianity (4.96%) and Buddhism (3.96%). Majority (98%) of the respondents had education more than secondary level. These socio-demographic details were collected to see if there is any difference in HIV related belief with regards to sex, religion, education, and profession.

Participants had good Knowledge regarding transmission of HIV/AIDS. 92.07% of the participants believed use of condoms decrease HIV/AIDS. This is higher compared to Nepal Demographic Health Survery (NDHS) 2022 data which showed 65% of young women and 88% of young men know that the consistent use of condoms can reduce the risk of getting HIV. More than 90% of the respondents knew that HIV is not transmitted by using the same seat as an infected person but can be transmitted to a newborn from an infected mother. Only less than 10% thought HIV could be transmitted by a mosquito bite. Knowledge regarding route of transmission was seen satisfactory In a similar study done by Poudel, et al.[7] among the health attendant staff at BPKIHS and Dong X, et al.[8] at Guangzhou, China. However, this finding is contrary to the study done by Wu Z, et al.[9] which showed knowledge about the rate of transmission was low among health care workers.

Knowledge related to HIV testing is satisfactory however lesser participants gave correct answers compared to questions associated with transmission. Only 70.3% of health care providers have ever tested for HIV before. This is more than the NDHS 2022 report which states 10% of women 13% of men of age group 15-49 have ever been tested for HIV. Only 75.2% of the participants had an idea about VCT and 34.7% thought that HIV testing should be prescribed by a doctor. More knowledge regarding VCT seems to be required along with information that HIV testing is free and confidential & can be done by everyone.

In part, D which consisted of questions related to perception and belief; respondents had satisfactory responses. More than 90% of the population knew that a person wouldn't die immediately after acquiring HIV/AIDS and isolation is also not necessary from the general population. Similar was the view expressed in a study done by Poudel, et al. in which the majority of participants were willing to work with a PLHIV collegue. However, 22% of the basic health workers in a study done by Timilshina N, et al.[10] stated that PLHIV should be isolated from the general population. It is interesting that 94.05% of respondents have discussed HIV/AIDS with their friends but only 51.5% have discussed it with their

parents. Moreover, only 51.49% assumed they should ask their partner to test before first intercourse. Even health care providers are still reluctant to discuss HIV/AIDS with their parents and rightly, 73.27% of respondents thought HIV/AIDS is still a taboo in Nepal. Study done Dilorio, et al.[11] also showed that parents and youth feel uncomfortable talking with one another about HIV-related topics. More than 90% said more awareness is necessary and it is encouraging that 92.08% responded that they would advocate for rights of PLHIV. UNGASS 2008 also showed that the general awareness regarding HIV/AIDS is comparatively high however comprehensive knowledge is limited.[12] Knowledge regarding HIV/AIDS is satisfactory, which is contrary to the study done by Mahat, et al.[13] which showed that Nepalese nursing students have a large knowledge gap and negative attitudes, regardless of level of education.

This is a very simple study aimed to evaluate the general and frequently encountered HIV/AIDS related questions conducted in a limited sample population working at Dhading Hospital. The findings cannot be generalized, however, it is among the limited studies done in a rural set up. Further large scale study involving health care provider working in an entire district can provide more consolidated data.

CONCLUSION

Studies like this help in identifying the perception of the health professionals so that the intervention required can be planned accordingly. Our study showed that the knowledge and perception among health workers at Dhading Hospital is satisfactory; however, an awareness campaign with special focus on voluntary counseling and testing should be continued.

Conflict of interest

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REFERENCES

1. UNAIDS: Fact sheet - latest global and regional statistics on the status of the AIDS epidemic [Internet]. UNAIDS; 2023 Jul 13. | Web Link |
2. National Center for AIDS & STD Control, Nepal. HIV epidemic update of Nepal: fact sheets. 2020. | Web Link |
3. Rueda S, Mitra S, Chen S, Gogolishvili D, Globerman J, Chambers L, et al. Examining the associations between HIV-related stigma and health outcomes in people living with HIV/AIDS: a series of meta-analyses. BMJ Open. 2016;6(7):e011453 | DOI | doi:10.1136/bmjopen-2016-011453
4. Nayar US, Stangl AL, De Zalduondo B, Brady LM. Reducing stigma and discrimination to improve child health and survival in low- and middle-income countries: promising approaches and implications for future research. J Health Commun. 2014;19 Suppl 1(sup1):142-63. | DOI |
5. Turan JM, Miller S, Bukusi EA, Sande J, Cohen CR. HIV/AIDS and maternity care in Kenya: how fears of stigma and discrimination affect uptake and provision of labor and delivery services. AIDS Care. 2008;20(8):938-45. | DOI |
6. Nyblade L, Stangl A, Weiss E, Ashburn K. Combating HIV stigma in health care settings: what works? J Int AIDS Soc. 2009;12:15. | DOI |
7. Poudel M, Bhandari R, Uprety S, Chaudhari S, Giri S, Yadav A, et al. Knowledge, attitude and practice about STD/HIV AIDS among the health attendant staffs of a tertiary level hospital of Eastern Nepal. Health Renais. 2015;13()3:95-106. | Full Text |
8. Dong X, Yang J, Peng L, Pang M, Zhang J, Zhang Z, et al. HIV-related stigma and discrimination amongst healthcare providers in Guangzhou, China. BMC Public Health. 2018;18(1):738. | DOI |
9. Wu Z, Qi G, Zeng Y, Detels R. Knowledge of HIV/AIDS among health care workers in China. AIDS Educ Prev. 1999;11(4):353-63. | PubMed | https://www.ncbi.nlm.nih.gov/pubmed/10494359
10. Timilshina N, Ansari MA. Knowledge and attitude of basic health workers (BHWs) toward HIV/AIDS. J Nepal Health Res Counc. 2013;11(24):182-6. | PubMed |
11. Diiorio C, Pluhar E, Belcher L. Parent-child communication about sexuality: a review of the literature from 1980-2002. J HIV/AIDS Prev Educ Adolesc Child. 2003;5(3-4):7-32. | DOI |
12. UNGASS country progress report 2008 [Nepal]. | Web Link |
13. Mahat G, Eller LS. HIV/AIDS and universal precautions: Knowledge and attitudes of Nepalese nursing students. J Adv Nurs. 2009;65(9):1907-15. | DOI |