

Substance use and associated factors among HIV Positive clients Taking ART form Assela Hospital: A qualitative study

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Abstract

Background: A growing body of research work focuses on the intersection of substance use and sexual behavior as they affect the risk of HIV infection. Evidence has revealed that alcohol use and substance use are strongly related to the high risk sexual behaviors such as inconsistent condom use and having multiple sexual partners.

Objective: The purpose of this study was to explore substance use and associated factors among HIV diagnosed individuals who are taking ART treatment from ART clinic at Assela Hospital, 2019.

Methods: A total of ten purposively selected ART users were enrolled in in-depth interview. This study followed a phenomenological study design to explore substance use, and HIV transmission sexual behaviors using the experience of people living with HIV/AIDS. We interviewed five alcohol seller, three daily laborers, one driver and one retire individual from Government employ were asked about substance use history and sexual behaviors.

Result: Participants of the study reported that, substance use is highly rampant among people leaving with HIV/AIDS. Although concern that use of ART and counseling during ART follow up might decrease sexual risk-taking behavior; this finding disclosed that unprotected sex is not reduced among HIV –infected individuals who are taking ART treatment from Assela

Hospital. This study highlights that being jobless, being divorced and working in the bar and being female respondent are main reasons for substance use and inconsistent condom use

Conclusion: Peoples living with HIV/AIDS who are on ART are at significant risk for transmitting HIV to uninfected individuals. Positive prevention interventions are urgently needed for people living with HIV/AIDS.

Key word: substance use, sexual behavior PLWHA, sexual partners

Introduction

HIV/AIDs remain to take incredible peal on human wellbeing, having claimed more than 35 million lives so far. In 2017 about 1.12million people died from HIV- related causes worldwide. There were approximately 36.7 million people living with HIV (PLHIV) at the end of 2015 with 2.1 million people becoming newly infected with HIV. Sub-Saharan Africa is the most affected region, with 25.6 million PLHIV and accounts for two-thirds of the global total of new HIV infections (WHO, 2015).

Between 2000 and 2015, new HIV infections have fallen by 35%, AIDS-related deaths have fallen by 28% with some 8 million lives saved. This achievement was the result of great efforts by national HIV programs supported by civil society and a range of development partners. Expanding Anti-Retroviral Treatment (ART) to all PLHIV and expanding prevention choices can help avert 21 million AIDS-related deaths and 28 million new infections by 2030. The world has exceeded the AIDS targets of Millennium Development Goal (MDG) 6, halting and reversing the spread of HIV, and more and more countries are getting on the Fast-Track targets to end the AIDS epidemic by 2030 as part of the Sustainable Development Goals (WHO and SDG 2015).

In Ethiopia, the first confirmed cases of HIV were detected in 1984 and the first hospitalized AIDS patients were reported in 1986, suggesting that the HIV epidemic had probably began in the late 1970's or early 1980's. Improved worldwide access and use of antiretroviral therapy (ART) for human immune deficiency virus (HIV) has been assumed to emasculate HIV prevention efforts by altering distinct risk-taking behavior (Mulugeta Sh, 2012).

In current years, investigators have begun to discover the connection of substance use and sexual behavior activities that put people at growing risk for HIV, STDs, unintended pregnancy, and sexual ferocity. Risk sexual activities include using condom inconsistently, having multiple sexual partners over one's life time or having intercourse with a casual partner. A research done to date indicates that drinking and illicit substance use often occurs in association with risky sexual activity (A.M Substance use and high risk sex in Africa, 2003)

Community health professionals anticipate that building a greater awareness of the potential relationship between substance use and risky sexual activity can influence individuals who depend on drinking or substance to help reduce inhibitions, increase sociability or enhance sexual arousal. Some people drink or use drug to gain courage, relieve pressure, and justify behaviors they might otherwise feel is uncomfortable or unwise without considering the potential consequences. In addition, determining how the use of alcohol or other substance use influences sexual risk –taking can support to notify efforts by health care providers, educators, social workers and policy makers to create effective programs for substance abuse among prevention and treatment, STD and HIV prevention, and sexual health education especially among HIV positive individuals (Bjrg.H, Substance abuse in pregnancy in Norway, 2017).

Still, it is not clear whether substance use carries the same problems for persons with HIV as it does for those at risk. Hence the purpose of current study was to explore substance use and associated factors among HIV infected individuals who are receiving ART treatment service from ART clinic at Assela hospital.

Objective

General objectives of this study

To explore substance use and associated factors among HIV Positive patients who are taking ART Drugs from Assela Hospital, 2019.

Specific Objectives

1. To capture substance use experiences of patients with HIV who are taking ART
2. To further explore their sexual experiences of patients with HIV who are taking ART
3. To explore factors contributing for substance use among HIV Positive patients who are taking ART

Methods and Materials**Study area and period**

The current study was conducted at Assela town which is located at 175km away from capital city of Ethiopia. Through personal communication with experts in the ART clinic the researcher identify HIV patients who are taking ART from Assela Hospital. Currently the hospital is rendering ART service for more than 8,000 HIV patients. This study was conducted from March 11 to 13, 2019.

Study design

A phenomenological qualitative study design was used

Source population

All PLWHA attending ART clinic at Assela Hospital

Participants of the study

Ten in-depth interviews were conducted among purposively selected HIV positive individuals who are taking ART. This study followed A phenomenological study approach to explore substance use and HIV transmission sexual behaviors using the experience of people living with HIV/AIDS.

Data collection procedure

Purposive sampling method was employed. Qualitative study with in-depth interviews was conducted among HIV positive patients to explore their experiences with substance use, sexual experience and HIV status. The data was collected through tape recording and there was also note taker to capture all information raised by study participants. The interview was conducted in quiet and separate room to avoid any disturbance during data collection

Data quality assurance

To ensure the quality of data that were gathered from the study subject's two days training was given for data collectors and supervisors. Data collection tools or guides was pre-tested on 5% of the sample out of the selected study *Kebeles* and necessary modifications was made based on the nature of gaps identified in the questionnaire

Substance use Sections

Indicators of substance use were derived from items at follow-up. Items about quantity and frequency of alcohol conception in the past 3 months were used to classify drinking patterns as no drinking, 1-5 drinks in past months were asked which of a list of illicit drugs they had used in the past 3 months including: chat, sedatives shisha, cigarette, inhalants or other hallucinogens.

Sexual Risk Behavior

The measures of sexual behavior were collected by using in-depth interview in private wing to reduce biases attributed to socially desirable reporting. For each of up to five of the most recent sex partners in the past three months, respondents reported frequency of protected and unprotected anal insertive, anal receptive and vaginal sex. Capping the experiences at the five most recent sex partners would truncate the experience of some of the risk groups. These were used to drive a measure of high risk sex, defined as any incident of unprotected anal or vaginal intercourse with a partner of negative or unknown HIV status. A measure of any sexual behavior was also created indicating any oral, anal, or vaginal intercourse in the past 3 months.

Three sets of items in the interview were used to measure substance use in conjunction with sex. Adapted from the national health and social life survey (NHSL) Laumann *et al.*, 1992, one asks about alcohol use before or during usual sex with each of the most resent partners in the last 3 months and a

second set of items about use of other drugs in this situations . A follow-up set asks those who used illicit substances in this way to indicate all drugs they took with a given partner.

Finally, a significant amount of information was provided to the participants of the study to create a trusting relationship, this helped the participants to explain their experience, on substance use and their sexual behavior freely. All the interviews, transcription, and translations were conducted by the researcher.

Data analysis

After the interview finalized all the audio tape record were transcribed in verbatim by researcher, later translated in to English again by researcher, coded using Open code computer software. The code were drawn from the data, data driven coding system is employed. Data analysis was undertaken in parallel with data collection, with consideration of the emerging themes and issues. Thematic analysis was employed to pinpoint the major issues from the data.

Operational definitions

Substance use – drinking of alcohol, chat chewing, shisha or and cigarette smoking in the last 3 months.

Substance abuse – drinking of alcohol, chat chewing, shisha or and cigarette smoking more than threshold and having psychological and physical dependency.

Ethical considerations

Ethical clearance was obtained from Arsi University College of health science and presented to Assela hospital administration and permission is given to contact patents, verbal informed consent was obtained from the individual to audio record the interview. To insure confidentiality, a code was used in steady of the participant's name. So, there was no dissemination of any information to anybody who is not directly involved in the study without the respondent's permission. The data was used only for this research purpose

RESULT

Description of participants and main findings

A total of ten purposively selected ART users were interviewed. Of these study participants, five of them were alcohol seller, three of them daily laborers, one drivers and one retire individuals from Government employ. (Table 1)

Almost all the respondents reported that from their life experience substance use is a common problem which is seen among almost all HIV/AIDS patients who are taking their pills from ART clinic. According to their information there was variation across patients concerning degree of substance use or abuse and sexual behavior.

From the result of the study we have drawn three major themes. Those themes are related to the experience of HIV/AIDS patients about substance use, sexual behavior (condom use) with HIV positive, negative and unknown status individuals and number of sexual partner in the last 3months. Those three main themes developed from the data are discussed one by one as follow.

Table1. Description of Socio-demographic characteristics of HIV positive individuals who are taking ART from ART clinic, 2019

Socio-demographic characteristics of study participants		Number	Percent
Sex	Male	5	50
	Female	5	50
Age	< 30	1	10
	30-40	3	30
	40-60	6	60
Marital status	Single	0	0
	Married	1	10
	Divorced	5	50
	Widowed	4	40
Occupation	Daily laborer	3	30
	Alcohol seller	5	50
	Drivers	1	10
	Retire	1	10
Ethnicity	Oromo	5	50
	Amhara	4	40

	Gurage	1	10
Religion	Orthodox	9	90
	Protestant	1	10
	Muslim	0	0
Level of Education	Primary	7	70
	Secondary	3	30
	Tertiary	0	0
Monthly income	<500 Birr	0	0
	500-1000	9	90
	>1000	1	10

Them one: Exploring experience of substance use

In the in-depth interview participants pointed out that social behaviors and the economic factors continue to be an important influences on substance use, risk taking and reshape the type of sexual relations for those receiving ART. Changing in the sexual behavior often occurred together with changes in other social behaviors, which participants linked to unsafe sex and multiple partnering, most particularly use of alcohol. Most of the respondents explain about the connection between alcohol and other substance use like chat and shisha and sexual behavior. A 28 years old female respondent, who was an alcohol seller and taking ART for more than ten years pointed out her experience of substance use as;

“No, am not that much a drinker am only drink one or two beer daily and two caticalas, just to get sleep after 2hr of I took my drug because as you know am selling alcohol/caticala unless I drink with them how my customer will drink the alcohol for me. More over am chewing chat to stay long time because I have many costumers coming to my home throughout the night As you see these ladies are working business her in my home, they sold alcohol for me and at the same time they work their own business, here I have bed rooms there, They have to pay 10% of their business daily for me. You know this is the way we support our selves”.

Alcohol as stress relief, some interviewees characterized alcohol as important in dealing with social stressors and helping to facilitate a restful night’s sleep. Drinking alcohol was described as a means of forgetting one’s problem, in effect, turning off the mind as a way of gaining peace. One interviewee described the perceived calming benefits of alcohol conception this way: “If you have many thoughts, or an issue disturbing you, alcohol helps you to forget the problems and helps your brain to focus on something else.”(Male of 45 years old who is taking ART for the last 15 years from Assela Hospital).

In support of this idea another 40 years female respondents stated that drinking alcohol is taken as a means to hide themselves from stress and to forget their disease or the problem they had, or some peoples are even ignorant about their health.

“Yes, to forget my status I drink 10melekiya caticala per day it is to hide myself from stress and something which made me an happy now am workless I am drinker and am smoking cigarette 10 times per day. Because I lose my hope, Yes to forget my status, I drink up to 10 beer per day I had been

worked in bar I had done business at that time. To hide myself from stress and something which made me a happy I drink a lot”.

Moreover, most HIV positive peoples are drinking alcohol because of stigma and discrimination.

A 55 years old male HIV positive and taking ART for the last 8 years stated his experience of alcohol and substance use as:

“I drink alcohol to hide myself from stress and some think which made me a happy, some peoples are points their finger toward me. Am a driver and working at “meneharia” or bus station so people say let go to HIV Kebele meaning toward the place I live. So this stigma makes me disappointed to myself and I immediately rush to drink alcohol”.

From this interview we conclude that, most HIV positive peoples were currently drinking alcohol. Their main reasons were, to forget their HIV status. In addition they may not take their drugs appropriately, they are poor adherent to HIV drugs, and they engaged in sex without condom with HIV negative people after they intoxicated by alcohol.

Theme two: Exploring experience of sexual behavior

In the in-depth interview most respondents describe range of reasons for not using condom the main reasons stated by study participants were condom is allergic for me, condom take away the pleasure of sex, partner’s refusal and income related factors were pointed as barriers of condom use. A 28 years female respondents HIV positive and taking ART explain her experience of condom use as;

“I know using condom during sexual intercourse has advantage. But I am not always using it because I was working in the bar before and some people

did not want to use it, therefore I had it(engaged in sex) without condom because I want to get money.”

But, currently I have friends(one Baluka) with whom am not used condom but I have some casual partners whom I like most, at that time I am engaged in sex by using two condom because some of them are HIV negative or they don't know their status

(Female of 28 years old, who was HIV positive and taking ART from Assela Hospital and living by selling alcohol in her house)

Majority of the in-depth interview participants explain that even if information is given through mass media and individual counseling was given during follow up period in ART clinic, still many peoples were practicing risky sexual behavior. A female participant who was in zero discordant relation describes her sexual behavior as:

“You know, as soon as i finished chewing chat, I drank alcohol because I want to sleep. My partner is HIV negative, we didn't use condom during sexual intercourse because, I need to have child. He knows my result again he knows how my previous husband died. But he engaged in sex with me without condom, I told him several times am HIV positive and I show him my ART drug but still he is engaged in sex with me without condom. Am helping myself by selling alcohol, I did business after I knew my status. I used condom when I did business with more than five individual per day,. I don't know their status I did it to help myself You know when you do business in alcohol house you have to drink alcohol, it is a must to drink, and then the owner of this house asked you (yemewucha)10% of total payment for the house owners“

Another 44 years male counselor mentioned his experience of counseling as follows;

“Yaa..... there is change but I don't think all people who live with HIV were behaving safe sexual practice for example while I was counseling a lady who was working in the bar she said to me that 'I am doing in the bar by selling my body I earned 500 birr per day from my costumer, who give me this money?, no one have right on my body in order not to do this'. I asked her whether she used condom or not she replied 'I told them to use it (condom). If they said no, I don't do anything this is business.

“In addition knowingly, some people rupture condom in sexual activity, they engaged in sexual activity without condom, but they don't know whether they took virus from me or they transmit it to me.

Yaa! Before I know myself, I drunk a lot I engaged in sex without condom because I engaged in risky sexual practice with anyone. The costumers asked you without condom they will say I will add money It was very difficult time Some females they don't want to stop this sexual activity the costumers will invite you alcohol, ... moreover, they will give you tip, so what can you do?”

Theme three: Number of sexual partners

In the in-depth interview most study participants describe that they engaged in risky sexual behavior before and after HIV diagnosis. They had reported history of sexual intercourse with multiple sexual partners with inconsistent condom use with HIV negative and with unknown sero-status. An HIV positive man who is on ART in Assela Hospital described his past sexual behavior as:

“Before I became HIV positive I had been a member of Ethiopia military and I had a bad character, I engaged in sexual intercourse with multiple sexual partners like bar ladies. I used condom sometimes with those ladies but not at all time.”

In support of this idea another female respondents who were doing in the bar reported history of multiple sexual practice.

“Before I knew myself I had husband, but we quarreled and divorced after I became HIV positive. Afterwards, i was doing in bar and I had sex with many people without condom”. And she explained farther her current practice as “Yes, I have one “baluka” and many casual partners I don’t know their status but my husband (Baluka) is positive. Yaa, have you seen those two girls?, they are working sex business here in my home I gave one class for them and they are practicing it. They engaged in sex with three to four partners per day, they used condom but I don’t think it is always. Moreover we sold alcohol in this house.

Discussion

The overall objective of this qualitative study was to examine how HIV infected individuals entering in to care and treatment for HIV worked to change their substance use over time and how this substance use mainly interferes with their sexual behaviors. We observed pattern of change as described in qualitative in-depth interview, as well the impact of social and psychological factors on efforts to reduce substance and alcohol intake. There is much evidence that heavy alcohol use is associated with having multiple sexual partners, which is primary risk factors for transmission of STDs, including HIV. Seven percent of adults who report never drinking or drinking less than once a month say that they have had two or more sex partners in the last year, compared with fifteen percent of those who say they drink monthly, and 24 percent of those who drink weekly (A.M Substance use and high risk sex in Africa, 2003, Meareg F, 2017)

Substance use and sex, about two million adults – one man in 100 and one woman in 200 – admit to using substance before having sex in the past year. Illicit drug users are also more likely than non-users to have multiple sex partners. One study found that 52 percent of those who used marijuana in the previous year had two or more sex partners during the same period, compared with sixteen percent of those who had not smoked pot (Scheidt, Alcohol use and high -risk sex, 2013). There is even more extensive research documenting the relationship between the use of crack or injection drugs and an increased number of sexual partners. And, people who are receiving treatment for alcohol and substance use or who use multiple drugs are more likely than others to engage in risky sexual activity (GF, maternal drug Use, 2013). A study of alcoholics found that those who also have drug problems are more likely than those who do not to have multiple sex partners (Opid and alcohol use, 2017). Systematic review found that unprotected sex is rarer

among HIV positive people taking ART than among those who are not (Abate .D Systematic review in Africa, 2016). This effect was inconsistent across studies, with no differences evident in the effect according to gender, sexual practice, or geographic location. Importantly, in studies that clearly documented episodes of HIV transmission risk (i.e., unprotected sex with HIV-negative partners or partners with unknown HIV status), ART use was associated with less unprotected sex. ART may also be associated with fewer STI diagnoses competing with these reasons were a number of incentives to drink, including reinforcement of social relationships, stress relief, and overall pleasure and enjoyment gained from alcohol consumption and other substance use. The result was a “moral pull of war”—with some participants trying to balance the “pull” of perceived benefits of drinking with the “push” of negative consequences from continued alcohol or substance use and its effect on sexual practice especially during pregnancy (Sofia F. Risk perception of substance use, 2011).

Particularly, we identified three influences on patterns of substance use related to HIV-infected status. Participants responded strongly to hearing from ART staff that continued alcohol use would undermine the effectiveness of antiretroviral therapy. Conversely, some found abstinence challenging while coping with the emotional turmoil brought on by their new HIV diagnosis. In addition, a fear that sudden unexplained abstinence might result in attributions of HIV-infected status by others contributed to the “pull” toward continued drinking. Otherwise, influences on efforts at changing drinking behavior appeared not to be directly related to one’s HIV status.

Using alcohol to facilitate social inclusion, cope with stress, and enhance pleasure have been reported repeatedly in studies carried out across age ranges in the world (Bjrg K, 2017, Adane . F, 2017).

This study has limitations that should be noted here. Our characterizations of patterns of change in substance use are based on participants' narrative accounts of their drinking behaviors provided in qualitative interviews. The likely influence of social desirability on participants' representations of their drinking must be acknowledged. Alcohol and other substance use is a highly stigmatized behavior in this setting and participants were being cautioned explicitly against using alcohol by interview as part of providing them with life-saving antiretroviral medication for HIV/AIDS. However, it was clear in some cases that interviewees perceived us as "wanting them to stop using this substance."

These perceptions may have shaped how they described their substance use and their sexual behavior; thus, in some cases underreporting is likely. However, the overall trends of decreasing alcohol consumption and substance use around the time of entry into HIV care and increased after adapting the ART drug is over all phenomena and it is consistent with results from the larger quantitative cohort study.

Limitation of this study

This study has many limitations. The characterizations of patterns of substance use and sexual behavior are based on respondent's narrative in the qualitative interview.

The likely influence of social desirability on participants' representations of their substance use must be acknowledged. Substance use is a highly stigmatized behavior in this setting and participants were being cautioned explicitly against using alcohol by ART clinic staff as part of providing them with life-saving antiretroviral medication for HIV/AIDS. These perceptions may have shaped how they described their substance use and alcohol conception; thus, in some cases under reporting is likely. Lack of

quantitative approach for triangulation is one of limitation of this study, because it is difficult to conclude and generalize from qualitative data only.

CONCLUSION

Substance use (alcohol, chat and shisha/cigarette smoking) among HIV/AIDS client is highly rampant. This research found that the association between substance use and risky sexual activities could stem from a host of personal factors, including a reduction in sexual inhibition because of the actual pharmacological effect of alcohol or drugs and cognitive impairment caused by drinking or drug use.

Substance or drugs use enhance a person's sexual attraction, behavior, or performance can also have an impact. Similarly, Social environments that support the use of alcohol and other drugs may also support the meeting of new sexual partners, which may help to explain the relationship between recent substance use and the likelihood of having multiple partners.

Although concerns that use of ART and counseling during ART follow up decrease sexual risk-taking behavior; this finding disclosed that unprotected sex is not reduced among HIV positive people who are taking ART treatment. The reasons for this are not yet clear, although self-selection and mutually reinforcing effects of HIV treatment and prevention messages among people on ART are likely.

Recommendation

- ✓ In each sessions, counselors has to provide information about safe sexual practice (i.e., use of condom), and prohibition of alcohol and other substance use with ART drugs.
- ✓ Behavioral change health education and communication and counseling adapted to the specific need of each client must be programed and

- ✓ Condom promotion is one of the important intervention among PLWHA.

NGO Partners

- ✓ Besides giving technical and material support Non-Governmental organization should have to work on programs of substance use and sexual behavior of PLWHAS in order to reduce new and re-infection of HIV virus
- ✓ Farther research with strong design

Competing interest

The authors declare that, they have no competing interest.

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