

# Assessment of Knowledge, Attitude, Practice and Willingness of People Living with HIV/AIDS to Share Personal Health Information to their Community in North West Ethiopia

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## Abstract

**Introduction:** Getting full personal health information especially from people living with HIV/AIDS has a great challenging due to fear of stigma and discrimination in developing countries like Ethiopia. Lack of knowledge, attitude, practice and willingness of people living with HIV/AIDS to share their health information may affect the quality of their life. This study aimed to assess the knowledge, attitude, practice and willingness of people living with HIV/AIDS to share their personal health information to their community.

**Materials and Methods:** A hospital based cross-sectional study was conducted from December, 2013 to May, 2014. All information's were collected through interview using structured questionnaires. The data was entered, processed and analyzed using SPSS version 20 statistical software. The 95% confident interval and the p-value were used to check for association between the dependent and independent variables. A p-value of <0.05 was considered statistically significant.

**Results:** Out of the total 422 participants included in the study, only 43 (10.2%) of respondents were knowledgeable and 379 (89.8%) were none knowledgeable. Moreover, 12 (2.8%), 408 (96.7%) and 125 (29.6%) of the participants were with a favorable attitude, good practice and favorable willing to share personal health information, respectively.

**Conclusion:** Majority of study participants have inadequate knowledge, none favorable attitude and willingness but significant proportions of them have good practice on sharing of their personal health information to others. So that new strategies should be established in health facilities to develop knowledge, attitude, practice and willingness of people living with HIV/AIDS to share their personal health information to their community, this will bring a radical change in prevention and control of HIV/AIDS transmission.

**Keywords:** Knowledge; Attitude; Practice; Willingness

## Introduction

HIV/AIDS is a global pandemic [1]. As of 2012, approximately 35.3 million people are living with HIV globally [2]. Of these, approximately 17.2 million are men, 16.8 million are women and 3.4 million are less than 15 years old. There were about 1.8 million deaths from AIDS in 2010, down from 2.2 million in 2005 [3].

HIV/AIDS will cause a great devastating social, economical, political and cultural problem worldwide [4]. In 2008, over 42 million people are living with the virus; of these infected people 74% live in sub Sahara Africa [5] and over 22 million people killed since the case of the virus were identified in 1981 [6]. The first case of HIV in Ethiopia was reported in 1984. Since then HIV/AIDS become a major public health concern in the country leading the Government of Ethiopia to declare a public health emergency in 2002. In 2007, the estimated adult HIV/AIDS prevalence in Ethiopia was 2.1 percent [7].

The virus created an enormous challenge to the survival of the population worldwide. Inadequate knowledge, attitude, practice (KAP), discrimination, lack of privacy and low socio economic factors are among the potential factors especially in developing countries [5]. HIV-related stigma and discrimination remains an enormous barrier to effectively fighting the HIV and AIDS epidemic. Stigma and discrimination can result in people living with HIV/AIDS (PLWHA) being shunned by family and the community, poor treatment in healthcare and educational settings, an erosion of rights, and psychological damage [8].

In recent years, considerable research has been done on how PLWHA

manage information. However, understanding of the role of information in the HIV/AIDS community is still limited because of the difficulties of reaching different groups of PLWHA. Since the earliest days of the epidemic, information has been understood as a critical resource in efforts to prevent transmission of HIV, manage the complications that accompany the disease, and prolong PLWHA's lives [9].

The concern of confidentiality and lack of willingness of PLWHA to share their personal health information will lead to a great discrimination and stigmatization at gross level [10]. This study would help in prevention and control of HIV/AIDS epidemics in a particular group of population by increasing the level of KAP and willingness of PLWHA to share their personal health information. Therefore, this study aimed to assess the knowledge, attitude, practice and willingness of people living with HIV/AIDS to share their personal health information to their community.

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## Materials and Methods

### Study settings

The study was conducted at Gondar University Hospital which is a tertiary level teaching and referral hospital with 400 beds for inpatients, and renders referral health services to over 5 million inhabitants. There are more than 10,900 HIV patients that follow anti-retroviral treatment (ART) care in the hospital.

### Study design and participants

A hospital based cross-sectional study design was conducted from December, 2013 to May, 2014 at Gondar University Referral Hospital. A total of 422 male and female individuals living with HIV/AIDS aged ≥15 years attending Gondar University Referral Hospital were enrolled in this study.

### Study population

All adult HIV patients attending ART center of Gondar University Referral Hospital with complete informed consent were included in the study whereas, HIV negative individuals and children living with HIV/AIDS under 15 years of age were excluded.

### Definition of terms

**Knowledgeable:** if respondents answered greater than or equal to 70% of knowledge questions;

**None knowledgeable:** if respondents answered below 70% of knowledge questions.

**Favorable attitude:** if respondents answered greater or equal to 70% of attitude questions;

**None favorable attitude:** if respondents answered below 70% of attitude questions.

**Good practice:** if respondents answered greater than or equal to 70% of practice questions;

**Bad practice:** if respondents answered below 70% of practice questions.

**Favorable willing:** if respondents answered greater than or equal to 70% of willingness questions;

**None favorable willing:** if respondents answered below 70% of willingness questions.

### Data collection procedure

The data collection was made using structured questionnaire written in Amharic through interview to assess the knowledge, attitude, practice and willingness of PLWHA to share their personal health information to their community. The study subjects were selected using simple random sampling technique and target groups for the study were selected randomly using lottery method and the required sample size for the study was calculated using single population proportion formula. The data that were found at every course of the process was kept confidentially.

### Data processing and analysis

The data were entered and analyzed in to SPSS version 20 statistical software. A descriptive statistics were used to present socio-demographic characteristics, frequencies and different variables. The 95% confident interval and the p-value were used to check for association between the dependent and independent variables. A P-value less than 0.05 were considered to be statistically significant.

## Ethical consideration

Ethical clearance for the study was obtained from the ethics review committee of the University of Gondar, College of Medicine and Health Sciences, School of biomedical and laboratory sciences. Permission to conduct the study was also obtained from Gondar University Hospital administrators. Informed verbal consent was obtained from each study participants. Any information obtained at each course of the study was kept confidential.

## Results

### Socio-demographic characteristics

The study comprised a total of 422 PLWHA, of this 231 (54.7%) were females and 191 (45.3%) were males. Majority of the respondents 158/422 (37.4%) were in the age between 26-36 years. The study revealed that 335 (79.4%) respondents were urban residences and 87 (20.6%) were rural. Concerning the religion distribution majority of them 324/422 (76.8%) were Orthodox Christian. The results of the study with regard to the marital status demonstrates that 78 (18.5%) were single, 203 (48.1%) married, 79 (18.7%) divorced and 62 (14.7%) widowed, respectively (Table 1).

Variables	Frequency	Percentage
<b>Sex</b>		
Male	191	45.3
Female	231	54.7
<b>Age</b>		
15-25	77	18.2
26-36	158	37.4
37-47	114	27.0
>48	73	17.3
<b>Resident</b>		
Urban	335	79.4
Rural	87	20.6
<b>Ethnicity</b>		
Amhara	400	94.8
Tigray	15	3.6
Oromo	5	1.2
Other	2	0.5
<b>Religion</b>		
Orthodox Christen	324	76.8
Muslim	71	16.8
Protestant	20	4.7
Catholic	7	1.7
<b>Marital status</b>		
Single	78	18.5
Married	203	48.1
Divorced	79	18.7
Widowed	62	14.7
<b>Education level</b>		
Student	41	9.7
Diploma	128	30.3
Degree	39	9.2
None educated	214	50.7
<b>Income level (Ethiopian birr per month)</b>		
450-700	47	11.1
701-951	17	4.0
>951	106	25.1
Don't know	252	59.7

**Table 1:** Distribution of socio-demographic characteristics of the study participants (N=422) attending ART center at Gondar University Referral Hospital, North West Ethiopia, 2014.

### Knowledge to share health information towards HIV/AIDS

The results showed that majority (97.4%) of the respondents heard about HIV/AIDS before they acquire the disease. Concerning to their source of information about HIV, mass media is the most inducing agent that account for about 332 (78.7%). More than 99% of the respondents knew the transmission ways of HIV. Almost all participants 420 (99.5%) said that health information to be shared among PLWHA or to others is the most important tool to bring a change in their health and the health of others. 409 (99.3%) of study subjects revealed that adult needs a better health education/ information about HIV/AIDS than other age groups (Table 2).

Knowledge questions	Frequency (N=422)	Percentage (%)
<b>Have you ever heard about HIV/AIDS before you acquired the disease</b>		
Yes	411	97.4
No	11	2.6
<b>What was your source of information</b>		
Mass media	332	78.7
School	7	1.7
Friends	8	1.9
I do not know	3	0.7
All	72	17.1
<b>Did you know the transmission of HIV/AIDS</b>		
Yes	418	99.1
No	4	0.9
<b>Did you think mosquitoes can transmit HIV/AIDS</b>		
Yes	56	13.3
No	334	79.1
I have no idea	32	7.6
<b>Did you made an awareness creation programs by sharing your health information to your family about HIV/AIDS</b>		
Yes	412	97.6
No	10	2.4
I have no idea	0	0.0
<b>In your knowledge, is HIV/AIDS is incurable</b>		
Yes	265	62.8
No	133	31.5
I do not know	24	5.7
<b>In your knowledge did you believe that eating, sleeping together and shaking hands could transmit HIV</b>		
Yes	9	2.1
No	413	97.9
<b>Would you think that health information will help in prevention and control of HIV/AIDS</b>		
Yes	419	99.3
No	3	0.7
<b>In your knowledge which group of people needs the health information about HIV/AIDS</b>		
Adult	419	99.3
Elders	0	0.0
I don't know	0	0.0
All	3	0.7

**Table 2:** Distribution of knowledge related questions among PLWHA (N=422) in ART center of Gondar University Referral Hospital, North West Ethiopia, 2014.

### Attitude to share health information towards HIV/AIDS

All participants had support and communicate with others to harmonize the life of other PLWHA. Out of the total, 420 (99.5%) of respondents were very strong in confidentiality and privacy of the results of PLWHA. In addition, 407 (96.4%) and 404 (95.7%) had a meal with PLWHA and sleep too, respectively (Table 3).

### Practice to share health information towards HIV/AIDS

The result of the study showed that majority 375 (88.9%) of respondents avoided having sex without condom and 412 (97.6%) had no any practice to have a sex with PLWHA. But about 70 (16.6%) had a practice having sex with commercial sex workers and 352 (83.4%) were not. In addition, 332 (78.7%) participants answered condom to prevent HIV transmission and about 416 (98.6%) had a practice to advice others to test for HIV/AIDS (Table 4).

Attitude questions	Frequency (N=422)	Percentage (%)
<b>Have you ever had a meal with HIV negative individual in your life</b>		
Yes	407	96.4
No	15	3.6
<b>Have you ever sleep with negative individuals</b>		
Yes	404	95.7
No	18	4.3
<b>Did you agree on HIV infected persons are hard worker &amp; productive</b>		
Yes	422	100
No	0	0.0
<b>Did you agree on excessive alcohol a. consumption and smoking will expose adults for HIV/AIDS</b>		
Yes	422	100
No	0	0.0
<b>Have you ever support HIV/AIDS patients in communication sharing to harmonize their life</b>		
Yes	422	100
No	0	0.0
<b>Have you ever think of lack of sharing health information will increase the seriousness of HIV in your experience</b>		
Yes	421	99.8
No	1	0.2
<b>Have you ever discussed about HIV/AIDS with your friend or your family</b>		
Yes	420	99.5
No	2	0.5
<b>What is your believe toward confidentiality and privacy of HIV result's of all PLWHA</b>		
Very strong	420	99.5
Strong	2	0.5
I do not know	0	0.0
Other specify	0	0.0
<b>What would you do if you found HIV positive individual</b>		
I will discuss & treat him politely	137	32.5
I will tell him to follow ART care	285	67.5
I don't know	0	0.0

**Table 3:** Distribution of attitude related questions among PLWHA (N=422) in ART center of Gondar University Referral Hospital, North West Ethiopia, 2014.

### Willingness to share health information towards HIV/AIDS

According to the result found, majority 394 (93.4%) of respondents were willing to share their personal health information either to their family or friends and most of them 295 (69.9%) were willing to share their personal health information every week to every one 336 (79.6%). Most respondents confirmed that 404 (95.4%) PLWHA are willing to share their health information to their community (Table 5).

### Knowledge, attitude, practice and willingness of PLWHA to share personal health information verses selected socio-demographic characteristics

The finding of the study showed that majority 379 (89.8%) were

Practice related questions	Frequency (N=422)	Percentage (%)
<b>Have you had a sex without condom</b>		
Yes	47	11.1
No	375	88.9
I have no idea	0	0.0
<b>Have you ever had a sex with HIV negative individuals; with how many</b>		
Yes, 1	7	1.7
Yes, 2-4	3	0.7
Yes, 5-10	0	0.0
Other specify	0	0.0
No	412	97.6
<b>Have you had a sex with CSWs in your practice</b>		
Yes	70	16.6
No	352	83.4
<b>Which method are you practicing now to prevent a disease transmission</b>		
Condom	332	78.7
ABCs	90	21.3
I have no idea	0	0.0
<b>Have you ever help for others to test for HIV by sharing your experience</b>		
Yes	416	98.6
No	6	1.4
<b>For how many friends did have you shared your practice to control HIV</b>		
1	22	5.2
2-3	63	14.9
4-5	301	71.3
0	32	7.6
I don't know	4	0.9
<b>What is your role to reduce the seriousness of HIV in your community</b>		
High	139	32.9
Low	45	10.7
Very high	233	55.2
Very low	2	0.5
I don't remember	3	0.7
<b>Have you ever practiced to support HIV patients</b>		
Yes	411	97.4
No	11	2.6
<b>Have you ever practiced to improve the life of HIV individuals</b>		
Yes	403	95.5
No	19	4.5

**CSWs** - Commercial Sex Workers; **ABCs** - Abstinence, be faithful, use a condom  
**Table 4:** Distribution of practice related questions among PLWHA (N=422) in ART center of Gondar University Referral Hospital, North West Ethiopia, 2014.

Willingness related questions	Frequency (N=422)	Percentage (%)
<b>Are you willing to share your health information about HIV to your family</b>		
Yes	394	93.4
No	28	6.6
<b>How frequently did you have a will to share your personal health information about HIV/AIDS</b>		
Every week	295	69.9
Every 2 weeks	39	9.2
Every month	42	10
I don't know	33	7.8
Other specify	13	3.0
<b>To whom did you have a will to share your health information</b>		
HIV persons	13	3.1
Friends	1	0.2
Family	68	16.1
Every one	336	79.6
Other specify	4	0.9
<b>Did you think that PLWHA are willing to share their health information</b>		
Yes	404	95.4
No	18	4.3

**Table 5:** Distribution of willingness related questions among PLWHA (N=422) in ART center of Gondar University Referral Hospital, North West Ethiopia, 2014.

none knowledgeable and only 43 (10.2%) were knowledgeable (were able to answer 70% and above to the knowledge questions). Comparing between the knowledge of PLWHA and sex showed that out of the total 43 (10.2%), only 24 males and 19 females were knowledgeable. Concerning to age of the respondents with regarded to the knowledge status of PLWHA demonstrate that respondents in the age between 26-36years (n=13) were knowledgeable and majority (n=145) were none knowledgeable. In addition, the attitude, practice and willingness of respondents were assessed with respect to their socio-demographic characteristics. Concerning to age of PLWHA with respect to their knowledge showed that there was no statistically significant association (p-value>0.05). In similar fashion, comparing the sex and knowledge of respondents the finding of the result revealed that there was no statistically significant association between the sex and knowledge of respondents (p>0.05).

The result showed that 12 (2.8%) were with a favorable attitude (were able to answer 70% and above to the attitude questions) and 410 (97.2%) were with none favorable attitude. According to the analysis made to assess the practice status of the respondents, the finding of the study revealed that 408 (96.7%) of participants were with a good practice (were able to answer 70% and above to the practice questions). The willingness status were also assessed, accordingly 125 (29.6%) of participants were with a favorable willing (were able to answer 70% and above to the willingness related questions) to share their personal health information to their family, friends and community (Table 6).

In addition, there was a statistically significant association between sex and willingness status of respondents (p<0.05). Female cases were a non-favorable willing to share their personal health information to their family, friends and community than males. This is related to educational level difference. Illiteracy was more common in HIV patient group (50.7%) and a high proportion of female HIV/AIDS cases were

Variables	Knowledge status			Attitude status			Practice status			willingness status		
	Knowledgeable	None knowledgeable	p-value	Favorable attitude	None favorable attitude	p-value	Good practice	Bad practice	p-value	Favorable willing	None favorable willing	p-value
<b>Age</b>			0.15			0.07			0.84			0.45
15-25	12	65		5	72		74	3		24	53	
26-36	13	145		1	157		152	6		45	113	
37-47	8	8		3	111		110	4		39	75	
>47	10	63		3	70		72	1		17	56	
<b>Total</b>	<b>43 (10.2%)</b>	<b>379 (89.8%)</b>		<b>12 (2.8%)</b>	<b>410 (97.2%)</b>		<b>408 (96.7%)</b>	<b>14 (3.3%)</b>		<b>125 (29.6%)</b>	<b>297 (70.4%)</b>	
<b>Sex</b>			0.14			0.40			0.07			0.04
Male	24	167		4	187		188	3		47	144	
Female	19	212		8	223		220	11		78	153	
<b>Total</b>	<b>43 (10.2%)</b>	<b>379 (89.8%)</b>		<b>12 (2.8%)</b>	<b>410 (97.2%)</b>		<b>408 (96.7%)</b>	<b>14 (3.3%)</b>		<b>125 (29.6%)</b>	<b>297 (70.4%)</b>	
<b>Education at level</b>			0.05			0.34			0.17			0.04
Student	2	39		1	40		39	2		12	29	
Diploma	10	118		2	126		124	2		24	84	
Degree	1	38		0	39		39	0		8	37	
None Educated	30	184		9	205		206	8		61	153	
<b>Total</b>	<b>43 (10.2%)</b>	<b>379 (89.8%)</b>		<b>12 (2.8%)</b>	<b>410 (97.2%)</b>		<b>408 (96.7%)</b>	<b>14 (3.3%)</b>		<b>125 (29.6%)</b>	<b>297 (70.4%)</b>	

**Table 6:** Influence of selected socio-demographic characteristics verses KAP and willingness of PLWHA (N=422) in ART center of Gondar University Referral Hospital, North West Ethiopia, 2014.

non educated. Therefore, special attention should be undertaken to educate among both sexes equality and counseling of male and female HIV/AIDS persons should be given priority to prevent stigma and discrimination so that HIV/AIDS patients can live with their rights.

On the other hand, religion of PLWHA with respect to their attitude status showed statistically significant association (Table 7). Majority of Orthodox Christen were with favorable attitude on HIV/AIDS than other religious groups but, the small number of respondents, among Muslim, Protestant and Catholic respondents, made it difficult to compare the experiences of Christians and other religious groups.

## Discussion

The present study showed 77 (18.2%) respondents were within the age group of 15-25years. The result clearly indicates that the young and productive population is mostly affected by the disease. This finding is approximately in agreement with the finding of the result in Maiduguri, North east Nigeria done on assessment of knowledge, perception and attitude of PLWHA [11].

The present study revealed that among the total respondents who were participated in the study, only 125 (29.6%) of study subjects were willing to share their personal health information to others on their available /convenient time and places. A study conducted in New York, America done on willingness of PLWHA to share their personal health information electronically showed 84% PLWHA share personal health information with their clinicians and 39% share with none clinical staff [12]. That is high percentage of willingness of the study participants as compared with the present study. This might be due to the difference in the socio-economic, level of awareness and living standards or settings among the population and fear to stigma and discriminations of respondents. In addition, a continuity of care documents which is an electronic health information exchange format for PLWHA was implemented and this allowing aggregation and sharing of patient data [13]. This may increase patients' willingness to share their personal health information.

In the present study majority 420 (99.5%) of participants were with a favorable outlook to exchange the information among their families and friends and about 404 (95.4%) of respondents are willing to share their

personal health information. On the other hand a cross sectional study conducted on health information exchange between the clinicians and PLWHA at the public health hospital in Addis Ababa, Ethiopia showed that the mean score of perception of respondents to exchange health information with their clinicians when they had encountered the disease were 77 (14%) and about 371 (92.8%) respondents were comprehended the information provided with their clinician upon encounter and almost 339 (84.8%) were satisfied with the process [13]. The present finding on the willingness to share personal health information of respondents was in contrast with the report in Addis Ababa.

Regarding to the source of information about HIV, a survey conducted in USA, of a total 259 participants involved in the study 51% of participants ever used internet of which 59% had used the internet to access health related information [14]. When we compare this with the present study, majority of respondents 332 (78.7%) used mass media as a source of information about HIV/AIDS. This is because mass Medias are easier to find, accessible and available for participants and significantly provide greater health related information and confidence of medications of HIV/ AIDS in the present study.

In the present report majority 416 (98.6%) of study participants stated that they supported others to test for HIV. But a report from Mangalore, India conducted on awareness and attitude of the general public toward people living with HIV/AIDS stated that one get infected by merely touching of HIV positive individuals but 54% of the study population were willing to test for HIV [15]. The difference may be due to the difference in the level of attitude and awareness of participants about HIV/AIDS and lack of open discussion about HIV related issues.

Regarding on knowledge and attitude status of respondents in this study showed that 43 (10.2%) and 12 (2.8%) of respondents scored below the mean knowledge and attitude score, respectively about HIV /AIDS. This report is in contrast with the study done in Nigeria on HIV related knowledge, attitude and social disturbance toward PLWHA among undergraduate students which was 87 (53%) and 105 (64%), respectively. In addition there is relatively higher percentage of favorable attitude unlike the present finding [16]. This discrepancy might be due to the difference in educational and attitude level of the study participants.

Variables	Knowledge status			Attitude status			Practice status			willingness status		
	Knowledgeable	None Knowledgeable	p-value	Favorable attitude	None favorable attitude	p-value	Good practice	Bad practice	p-value	Favorable practice	None favorable favorable	p-value
<b>Age</b>			0.15			0.07			0.84			0.45
15-25	12	65		5	72		74	3		24	53	
26-36	13	145		1	157		152	6		45	113	
37-47	8	8		3	111		110	4		39	75	
>47	10	63		3	70		72	1		17	56	
<b>Sex</b>			0.14			0.40			0.07			0.04
Male	24	167		4	187		188	3		47	144	
Female	19	212		8	223		220	11		78	153	
<b>Resident</b>			0.65			0.73			0.55			0.56
Urban	33	302		10	325		323	12		97	238	
Rural	10	77		2	85		85	2		28	59	
<b>Ethnicity</b>			0.82			0.80			0.17			0.06
Amhara	40	360		11	389		388	12		114	286	
Tigray	2	13		1	14		14	1		9	6	
Oromo	1	4		0	5		4	1		1	4	
Other	0	2		0	2		2	0		1	1	
<b>Religion</b>			0.99			0.00			0.12			0.34
Orthodox Christen	33	291		9	315		315	9		92	232	
Muslim	7	64		0	71		69	2		26	45	
Protestant	2	8		1	19		18	2		4	16	
Catholic	1	6		2	5		6	1		3	4	
<b>Marital status</b>			0.31			0.79			0.67			0.57
Single	5	73		2	76		75	3		28	50	
Married	19	184		5	198		196	7		56	147	
Divorced	12	67		2	77		78	1		22	57	
Widowed	7	55		3	59		59	3		19	43	
<b>Educational level</b>			0.05			0.34			0.67			0.38
Student	2	39		1	40		39	2		12	29	
Diploma	10	118		2	126		124	2		24	84	
Degree	1	38		0	39		39	0		8	37	
None educated	30	184		9	205		206	8		61	153	
<b>Income level (Ethiopian birr per month)</b>			0.57			0.44			0.14			0.73
450-700	5	42		2	45		47	0		13	34	
701-951	5	15		0	17		16	1		5	12	
>951	7	99		1	105		105	1		36	70	
Don't know	29	223		9	243		240	12		71	181	
<b>Total</b>	<b>43 (10.2%)</b>	<b>379 (89.8%)</b>		<b>12 (2.8%)</b>	<b>410 (97.2%)</b>		<b>408 (96.7%)</b>	<b>14 (3.3%)</b>		<b>125 (29.6%)</b>	<b>297 (70.4%)</b>	

**Table 7:** Influence of selected socio-demographic characteristics verses KAP and willingness of PLWHA (N=422) in ART center of Gondar University Referral Hospital, North West Ethiopia, 2014.

The cross sectional community based study done among 274 care givers /families of PLWHA about their knowledge, attitude and practice in Ethiopia showed that 91.6% of home based care givers were knowledgeable to give care for PLWHA and with 88.7% of favorable attitude, respectively [17]. In the present study 99.3% are again knowledge in prevention and control of HIV/AIDS transmission through sharing their personal health information both to their families and friends. This finding is in line with the present study in that health information exchange achieved by developing of knowledge, attitude and practice of PLWHA has a great role to provide care and harmony for PLWHA.

In general, in the present study most participants were with good practice despite they were not knowledgeable, without favorable attitude and without favorable willingness to share personal health information.

This is because majority of participants shared their practice to control HIV, to support HIV patients and to improve the life of HIV individuals. But this is not adequate and they should be strongly motivated to have safer sex practice to avoid spread of infection.

## Conclusions

In this study, the knowledge and attitude status of PLWHA about HIV /AIDS and their willingness to share their personal health information to their community is inadequate. But, majority of respondents used mass media as a source of information about HIV/AIDS and the practice of PLWHA to share their personal health information is encouraging. This indicates that, mass media is not enough to bring a rational change on perception of PLWHA and their willingness to share their personal health information. Combating

the stigma and discrimination against people who are infected with HIV/AIDS is as important as developing medical cures in the process of preventing and controlling the global epidemic. Therefore, people living with HIV/AIDS should be counseled so that they can live free from stress and anxiety. In addition, health education should be utilized in a big way to alleviate the misconceptions associated with HIV/AIDS within general population and new strategies should be established in health facilities to develop the knowledge, attitude, practice and willingness of PLWHA and to improve their lives.

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#### Conflict of Interest

The authors declare that they have no competing interests.

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