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Knowledge and Attitude of Basic Health Workers (BHWs) toward HIV/AIDS

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ABSTRACT

Background: The incidence of HIV infection and AIDS is rising in Nepal. The Basic Health Workers (BHWs) are front-line services providers in rural community. The aim of this study was to ascertain BHWs concerns regarding risk awareness, knowledge and attitude toward HIV/AIDS.

Methods: A stratified random sample was used to select the BHWs from two districts. Data were collected using well-structured self-administrated questionnaire. It was consists of knowledge and attitude related question. Knowledge was assessed by asking several questions concerning issues on HIV/AIDS. Attitude was measured on a five-point Likert scale. Collected data were analyzed using the Epi-Info Software.

Results: A total of 100 BHWs were participated in this study. The mean age of Basic Health Workers were 39 years. Out of all the participants 69 (69%) were male and 31 (31%) were female. The present study revealed that only 46 (46%) had good knowledge and 59 (59%) differentiate between HIV and AIDS. Only 22 (22%) BHWs had accurate knowledge of Universal Precaution.

Only 38 (38%) participants showed positive and rationalized feeling towards HIV/AIDS patients and 51 (51%) BHWs agreed that HIV/AIDS patients have right to live as we do. 41 (41%) were uncertain that universal precaution can prevent transmission of HIV.

Conclusions: This study suggested that the Basic Health workers who participated in this study study possess basic knowledge but inadequate, although majority of them have poor attitudes toward persons with HIV/AIDS. Most incorrect answers were related to universal precaution. Ministry of Health Services, Nepal should consider the potential benefits to be gained from improving knowledge, attitude and practice of Basic Health Workers in prevention and control of rapidly increasing health problem of HIV/AIDS.

Keywords: attitude; basic health workers; HIV/AIDS; knowledge; universal precaution.

INTRODUCTION

Acquired Immune-deficiency Syndrome (AIDS) is currently the most dreaded public health problem in the world. HIV epidemic continue to spread at alarming rates in many parts of South Asia, including Nepal.[1-3]

BHWs serve as the backbone of rural health care system in Nepal, responsible for providing healthcare and counseling services to HIV/AIDS patients. Few recent study shown stigma and scare associated with HIV/AIDS in health care settings despite of high level of HIV/AIDS knowledge.[4-6] This may be negatively effects up on the success of counseling, testing initiatives, treatment and prevention issues including care-seeking behavior of the patients.[7,8] The poorly developed health infrastructure is one of the significant factors for rapid spread of HIV in Nepal, besides providing required/adequate services with proper infections control measures either delayed or not carried out at all.[9,10]

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The purpose of this study is to investigate BHWs awareness, knowledge and attitude toward HIV/AIDS.

METHODS

A descriptive cross sectional study was conducted at Kaski and Tanahun district in Nepal. The participants were selected from the staff list provided by District Public Health Office (DPHO), Kaski and District Health Office (DHO), Tanahun. Ethical approval was taken from the Ethical Research Committee of Nepal health Research Council (NHRC). The Right of respondents not participating in interview was also considered. Consent was taken from the Department of Health Services, Teku and DPHO; Kaski, DHO, Tahanun was obtained by clarifying objectives of the study before interview with respondents and assured them that any information gathered will be used for research purpose only such that information from any individual cannot be identified separately.

In our study consist of BHWS including the Health Assistant (HA), Auxiliary Nurse Midwife (ANM), Auxiliary Health Worker (AHW), Village Health Worker (VHW) and Staff Nurse. They may be working in hospitals or primary health centre (PHC), Health posts (HP) or Sub-Health Posts (SHP). The participants selected were working in Sub-health posts, health post and primary health care centre (PHC) at Kaski and Tanahun district. Each health post has a sanctioned staff of five includes Health Assistant (HA), Auxiliary Health worker (AHW), Auxiliary nurse midwife (ANM), Community Health assistant (CMA) and Village Health worker (VHW), though a minority have a staff of only three professionals. Health assistant (HA) considered to be on the upper end of the mid-level health provider, they primarily provide and administrator of health posts that are on the front line of providing health care to the rural population.[11,12]

Stratified proportionate random sampling was used to select the participants from each study site. Total sample size 100 BHWs: 50 from each district were selected. Basic Health Workers who worked in Hospital were not included in this study. In-depth interview were conducted to study knowledge and attitude of basic health workers using well-structured and pre-tested questionnaire. During the field session pre-testing of the interview questionnaire was carried out among INF's "Paluwa' HIV/AIDS programme center staff. Questionnaires were revised based on the experiences of the pre-test result.

Likert scale was used to access the attitude.[13] The data obtained were entered and analyzed using Epi-Info software. Summary statistics and chi-square test were done.

RESULTS

Of the 100 respondents selected for study, all of them were interviewed. Mean age of respondents was 39 years, the study sample compared 31 (31%) female and 69 (69%) male. Among them 37 (37%) living in urban area while 63 (63%) living and working in rural area. Forty percent were working in Health post, 73 (73%) in sub-health post. Of them 74 (74%) were received school leaving certificate, 12 (12%) had college education and 14 (14%) were bachelor level of education. Large majority of respondent's source to information was radio.

Knowledge of BHWs towards HIV/AIDS: A score of one was given for a correct answer and a score of zero for an incorrect answer. Latter all score were summed up and the classified in to three categories, good (more then 25), average (13-25) and poor (0-12). The findings shows that 46% BHWs display good knowledge of HIV/AIDS, further, 51 (51%) BHWs had average knowledge score and few of respondents 3 (3%) had poor knowledge on HIV/AIDS (table 2). Male respondents were higher level of knowledge on HIV/AIDS compare to female BHWs.

Table 1: Demographic characteristic of study Participants:

Variables	
Age (mean)	39
Gender	
Male	69
Female	31
Place of working	
Primary Health Centre	17
Health Post	40
Sub-Health Post	43
Heath Training	
Auxiliary health worker (AHW)	22
Auxiliary nurse midwife (ANM)	16
Health Assistant (HA)	8
Community Health assistant (CMA)	21
Staff Nurse	2
Village health worker (VHW)	31
Source of information of HIV/AIDS	
FM/Radio	43
Magazine/newspaper	84
TV	42

Regarding different between HIV and AIDS, 59 (59%) BHWs replied correct response. There is no treatment of AIDS still now, however only 76 (76%) respondents gave correct answer of regarding treatment of HIV/AIDS. Further more, only 86 (86%) of respondents replied to need to take precaution. HIV can be transmitted through different route of transmission considering the multiple answers given by respondents. Ninety two percent of

respondents replied that HIV can be transmitted through unsafe/unprotected sex, 70 (70%) & 58 (58%) from drug users and 29 (29%) replied unsafe needles.

Table 2: knowledge of HIV/AIDS of Basic Health workers

Variables			
Over all knowledge	Good	Average	Poor
	46	51	3
Knowledge of Difference between HIV/AIDS	True	False	
If some one has HIV, S/he has AIDS	59	41	
AIDS is last stage of HIV infection	91	9	
HIV counseling mean providing psychological support	91	9	
Awareness Key issue	**Yes**	**No**	**DK**
HIV/AIDS can be cured	13	76	11
Necessary of prior HIV knowledge	95	3	2
Health worker needs to take precaution	86	10	4
Knowledge of most common symptoms of HIV/AIDS	52	12	36
Knowledge of window period	52	23	25
Knowledge of HIV transmission:	Yes	No	DK
Unsafe sexual intercourse	100	0	0
Infected needle and syringe	100	0	0
Transfusion of infected blood	100	0	0
Infected mother to her child	90	5	5
Casual contact with patients	13	83	4
Staying together in house	1	97	2
Eating together with HIV patient	3	96	1
Knowledge of Universal Precaution:			
No answer			59
Advice			1
Careful advice while treatment			4
Create barrier between health worker to patients			2
Prevent transmission			16
National level awareness			3

Prevention is only way of control of HIV/AIDS. Knowledge about prevention measure of HIV infection is very important for prevention of infection. Finding of the study shows that only few 22 (22%) respondents having accurate knowledge about the universal precaution. Majority of the respondents 59 (59%) had not response about universal precaution.

Attitude of BHWs towards HIV/AIDS patients: All the attitude were measured in five point Likert scale ranging form strongly disagree with score of 1 to strongly agree with score of 5 and negative attitude were scored respectively. Higher the score of this questionnaire indicate more favorable attitude. The mean score of attitudes from strongly agree to strongly disagree were 22.9, 19.8, 11, 19.9 and 9.8 respectively (table 3). Finding of the study indicate that 84 (84%) respondents agree that HIV/AIDS is a worldwide problem. Almost half of the respondents agreed that HIV/AIDS patients have right to live as we do. Of almost of half of respondents 41 (41%) were uncertain that universal precaution can prevent transmission of HIV/AIDS.

Table 3: Attitudes of Basic Health Workers towards patients with HIV/AIDS.

Variables	SA	A	U	DA	SD
HIV/AIDS is world wide problem	84	15	0	1	0
HIV/AIDS patients right to live as we do	51	44	2	3	0
HIV/AIDS is disease of immoral people	3	19	3	57	18
Health personal should take care of PLWHA	17	61	12	7	3
PLWHA has right to care at Public Health Unit	24	61	7	8	0
HIV epidemic has added your workload	3	36	10	46	2
Health personnel at risk for HIV transmission	13	48	15	22	2
Universal precaution best method to prevent HIV transmission to health worker	33	23	41	3	0
HIV/AIDS is big problem for health worker	13	53	12	22	0
Prevention of HIV/AIDS is important responsibility of health worker	34	59	3	3	1
HIV positive patients should be isolated to prevent transmission	9	13	4	42	32
HIV/AIDS is problem for development of our country	25	67	4	1	3
Mean score	22.8	19.8	11	19.9	9.8

SA = Strongly Agree; A=Agree ; U=uncertain ; DA=Disagree; SD=strongly Disagree

The findings of study revealed that male BHWs had significantly higher attitude score then female BHWs, furthermore, among the BHWS, Health Assistant had higher attitude score compare to rest of BHWs (data not shown).

DISCUSSION

Our samples were basic health care worker, working in mainly rural area. Primary health care units generally employed mid level health workers. Community-based workers often well positioned to identify and communicate the medical needs of people who have HIV/AIDS to local and national health care systems. Basic health workers can provide technical advice to stakeholders about effectiveness or challenges associates with certain HIV/AIDS programme strategies. In doing so, BHWs can inform evidence-based clinical 'best practices' and policies. Community based health workers in Nepal, thus act as a bridge between population in needs of treatment and legal, political and health authorities' aiming to help both clients and the community. Our results show that most of health workers generally have some appreciation knowledge about HIV/AIDS, although there is still considerable scope improvement practice of universal precaution and disease transmission. Finding show that male basic health worker has better knowledge then female (data not shown).

Demographic health survey, Nepal (2001) found that knowledge related HIV/AIDS higher among the male, urban residents and higher educated with compare of female, rural residence and people with low education. The study also reveled the similar finding among BHWs.[14]

Specific area where the BHWs knowledge was lacking included awareness key issue of HIV/AIDS, window period of HIV, and Universal Precaution. However, they had better understanding about the mode of transmission.

Stigma among the heath care worker appears to be grounded in culture,[15-17] which ultimately compromise the treatment and care of people living with HIV/AIDS. Kermode et al. revels that large majority of health care workers in rural India perceive that they have high chance of acquired HIV simply through providing care to HIV patients.[18] In developed countries in United Kingdom and United States shows that such fear decreasing with use of treatment protocol and guidelines, training and facilities of appropriate equipment.[19-21] In our finding show that about half of respondents were uncertain that universal precaution can prevent transmission of HIV and 22% of BHWs (9% strongly agree and 13% agree) that HIV positive patients should be isolated to prevent transmission.

The study showed that 38% BHWs said that they feel sorry for them and their families and 36% reported that they are source of further infection, 10% respondents says that they are burden to community and 12% of respondents replied that they are people of with out morel. Hence, the study reveled that significant difference exist in BHWs perceptions about people living with HIV/AIDS.

This study also showed some negative attitudes towards taking car of people with HIV. The main reason started was the fear of being infected whole caring. In addition, 25% BHWs started that even thinking about HIV positive should be isolated to prevent transmission. Many others study showed similar results.[22-24] While some study showed contrary findings.[25]

Many health workers in this study would not operate on HIV/AIDS patients. Family Health International (2001) found that poor health infrastructure and poor infection control measure at health institutions is one of the contributing factors for rapid spread of HIV in Nepal. Finding of this study reveled that very few BHWs had knowledge of universal precaution. One of the study by Chander K.Jha, show that doctor was trying to squeeze HIV patients would with bare hands. General infection control measure should be routing undertaken with special emphasis on universal precaution practice.[26, 27]

Our study did have a number of limitations. Although the respondents interviewed were number of BHWs matched in two districts, the sample size was relatively small (100 respondents). Nevertheless, further longitudinal studies with a more diverse work BHWs in different region of Nepal are required in order to confirm these results.

CONCLUSIONS

In summary, the involvement of BHWs has increased to acceptance and uptake of primary healthcare services, promoted timely programmatic changes, and improved the understanding of HIV/AIDS prevention among stakeholder. This study, the first to investigate HIV/AIDS knowledge and attitude of BHWs, who worked in mainly primary health care setting , Primary Health center, Health Post and Sub-health post in Nepal, has identified the particular opportunities for Knowledge, attitude and universal precaution improvement. Ministry of Health Services, Nepal should consider the potential benefits to be gained from improving Knowledge, attitude and practice of Basic Health Workers in prevention and control of rapidly increasing health problem of HIV/AIDS.

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