



## Assessment of Knowledge, Attitude and Practices of Condom Use among People Living With HIV/AIDS in Nekemte Referral Hospital, West Ethiopia

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### ABSTRACT

*The main objective of this study was to assess the knowledge, attitude and practices of People Living with HIV/AIDS attending Nekemte Referral Hospital, ART clinic service. This study was a descriptive cross-sectional survey which investigated the knowledge, attitudes and practices of PLWHA on ART care using structured questionnaires at Nekemte Referral Hospital in west Ethiopia. A total of 333 questionnaires were distributed to respondents that came to fill their ART prescriptions over the period from March 1, 2015 to March 30, 2015. with 100% response rate, the mean score of knowledge was 4.92 out of 6 (82.05%) that means 95.8% of PLWHA taking ART medication at NRH were familiar about condom; while, 63.7% of them attended condom demonstration session. Again, 84.1% respondents knew that the correct use of condom will prevent HIV/AIDS transmission; while, 79.0% of them only know that condom can prevent also other sexually transmitted infections unlike 83.5% who knew that it can prevent pregnancy. Also, 86.2% of respondents expressed that condom use will reduce chance of getting HIV virus and transmitting to others. More than half, 53.8%, of the respondents reported that they had used condom at least once, while 46.2% have never used condom in their life time to today. They exposed that about 40% of them were requested by their sexual partner to make sex without condom, even 25.8% enforced not to use condom at sexual intercourses. On top of that, 29.4% of PLWHA on ART at study site had more than one sexual partner. With good news, 78.7% of total respondents take a care for their sexual partner's life. Only 62.8% of them feel happiness when they hear about condom, with similar breath merely 36.9% feel complete satisfaction during sexual intercourse by using condom, moreover, 45.6% of the respondents fear carrying and using condom; surprisingly, only 73% of them believe that condom can prevent HIV transmission, while 56.8% of the respondents have a plan to use a condom in the future for all their sexual intercourse. The mean score of attitude was 2.75 out of 5 (55.02%) which was under negative attitude category. From the foregoing the following can be concluded as the knowledge of PLWA using ART service at Nekemte referral Hospital is not on the stand of taking down the HIV infection plan to take to zero level. Even the practice of using condom at every sexual practice is very poor relative to expected 100% condom use for a person infected with this virus. At the same time, the attitude of above stated study*

*group towards condom use is not good to the degree that can become stumbling block to our common goal about the pandemic virus.*

**Keywords:** People living with HIV/AIDS (PLWA), Anti Retroviral Therapy (ART), knowledge, attitude, practice.

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## INTRODUCTION

HIV/AIDS is one of deadly grievous devastating disease with worldwide pandemic horizon, succumbing our planet into broad social, cultural, economical, ethical and legal troubles [1]. By the end of 2014, 36.9 million people globally were living with HIV; while in the year; 2 million people became newly infected with HIV, 1.2 million people died from AIDS-related illnesses worldwide compared to 2 million deaths in 2005. Since 2000, around 38.1 million people have become infected with HIV and 25.3 million people have died of AIDS-related illnesses [2]. In September 1983, the CDC identified major routes of HIV transmission, ruling out causal contact, food, water, air, or surface, while, sexual intercourse as major route of transmission [3]. Condoms have long been a mainstay of HIV prevention programming and prevention is the first line of defense against HIV/AIDS. Prevention strategies implemented by countries have led to a 35% reduction in new infections since 2000. One of effective tools to prevent the transmission of HIV is use of condoms during sexual intercourse [4]. AIDS activist Cleve Jones and Surgeon, Erverett Koop urged parents and schools to start open discussions about AIDS and education on condom use, while in 1987, FDA declared HIV prevention as a new indication for male condoms [3].

Condom is a thin rubber sheath worn on a man's penis during sexual intercourse as a contraceptive or as protection against sexually transmitted diseases such as HIV/AIDS, used for at least 400 years. One study predicted that developing nations would need 18.6 billion condoms by 2015 [5]. Condoms, when used correctly and consistently are highly effective in preventing HIV and other sexually transmitted infections (STIs). A large body of scientific evidence shows that male latex condoms have an 80% or greater protective effect against the sexual transmission of HIV and other STIs. Condoms are a key component of comprehensive HIV prevention [4].

Condoms have played a decisive role in HIV prevention efforts in many countries. Condoms have helped to reduce HIV infection rates where AIDS has already taken hold, curtailing the broader spread of HIV in settings where the epidemic is still concentrated in specific populations. Condoms have also encouraged safer sexual behavior more generally [6].

The authors of the Cochrane review identified and selected 14 studies involving discordant couples (i.e. couples in which one of the partners is HIV-positive and the other free from HIV). A total of 587 people who reported "always" using condoms during sexual intercourse and 276 people who reported "never" using condoms were included in these studies. They arrived on the summary that sate incidence of HIV infection among those who reported always using condoms was 1.14 per 100 person-years (95% confidence interval 0.56-2.04), while it was 5.75 per 100 person-years (95% CI 3.16-9.66) among those who never used them. This gave an 80% reduction in the incidence of infection with condom use [7].

Despite these known facts, many myths and misperceptions about condoms contribute to their inconsistent use and therefore diminish their impact on the prevention of HIV. Low condom use is sometimes attributed to unreliable supply and poor distribution to those who need condoms the most. It is reported that condom use among populations at high risk of acquiring HIV/STIs has increased, but despite increased acceptability, condom availability in many countries remains low. An estimated 8 to 10 billion condoms are currently used in low and middle-income countries; however, this represents only half of the

condoms needed every year to protect the world's population from HIV and other STIs. There are also other barriers to consistent and correct use of condoms [8]. For some people, it is simply something that has not been part of their past set of behaviors (culture) and starting something new is their greatest hurdle. Others may have been influenced by misinformation or commonly held myths and misperceptions, which generate dismissive or negative views of condoms and/or condom use. Still others may be influenced by strong religious views or teachings or social inequities which prohibit discussing or negotiating safer sexual practices [8]. Myths, Misperceptions and Fears about condom use are "Condoms reduce spontaneity", "Condoms cause premature ejaculation and can reduce sensation and pleasure", "Condoms cause impotence, penile weakness, and loss of erection", "Condoms cause vaginal dryness", "In some countries, semen is thought to give strength and therefore should be ejaculated into the woman rather than collected in a condom", "Condoms cause pain, bleeding, infertility in men, infection disease, fetal damage, cancer, sores, back or kidney pain, other health problems, death", "Condoms prevent women receiving the benefits of semen", "Retaining semen in the condom can harm the man if it flows back into the penis", "Using a condom means wasting semen", "Male condoms can get lost in the woman's body or burst inside her during sexual intercourse", "Female condoms will get lost in the vagina [8].

Many beliefs and prejudices concerning condoms exist in cultures and settings. The ones identified in this document represent commonly reoccurring issues. It is also important to identify local MMFs through socio-cultural research in local communities and discussion groups so that appropriate specific responses can be developed. People living with HIV/AIDS sexual life have very crucial influence on the life of others, especially who didn't contract the virus before. So, knowing the reality on the ground is so important to intervene for prevention of new HIV viral incidence. Since condition on the ground in Nekemte town is not known concerning about knowledge, attitude and practice of people living with HIV/AIDS on condom use, this study is very important to provide base line intervention for both possible intervention and further study.

The main objective of this study was to figure out the status of knowledge, attitudes and practices of condom use among people living with HIV/AIDS attending Nekemte Referral Hospital, ART Clinic.

## MATERIALS AND METHODS

**Study Setting:** Nekemte is located in the western part of Ethiopia. The study was conducted at Nekemte Referral Hospital, in Nekemte, which is about 331km west of Addis Ababa. It is one of large Referral Hospitals in western regions of the Nation.

**Study design:** A both self-administered (for literate ones) and data collector lead interview (for illiterate), quantitative, and cross-sectional survey was designed and used to describe the current knowledge, attitude and practice (KAPs) of people living with HIV AIDS (PLWA) receiving antiretroviral therapy (ART) service cares at Nekemte Referral Hospital (NRH).

**Data collection and analysis:** One well-trained pharmacy personnel collected data using interpreted English questionnaire to Afan Oromo/local language. SPSS was used to analyze data. For this particular study, total numbers of PLWAs with 18 years ages and above were 1372. The level of precision,  $d=0.05$ , the level of KAP was not known in the area, so,  $p=0.5$  was assumed, level of significance,  $\alpha=0.05$  were used as inputs to compute sample size. The total required sample size calculated using the finite population correction formula since the total population was less than 10,000 with 10% non-response rate were about 333.

### Operational definitions

**Knowledge** is correct understanding about something. A respondent is said to be in good knowledge if he/she answered mean score of 4.5 (75%) correctly out of the total 6 knowledge of condom use questions.

**Practice:** Routine performance of something or daily activity. A respondent is said to be in good practice if he/she answered mean score of 3.75 (75%) correctly out of the total 5 knowledge of condom use questions.

**Attitude** is correct or incorrect feeling or thoughts or internal feeling about something. A respondent is said to have positive attitude if he/she answered mean score of 3.75 (75%) correctly out of the total 5 attitudes of condom use questions.

## RESULTS AND DISCUSSION

**Demographic profile of PLWA at the study facility:** The total study participants were 333 and all of responded to the prepared questionnaires. The 39.3% of them were males while 60.7% were females. Majority of respondents were 53.2% were in the age range of 18-30. Most of them, 43.2%, were Protestant, 33.3% (Orthodox), 11.1% (Muslim) and 9.3% were Wakefata. By social union, 34.8% were married, 51.4% were single, 9.3% were divorced and 4.5% were widowed. Majority of the respondents were urban resident (56.2%). In terms of educational status, 33.9% were primary school, 25.8% were secondary school, while 21.3% were higher education unlike the rest who were illiterates, 18.9%.

**Knowledge of PLWA related to condom and its use:** As it was shown in **table 1**, 95.8% of PLWHA taking ART medication at NRH were familiar about condom unlike 4.2% who never knew what condom does mean totally. Of total study participants, 63.7% of them attended condom demonstration session, unlike 36.3% who didn't attended condom use demonstration session to know how to use at sexual intercourse period for effective result. Again, 84.1% respondents knew that the correct use of condom will prevent HIV/AIDS transmission; while, 79.0% of them only know that condom can prevent also other sexually transmitted infections unlike 83.5% who knew that it can prevent pregnancy. Also, 86.2% of respondents expressed that condom use will reduce chance of getting HIV virus and transmitting to others. The mean score of knowledge was 4.923 out of 6 (82.05%).

**Table 1.** Knowledge of PLWHA towards condom use attending ART service at NRH, West Ethiopia, 2015

| S/No. | Variables  | Frequency |     | Percentage (%) |      |
|-------|--|-----------|-----|----------------|------|
|       |  | Yes       | No  | Yes            | No   |
| 1.    | Do you know condom?  | 319       | 14  | 95.8           | 4.2  |
| 2.    | Have you attended any condom demonstration session                           | 212       | 121 | 63.7           | 36.3 |
| 3.    | Do you know that correct condom use will prevent HIV/AIDS transmission?      | 280       | 53  | 84.1           | 15.9 |
| 4.    | Do you know that correct use of condom will prevent STIs?                    | 263       | 70  | 79.0           | 21.0 |
| 5.    | Do you know that correct use of condom will prevent pregnancy?               | 278       | 55  | 83.5           | 16.5 |
| 6.    | Do you know that correct condom use will reduce chance of getting HIV virus? | 287       | 46  | 86.2           | 13.8 |

**Practices of PLWA related to condom and its use:** More than half, 53.8%, of the respondents reported that they had used condom at least once, while 46.2% have never used condom in their life time to today. They exposed that about 40% of them were requested by their sexual partner to make sex without condom, even 25.8% enforced not to use condom at sexual intercourses. On top of that, 29.4% of PLWHA on ART

at study site had more than one sexual partner. With good news, 78.7% of total respondents take a care for their sexual partner's life (**Table 2**).

**Table 2.** Practices of PLWHA on condom use attending ART service at NRH, West Ethiopia, 2015

| S/No. | Variables  | Frequency |     | Percentage (%) |      |
|-------|--|-----------|-----|----------------|------|
|       |  | Yes       | No  | Yes            | No   |
| 1.    | Do you ever used condom?   | 179       | 154 | 53.8           | 46.2 |
| 1.    | Do you ever requested your sexual partner to perform sex without condom use? | 133       | 200 | 39.9           | 60.1 |
| 2.    | Have you ever enforced not to use condom?                                    | 86        | 247 | 25.8           | 74.2 |
| 3.    | Have you have more than one sexual partner?                                  | 98        | 235 | 29.4           | 70.6 |
| 4.    | Do you care for your sexual partner life?                                    | 262       | 71  | 78.7           | 21.3 |

**Attitude of PLWA related to condom and its use:** Respondents' attitudes towards condoms use were presented in **Table 3**. Accordingly, only 62.8% of them feel happiness when they hear about condom, on top of that merely 36.9% feel complete satisfaction during sexual intercourse by using condom, moreover, 45.6% of the respondents fear carrying and using condom; with the same breath, 73% them believe that condom can prevent HIV transmission, while 56.8% of the respondents have a plan to use a condom in the future for all their sexual intercourse. The mean score of attitude was 2.75 out of 5 (55.02%).

**Table 3.** Attitudes of PLWHA on condom use attending ART service at NRH, West Ethiopia, 2015

| S/No. | Variables   | Frequency |     | Percentage (%) |      |
|-------|---|-----------|-----|----------------|------|
|       |   | Yes       | No  | Yes            | No   |
| 1.    | Do you feel happiness when you hear about condom?                                 | 209       | 124 | 62.8           | 37.2 |
| 2.    | Do you feel complete satisfaction during sexual intercourse by using condom?      | 123       | 210 | 36.9           | 63.1 |
| 3.    | Do you fear carrying and using condom?  | 152       | 181 | 45.6           | 54.4 |
| 4.    | Do you believe that condom can prevent HIV transmission?                          | 243       | 90  | 73.0           | 27.0 |
| 5.    | Do you have a plan to use a condom in the future for all your sexual intercourse? | 189       | 142 | 57.0           | 43.0 |

This is a cross-sectional survey conducted to assess the knowledge, attitude and practices towards condom use of PLWHA on ART care at Nekemte Referral Hospital, Nekemte, West Ethiopia.

Key prevention strategies of HIV/AIDS include testing (to enable individuals to be aware of their own and their partner's status), condom use and provision of antiretroviral therapy to the partner living with HIV, regardless of their CD4 count [9]. It was well established common knowledge that condom use and other HIV prevention strategies used synergistically towards a common goal offer the greatest potential for achieving the maximum overall impact on HIV transmission. Four meta-analyses of condom effectiveness put the range of effectiveness to prevent HIV transmission between 69-94% [10].

Results of this survey indicated good knowledge towards condom use for effective HIV transmission prevention of the PLWHA at the study site with mean score of knowledge 4.923 out of 6 (82.05%) which is greater than a study done by UNAIDS in Namibia which was 60% [11]. This encouraging result may be the flash back of Ethiopian and stake holders decisive measures performed to increase awareness of community as a means of knowledge improvement to shape behavior positively in the past decades to prevent HIV virus transmission and new incidences besides treating already infected persons with HAART care.

Still there is a large gap that must be closed to take HIV transmission to zero probability as long as about 18% of the study respondents have knowledge deficit. This may be one of many reasons that led to 15,700 new HIV infections in 2014 in the Nation (Ethiopia) specifically and 2 million as a globe generally [4].



Since knowledge is the forerunner of attitude and practice, tolerance to knowledge gap can cost still lack of behavioral change and further new infection.

On attitude point of view towards condom use to prevent HIV transmission, the mean score of study respondents was 2.75 out of 5 (55.02%), which was under negative attitude conventional category. Some study done in different parts of Ethiopia showed that students of higher institution have poor attitude and risk perception of HIV infection due because of socio- cultural, situational and environmental leading factors influencing development of myths, misperceptions and fears such as “using condom will reduce sexual desire,” “only unmarried peoples use condom as they are promiscuous,” “using condom is necessary only when having sexual contact with CSWs,” and “condoms are basically used to prevent pregnancy rather than HIV/AIDS,” and the like generally discourages young people's utilization of condom [12]. Other possible major reason to this low perception to condom acceptance with in west Ethiopia may be social taboo of buying and carrying condom at public gaze; moreover, using condom at sexual intercourse may be considered as “there is unfaithfulness between sexual mates” in our home land, Ethiopia. Again, contribution to negative attitude of “reduced sexual sensation” by condom use at sexual intercourse can't be undermined.

For some people, it is simply something that has not been part of their past set of behaviors (culture), and starting something new is their greatest hurdle. Others may have been influenced by misinformation or commonly held myths and misperceptions, which generate dismissive or negative views of condoms and/or condom use. Still others may be influenced by strong religious views or teachings or social inequities which prohibit discussing or negotiating safer sexual practices [8]. Even now, people believe that HIV exists and that people of their age are at risk but they do not at the same time accept that they are personally at risk [13].

Relatively low condom use prevalence among PLWHA was exposed by this study at Nekemte since only 53.8% of the respondents reported that they had used condom at least once, while 46.2% have never used condom in their life time to today compared to the non -PLWHA prevalence of condom use (73.1%) at Gurage Zone of Ethiopia [14].

Similarly, this finding was lower than a study done in Addis Ababa public hospitals which was 63.1% [15]; and a study done in rural Uganda which was 82% [16]. This variation could be because of the study setting influence, the respondent socio- demographic profiles. This lack of condom use at each and every sexual intercourse can lead to very resistant strain new infections since the study participants were ART users. Even, if they are couples with HIV/AIDS positive, their HIV can have different species such as HIV1 or HIV2. If so, re-infection by other species can occur leading to accelerating the death appointment of couples. Even, new infection can occur since 29.4% of study participants had more than one sexual partner [16].

**Limitations:** Most people are sensitive to questions related to sexuality. Although the questionnaire based interview was a most efficient way of minimizing non-response rate and maximizing completeness of a questionnaire, it has its own limitations. One of the main limitations is the social desirability bias.

## APPLICATIONS

The results indicate that the condom use as a means of HIV/ AIDS transmission prevention strategy in PLWHA

## CONCLUSIONS

Even though mere knowledge by its own has no beneficiary value unless behavioral change is added to, there is fairly high knowledge on condom use as a means of HIV/ AIDS transmission prevention strategy.

There are almost shocking negative attitudes towards condom use as a means of HIV/ AIDS transmission prevention strategy in PLWHA. Moreover, the condom use practice at sexual intercourse events in PLWHA is trembling.

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