The Role of Behavioral and Livelihood Factors of Quality of Life Among People Living with HIV/AIDS on Highly Active Antiretroviral Therapy in Public Hospitals of South West Ethiopia: 2018

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Abstract: Despite the use of HAART, People living with HIV/AIDS (PLWHA) have continued to suffer due to the adverse health consequences of behavioral and livelihood factors of quality of life. Hence, this study was aimed to assess behavioral and livelihood factors of quality of life among PLWHIV on HAART in Jimma zone public hospitals, southwest Ethiopia 2018. A qualitative study using an in-depth interview with 22 ART users and 9 health professionals was carried out at the public hospitals of the Jimma zone, Southern Ethiopia that serves a large number of HIV positive individuals. Accurate transcribing of audiotaped interviews was done and digital audio recordings were transcribed carefully in English by the PI. The main responses were reported in the direct quotation and analyzed manually. The study was conducted from March 10-April 30- 2018. The commonest factors include substance use, economic constraints, fear of stigma and discrimination, religion. On the other hand, the study identified that about 65% of respondents were economically insecure, females’ with the highest-burden; more than half of PLWHIV on HAART experienced reducing the quantity or number of meals eaten, along with about 35% of respondents in-able to buy treatments. The study identified a range of barriers to QOL: substance use, economic constraints, poor perception, lack of disclosure, fear of stigma and discrimination, religion, lack of social support, drug side effects, and long waiting time. On the other hand, the livelihoods of respondents on economic insecurity, food, and nutrition insecurity along with lack of access to health care services were among the major challenges that patients faced. Therefore, the study would like to inform the development of effective interventions that address the barriers of QoL and livelihoods. Priority should be given to improving QoL by alleviating livelihoods, economic constraints, stigma and discrimination, education, and counseling to manage religious obstacles.

Keywords: QOL, PLWHIV, Qualitative Study, HAART
1. Introduction
Globally since the start of the epidemic, 35.0 million people have died from AIDS-related illnesses and 1 million in 2016. Around 76.1 million people have become infected with HIV since the start of the epidemic until 2016. 36.7 million People were living with HIV of this, 34.5 million were adults (15+ years) and 52% of them were [1, 2]. In Africa, a large proportion of 19.4 million people living with HIV were found in eastern and southern Africa in 2016[2]. Whereas in Ethiopia, the HIV/AIDS situation continues to be characterized by a low-intensity, a mixed epidemic with significant heterogeneity across geographic areas estimated to be 1.1% with substantial prevalence variation by region (6.6% in Gambella 5.0% in Addis Ababa). High in cities (5.1% above 50 thousand compared to 3.1% in smaller cities and 0.6% in rural areas [3]. In sub-Saharan Africa, HIV and poverty are inextricably intertwined [4]. Poverty and social isolation may increase girls’ risk of sexual coercion, which increases their risk of pregnancy and HIV infection [5]. Insufficient livelihood opportunities create and exacerbate vulnerabilities to HIV. People may engage in higher-risk activities to generate an income or access basic commodities, such as sex work or transactional sex [6]. Livelihood and economic strengthening in communities confronting HIV and AIDS are central to the multisectoral response and need to reflect this far from simple reality [7]. Livelihoods can be defined as the means through which individuals or households can meet their basic needs. It encompasses not only remunerated labor, but also an individual’s capabilities (e.g. level of education, skills), assets, and participation in other productive activities [8]. In recent years, the WHO and the UN have recognized that addressing food insecurity is a critical component of successful HIV interventions in resource-limited settings. Similarly to the above, it also helps to alleviate poverty and reduce the transmission of HIV [5, 9]. There was a strong consensus that improving livelihoods are an important intervention in addressing food insecurity and its adverse health consequences among PLWH [4, 10]. Studies have shown that engaging in livelihood programs benefited PLWHIV which helped them to discuss safe sex options and use preventative measures when engaging in sexual activities [5, 10]. Similarly, a study from Uganda indicated that livelihood intervention showed preliminary evidence of both economic and psychosocial benefits which improved wellbeing or quality of life. WHO defines Quality of Life as an Individual's perception of their position in life in the context of the culture and value systems in which they live and concerning their goals, expectations, standards, and
concerns [4, 11]. It also refers to the degree of excellence in a person’s life at any given period that contributes to the satisfaction and happiness of the person and benefits society [12]. Not only livelihoods but the use of ART has also become the cornerstone of the clinical intervention available to prevent transmission and slow progression of HIV infection in individuals living with HIV/AIDS [13, 14]. It also helps living longer and manages properly with diagnosis and treatment provision before HIV is transformed into a chronic illness or reduce HIV-related morbidity and mortality, provide maximal and durable suppression of viral load (VL) restore and/or preserve immune function [15, 16, 17]. Since 2003, the annual number of people dying from AIDS-related causes declined by 43% among adults reaching 54% 15 years and above [2, 18].

Even though several economic and livelihood intervention strategies have been suggested, to help mitigate the adverse effects of HIV infection in sub-Saharan Africa, more than three-quarters are poor populations. Ignorance and fear of HIV have nurtured stigma and discrimination against people living with HIV leads to a lack of access to work and treatment [4, 19]. In Uganda poverty, unemployment and hunger were widely cited and which included pushing people into risky sexual behavior to procure food and other essential household needs with low SES adversely impacts the quality of life of patients [7, 20].

Despite the benefits of livelihoods and ART, patients with Advanced HIV status are more likely to have an affected level of quality of life and wellbeing at daily bases. Quality of life (QoL) is an important outcome used in a wide variety of medical research to ascertain aspects of wellbeing in settings of health and disease and for understanding the life experience of PLWHIV which will become more important to evaluate their status and to provide necessary health and social services [21]. When PLHIV luck to acquire food, they will not take their ART that leads to impaired quality of life. In a broad-ranging concept, it can be affected in a complex way by the person's physical health, psychological state, level of independence, social relationships, personal beliefs, and their relationship to salient features of their environment. HIV/AIDS also continues to affect financially along with the above with a great impact on society both as illness & as a source of discrimination and stigma [15-16, 22].

So far, studies have widely assessed the magnitude of quality of life by the developed world but not well addressed by developing countries including Ethiopia [23-25]. Nevertheless, improving livelihoods has indicated a better outcome of patients, it has continued as a challenge to adhere to
ART and QoL [4, 9-10, 21-22, 26]. Thus, this study was aimed to assess the behavioral and livelihood factors of quality of life among PLWHIV on HAART in the study settings.

2. Materials and Method

Study design and study setting- a qualitative study using in-depth interview was employed. The study was conducted in Jimma Zone public hospitals, Southwest Ethiopia. Jimma zone is located 357 km South-west of Addis Ababa. Jimma zone is found in a region that accounted for the highest number of HIV infected people from Ethiopia. It is found near the Gambella region, a region that accounted for the highest prevalence rate of HIV from Ethiopia [3]. The study was taken place in four public hospitals called Jimma University Medical Center (JUMC), Shenjen Gibe Hospital (SGH), Agaro hospital (AH), and Limu Genet Hospital (LGH). All are general hospitals except (JUMC) which is teaching and specialized center with a pivotal role to the zone. These settings were selected because of a longer duration, enrolled many patients and presence of active electronic medical data records. They serve a total of more than 3 million people and 11,675 PLWHA were on follow up. Among them, 6310 were adults who were enrolled in chronic HIV care. The study was done from March1-April 30-2018.

Sampling size determination and Sampling technique

We recruited 31 key informants who were purposely selected from each hospital. It is composed of patient participants of local language speakers, adherence supporters, health professionals, and case managers of both sexes. All adult people living with HIV/AIDS age ≥15 years who were eligible for the study on HHART and who provided study consent and health professionals who served in Jimma zone public hospitals. We chose to interview individuals from both groups for several reasons. Of this, clients were chosen that better understand barriers from the patient perspective. Health professionals were chosen because of their involvement in counseling and treating people about HIV treatment and who served for a longer period.

Purposive sampling technique was used to seek participants with a variety of ages, gender, educational status as the study progressed in an attempt to obtain diverse perspectives. Intensity purposive sampling is used to identify common themes that transcend a focused sample. Initially, we interviewed health care providers to have an in-depth understanding of various concepts related to the study objectives. Data collection continued until it reached the point of saturation.

Data collection procedure
Data were collected by the principal investigator using open-ended semi-structured in-depth interviews. Face to face interview was employed. After giving consent, all interviews were conducted in local languages and Amharic with each informant in a private room. Each session lasted between 30 and 60 minutes. Note-taking and tape recording were used and data were collected until saturation of the idea was reached.

**Data processing and statistical analysis**

The PI concurrently gathered, managed, and assessed the data. Accurate transcribing of audiotaped interviews was carefully done in English by the PI. Then different colors were used to indicate different responses to categorize into themes that were analyzed manually. The main responses were reported in a direct quotation.

**Rigor and Trustworthiness of the study**

Data were collected from different participants’ perspectives. Participants were invited to explore the data freely and told that the findings and ideas, will be kept confidential that helped then present a true picture from their perspective. Besides, the investigator developed an early familiarity with the culture of the selected settings to gain an adequate understanding of the organization and to establish a relationship of trust.

**3. Result**

**Characteristics of the participants**

A total of 22 patients and 9 health care providers participated in the study. The majority of the patients were female, ages between 31-40 years and nearly 41% were at the primary level of education. About 77% of patients stayed greater than three years since they knew their HIV status and most of them took ART for about greater than a year. Among the health professionals, 4 of them were nurses, a doctor working as a residence, 3 adherence supporters, and a case manager.

**Table 1.** Characteristics of patients on Highly Active Antiretroviral therapy in Jimma zone Public Hospitals, South West Ethiopia, 2020 (N=22).

<table>
<thead>
<tr>
<th>Variable</th>
<th>N(=22)</th>
<th>(%)</th>
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<tbody>
<tr>
<td>Sex</td>
<td></td>
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<tr>
<td>male</td>
<td>9</td>
<td>40.9</td>
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<tr>
<td>female</td>
<td>13</td>
<td>59.1</td>
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Barriers of quality of life among respondents on Highly Active Antiretroviral

Thematic areas: The study identified several perceived barriers to patient quality of life categorized into three themes: (I) individual patients’ beliefs and behaviors related themes; (II) socioeconomic and cultural related themes; (III) healthcare provision and drug-related themes of barriers to patients quality of life while they are on HAART (IV), Livelihoods barriers

Individual patients’ beliefs and behaviors related themes

Substances

The use of substances like alcohol, chat, smokes, and behaviorally, having multiple sexual partners has been reported as a barrier by both health professionals and patients. As the interview of female 34 years old patient mentioned, I feel happy for a short period when I used to drink alcohol after chewing chat and Shish smoking. This happens especially when I meet friends. Later on, I might have exposed myself to an exacerbated and complicated state of disease. The effect of substance use has caused family distortion and wastage of my body. Then after, I decided to stop due to thinking about the fate of my three children. Now, I am happy that we are all in a good situation as elaborated by another (male 44 years old patient).

Alcohol drinking has been the usual tax of my husband (a female patient about 36 years old). Once upon a time, he left the treatment for about 8 months and missed time to take till a recent period. Due to this, we have conflicted and separated each other because I repeatedly tell him the consequence of his quality of life and the family at large that nobody will care for us. Later on,
when the holiday comes, he decided to stop drinking which helps us live together for the sake of our children.

_Perception related barriers to quality of life_

The perception of patients on the quality of life differs. (One of 42 years old male patient) from rural has mentioned that I am not feeling confident; I fear my future and worry about death. Of course, I believe in God; this helps me to adhere to the treatment.

We sex workers prefer to be happy and live a temporary life without thinking of our future. We mostly don’t even get married and become hopeless because we believe that we will not live like apparently healthy individuals (about 34 years old female patient). This poor perception portrays that patients’ quality of life may become distorted.

_Lack of HIV Disclosure_

One approach to disclosure that some HIV-positive people follow is to only tell people who come in direct contact with your bodily fluids, such as blood, semen, or vaginal secretions. The issue of disclosing your status to your partner or significant other can be complex. One of the female 32 years old patient responded that “there was one person in my neighbor who married a girl from a rural area. They didn’t test together before marriage. Later on, she encountered repeated sickness. After she got treated, severely sick continued was told to screen for HIV. Then after, she becomes positive. Although her husband had unprotected sex with many others, he lacks to disclose his status that affected the quality of life of his wife.

_Socio-economic and cultural related themes_

_Economic constraints_

Socio-economic impoverishment (loss of employment and poverty) associated with lack of access for food, clean, and safe living conditions like housing were among the major constraints to good QoL as mentioned by most of the interviewed PLWHIV. It leads to free sex work and other problems. Individual patients suffer from renting houses, don’t sit a latrine, not supported, those parent’s children will not play with apparently healthy families.

_Stigma and discrimination_

HIV related stigma was reported as one of the reasons why some patients discontinued ARV treatment or missed treatment dosage. Stigma and discrimination continue to affect the life of PLWHIV which was confirmed by about 70% of patients who have been on ART have said that “the community had common understandings (some naming) for PLWHIV. Like in Idir, we will
not cut onions or other vegetables using sharp material which the community uses a common
sign such as holding the cup down, putting different cup color, or showing the broken tip of the
cup towards us.” This implies that we are not allowed to do those activities in the gathered
settings because HIV will be transmitted by blood contact. This would let us ignore the treatment
and hurts that our life.”

Similarly “what experience I had come across last week was that there was a program in the
church where I went with my friend. She took her treatment on the way to sleep while other
individuals were there. Those who were besides have moved apart and left us alone. This is
shocking!”(a similar respondent). Therefore, stigma and discrimination are found everywhere
that continues hidden which challenges those PLWHIV on ART.

Barriers relating to religion

When PLWHIV adhere and get a change in their quality life, they will go to religious areas and
come back after they develop complications. One patient elaborated that “she went to church to
follow holly water and considered as she was relieved from it. She felt happy but later born HIV
positive kid.” PLWHIV on HAART used to mention ‘tefewushalehu’ the Amharic word to mean
I got relieved from the disease (about 28 years old male health professional).

Lack of social support

Lack of social support from organizations

So far, “there was support obtained from different community and funding organizations. Like
OSSA focusing on sex workers, unwanted pregnancy and abortion, kebele, health institutions,
and other stakeholders but due to shifting of NGOs fund on other programs they support become
a challenge for PLWHIV.” This was mentioned by a female about 39 year’s old health
professional working as a case manager.

Another female about 36 years old patient has explained that lack of support is the factor that
hinders them to take the treatment which in turn complicates the quality of life. “During the start
of the treatment, I stopped taking it for about a year. It was due to a lack of support. Even though
the source of infection was my husband, he left the family alone and we suffered a lot.
Thereafter, I preferred to stop the drug; I left to think about the treatment, which then gets
worsened. My cd4 count was below the 100 cells/µL. Thereafter I shifted into a second-line
option with the help of one professional’s support in this treatment site.”

Lack of social support from family and friends
“What makes me feel sorry is being alone. When I was a soldier my life was good as compared to the current. Although it was better to live engaged which enables us to support each other, I don’t even get enough to me. There is one Amharic proverb that says ‘sew satihon sew atifter!’ this implies that it is not advisable to let others suffer while you are still suffering. So I have to work hard by creating my own business than trying to obtain support from others.” (Patient code E male about 37 years old)

**Healthcare system provision and drug-related themes**

**Long waiting times**

Patients looking for ART services are huge in number that the catchment of the zone provides. “Due to this, long waiting time is a common problem that patients face. Some patients may come to start treatment while they come for another service due to the new screening approach of test and treat. You know, some patients like adolescents who come by long search in the community; may not wait for a long time in the setting. This may lead to loss of patients that may affect the quality of life that these patients would deserve.” (About 40 years old, male adherence supporter).

**Drug side effect**

Although the use of treatment has changed the effect on the patient’s health that boosts our energy and enables them to engage in daily living. Some treatment does have side effects and observed among some patients. “I had encountered diarrhea, gastric burn and pain due to facial skin lesions.” (About 45 years old male patient)

**Livelihoods of PLHIV on HAART and QoL**

The livelihood status of respondents was assessed and economic insecurity, food security and nutrition, and access to healthcare were recognized in the study. The study identified that about 65% of respondents were economically insecure of this, female share the highest-burden as compared to male interviewees; more than half of PLWHIV on HAART experienced reducing the quantity or number of meals eaten and going the entire day without eating along with about 35% of respondents in-able to buy treatments.

**Economic insecurity**

According to this study, about 65% of respondents were economically insecure of this female share the highest-burden as compared to male interviewees. Without adequate livelihoods and skills, we rely on sex work and domestic activities in unsafe conditions for income. Socio-
economic impoverishment (loss of employment and poverty) leads to inaccessibility to food, clean water, and safe living conditions like housing (36 years old female patient). Economic insecurity heightens vulnerability through increased mobility and unsafe migration in search of livelihood opportunities and the risk of HIV transmission through transactional sex to secure income or access to commodities.

Food security and nutrition

Regarding food security and nutrition, it is obvious that lack of livelihood strategies has a direct impact on household food security, a critical need for PLHIV. It was true and mentioned by more than half of PLWHIV on HAART experienced reducing the quantity or number of meals eaten, and going the entire day without eating. Access to food is still a challenge for PLWHIV, which was evidenced by a 37 years old male, Patient who attended JUMC ART clinic “Eddddd…. this is not questionable, leave a year alone I cannot tolerate even for a day. What I am always getting stressed is the issue of obtaining adequate food. Look, after I eat my breakfast, I think of the next meal and wait until the time to feed will go. If there is no food for dinner, I will tie my abdomen and sleep without it.”

However, this is not easily captured which becomes a significant focus to adhere to the treatment. About 28 years old male Health professional has mentioned that patients refuse the drug by saying “if I don’t get food, how can I take the drug? If we let them take the drug, they say take it for yourself! Some patients buy plumpy nut which is sold outside but when I try to do so I don’t have money.” Some patients do not persistently gain weight; when assessed, it may not be because of luck awareness but also due to poor access to food which on the other hand, affects their quality of life.

Access to healthcare

Regarding access to health care, about 35% of respondents have suffered from a lack of income to buy treatments. For PLHIV, insufficient income impacts their ability to access healthcare. “Although antiretroviral therapy (ART) is often free, there are many other costs associated with healthcare that are not. These may include transport to clinics and treatment for opportunistic infections, (by 35% of interviewed respondents).

4. Discussion

The study identified barriers of quality of life that were diverse, with a wide spectrum related to individual patients’ beliefs and behaviors, socioeconomic and cultural related and health care
provision, and drug-related factors of quality of life. It was identified that the use of substances, poor perception of QoL, and lack of HIV status disclosure were among the individual patients’ beliefs and behaviors related factors.

The major individual patients’ beliefs and behavioral constraints that affected the quality of life were substance use, especially alcohol drinking. Both patients and health care professionals have mentioned the link between excess alcohol intake and quality of life, in that alcohol drinkers often “ignore” or “forget” their medications that lead to poor adherence [25]. Since ART adherence is known to contribute to the QOL of people living with HIV and AIDS, and QOL is in turn believed to positively influence adherence, as persons with better QOL may have a greater ability to adhere to their ART regimens[17]. A patient interviewee also told as it leads to the risky sexual pattern that intern caused family distortion. Regarding perception, most patients experienced negative feelings about the quality of life. This thought is supported by the study from Ghana, that Patients’ self-appraisal of their health significantly predicted their quality of life, with lower QoL recorded among those who perceived themselves as ill [27]. The in-depth interviews revealed other factors to be important for a good QoL in addition to good health, such as having money, building a house, family relations with spouses and children. Disclosing HIV status to a partner showed to be complex and most of PLWHIV suffered [28-29].

Among the socioeconomic and cultural related barriers, economic impoverishment (loss of employment and poverty) associated with lack of access for food, clean and safe living housing was mentioned by most respondents consistent with other studies [17, 20, 28, 30, 37]. Socio-cultural factors, such as stigma and discrimination also had significantly affected QoL. Informants articulated that stigma and discrimination were still widespread, both at the families as well as communities. Some participants did not take medicine in front of people they knew due to fear of being identified as HIV-positive [12, 15, 29, 31, 38-39].

Another barrier to QoL included was religious activities; patients miss or delay medications to fulfill religious obligations. The health professional has speculated that patients use the spirit of holy water as a means to resolve from HIV/AIDS. Holly water is a healer, a curative means for all diseases, something that benefits the flesh as well as the soul, or an instrument by which God and the saints give forgiveness [32]. Lack of social support negatively affects QoL. Although married respondents reported higher family functioning compared to non-married respondents, the effect of better family interaction was also found to be beneficial in non-married
respondents, indicating that both immediate and extended family relationships may be contributing to better QoL [30]. It was also taught that there exists a positive relationship has been linked between social support and QOL among women living with HIV/AIDS [33]. Although the use of treatment has changed the effect on the patient’s health that boosts our energy and enables them to engage in daily living. About 65.5% of patients had developed at least one adverse effect on antiretroviral drugs. Of these, some caused severe side effects observed among patients [34]. This was supported by the study in Nigeria, that patients on a lower pill regimen had better QoL as explained probably related to fewer side effects, fewer tablets to swallow, and a smaller container (easy to convey and a pocket-friendly package) [31]. Along with this PLWHIV faced long waiting times that leads to patient negative treatment outcomes.

Regarding the livelihood status of respondents, it was assessed using three pillars that include economic insecurity, food security, and nutrition, and access to healthcare was recognized in the study [6]. When we see the economic status, about 65% of respondents were economically insecure, of this, female share the highest-burden as compared to male interviewees. The majority of the female respondents highlighted that it is the major challenge they face which leads to seeking extra demands of the household that intern affected their wellbeing by exposing themselves to risky sexual behaviors. Participants from a similar study reported complex economic lives often characterized by multiple economic activities, including both formal and informal labor [29]. Likewise, a diversified livelihood had a profound influence on positive self-perceived physical health [4, 20].

Regarding food security and nutrition, it is obvious that lack of livelihood strategies has a direct impact on household food security, a critical need for PLHIV [6]. It was true in this study and mentioned by more than half of PLWHIV on HAART experienced reducing the quantity or number of meals eaten, and going the entire day without eating. A similar study, two-thirds of PLHIV initiating ART lived in households affected by moderate to severe food insecurity that leads to poor quality of life [35]. Access to food continues to challenge those not to adhere to their treatment which leads to disease complications and exacerbation that likewise shifted them to take second-line medications. Regarding access to health care, about 35% of respondents have suffered from a lack of income to buy treatments of Opportunistic infection though other services are obtained free which is supported by the Northeastern region of Brazil [6, 36].
**Strength and Limitations**

The finding of this study is based on interviews with 31 informants taken from different respondents. All the interviews were tape-recorded. The results reflect diversity in views and experiences in terms of source and data helped to strengthen the validity of the results. These findings offer an understanding of the complexity and dynamics of the different factors that may influence QoL. Despite the strengths, the study may have limitations since all interviews were collected by the principal investigator that might have encountered bias.

**5. Conclusion**

The study identified a range of behavioral and livelihood barriers to QOL: substance use, economic constraints, poor perception, lack of disclosure, fear of stigma and discrimination, religion, lack of social support, drug side effects, and long waiting time. On the other hand, the livelihoods of respondents on economic insecurity, food, and nutrition insecurity along with lack of access to health care services were among the major challenges that patients faced. Therefore, the study would like to inform the development of effective interventions that address the barriers of QoL and livelihoods. Priority should be given to improving QoL by alleviating livelihoods, economic constraints to better access to treatment services, use of substance, stigma and discrimination. Also, health professionals should encourage them develop good perception, disclose to relatives, adhere to educate and counsel to manage religious obstacles. Similarly, professionals should explain the side effects of drugs and need to develop mechanisms to shorten long waiting hours.

**Declarations**

**List of Abbreviations**


**Ethical Approval and Consent to Participate**

Ethical clearance was obtained from Jimma University Research Ethics Review Committee.
A formal written letter was obtained from the Population and Family health department to Jimma zone health office and respective hospitals. Permission was obtained from the facilities and written informed consent was obtained from all informants including guardians whose child was under the age of 18 years. The interview procedures were conducted completely in a private room. The informants were ensured that all data would be kept confidential by using codes to identify participants and were also clearly informed about their right to refuse to participate in the study or withdraw at any time during the interview session. Completed recorded information was kept confidential.

Consent for Publication
Not applicable

Availability of Data and Materials
The data sets used and/or analyzed during the current study are available from the corresponding author of the research on reasonable request.

Competing Interests
The authors declare that they do not have competing interests.

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Author Contributions
AA: Involved in the inception, design, data acquisition, analysis, and interpretation, and wrote the manuscript. TT and AM: Participated in data acquisition, analysis, and involved in critical reviewing of the manuscript. Finally, all authors read and approved the manuscript.

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References


[6] The United Kingdom (UK); “the link between HIV and Livelihoods, ”Stop HIV/AIDS; Fact sheet on, 2013;1–4. www.stopaids.org.uk@STOPAIDS.


