The East African Journal of Social Sciences and Humanities (EAJSSH)
ISSN: 2619-8894 (Online), 2619- 8851 (Print)

Household Gender Relations and Adherence to Antiretroviral Therapy in Njombe District, Tanzania

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Received: February 12, 2019; **Accepted:** June 25, 2019; **Published:** May 5, 2020

Abstract: ***The government of Tanzania initiated the rollout of free antiretroviral therapy (ART) to reduce mortality and morbidity rates and improve the quality of life for people living with Human immunodeficiency virus and acquired immune deficiency syndrome (PLWHA). The initiative will be successful once the services are widely accessed and register a high level of ART adherence by PLWHA. There are however, limited empirical studies on how gender-related factors affect access to and follow-through treatment for HIV and AIDS hence the need to fill this knowledge gap. The study adopted a cross-sectional design to collect data using a structured questionnaire in Njombe Region, Tanzania. The findings reveal that heterosexual intercourse with a spouse was the leading cause of HIV transmission for women (64.9%), and casual sex outside of marriage was the major cause for men (54.3%). It was revealed that 45.5% of respondents reported women to be responsible for income generation at the household. The study found that 81.4% of women, compared to 42.9% of males walked to the clinic while only 14% of women paid for transport to get to the clinic, compared to 40% of men. It was found that 30% of women and 17% men had no access to a special diet required by the PLWHA. Findings indicate that 96.6% of females and 85.6% of males patients took their medication as prescribed and attended scheduled clinics (97.1% of men and 93.8% of women) as planned. Heavy household workload was reported to constraint women in taking medication on time. Maintaining a good diet was a problem reported by most of the respondents, especially women. The study concludes that as treatment programs are rolled out and scaled up, household gender relations still affects adherence in different ways, therefore considering gender aspect will improve access and adherence to ART for PLWHA.***

Keywords: HIV and AIDs, adherence, ART, Gender division of labour, decision making, access to resources

1. Introduction

HIV and AIDS have affected Tanzania for more than three decades, and have affected all sectors of the population (Nsimba, *et al.*, 2010). Following the Government of Tanzania's declaration in 1999 that HIV and AIDS represent a national disaster, new policies, plans, and strategies were developed at international, national, and subnational levels (URT, 2010). Since then, various health and non-health-related initiatives to address the socio-economic and development impacts of HIV and AIDS have been implemented by a wide range of stakeholders, including the government, NGOs, and others.

Although efforts to find a cure for HIV and AIDS have not been fruitful, the Government of Tanzania initiated the rollout of free ART in 2004 as part of comprehensive prevention, treatment, and care strategy. This intervention has dramatically reduced rates of mortality and morbidity, improved the quality of life for PLWHA, revitalized communities, and transformed the perception of AIDS from being a plague to a manageable chronic illness (Paterson *et al.*, 2000; Irunde, *et al* ., 2005).

The Tanzania Government's efforts to make antiretroviral (ARV) drugs available to PLWHA have been one of the registered national achievements in the health sector. However, the availability of ARVs does not guarantee that all infected men, women, boys, and girls, may have equal access to the treatment. PLWHA must maintain adherence to an ART schedule and consume the entire course of drugs prescribed, to prevent resistance and improve their chances of survival (Wasti *et al*., 2012). However, patient behaviour can be affected by personal, socioeconomic, infrastructural, and other challenges (Etienne, *et al.*, 2010; Nsimba *et al.*, 2010; Rutayuga, 2011; Idindili *et al*., 2012; Wasti, *et al*., 2012).

In some countries where treatment is available, for example, women are less likely to access it than men, owing in part to cultural norms that prioritize men's treatment—the traditional breadwinners (Joint United

Nations Programme on HIV/AIDS, 2006). The International Community of Women Living with HIV/AIDS argues that gender inequality within households and families is a barrier to women's access to information, treatment, support, and other health services. Moreover, many women must obtain permission from a husband or a male relative to seek HIV care (International Community of Women Living with HIV/AIDS, 2004).

Findings from previous research on adherence to ART services are inconclusive. In Ethiopia, men were more likely than women to discontinue ART, but there was no clear explanation for this gender difference (Mekonnen *et al.*, 2010). An assessment of the uptake of ARVs in Malawi found that men are unlikely to access treatment out of fear of marital discord because men testing positive are perceived to have contracted HIV because of infidelity. Given that the desire for marital harmony affects men's willingness to access testing services, many men face a barrier in obtaining and maintaining treatment (Muula and Kataika, 2008; Campbell *et al*., 2011; Skovdal *et al*., 2011).

Depending on social and cultural norms related to gender, one's gender can increase personal vulnerability to HIV and influence one's ability to access information about preventive measures, care, support, and treatment. Hence, gender inequity is recognized as a major barrier to effective care, treatment, and prevention efforts (World Health Organization [WHO], 2003; Herstad, 2010). In Tanzania, efforts to address gender issues have been initiated only recently. Such efforts aim to ensure that gender considerations are mainstreamed in development programs, interventions, and policies affecting the care and treatment of people affected by HIV and AIDS. Although research has been conducted to understand factors influencing ART access and adherence, these studies have limitations. Most were conducted in Asia, Latin America, and a few countries in Africa. Among the available studies from other countries, few have specifically captured gender-related factors (Puskas *et al.*, 2011; Skovdal *et al.*, 2011; Tapp *et al*., 2011).

In Tanzania, few studies have analysed gender factors related to ART adherence (Roura, *et al*., 2009; Nsimba *et al*., 2010; Rutayuga *et al*., 2011; Idindili *et al*., 2012). Most studies in Tanzania paid little attention to a gendered analysis of the factors influencing adherence to ART. Gender has been mentioned as a variable contributing to none-adherence but without an exploration of how this occurs. Given the paucity of gendered analyses of factors affecting adherence to ART services, it is likely that equitable access to these services will not be attained. Therefore, this study was conducted to establish an empirical gendered analysis on factors affecting access and follow through the HIV and AIDs treatment. The study sought to answer the following research questions i) How does the household division of labour affect ART access and follow-through? ii) How does household decision making on access to and control of resources affect ART access and adherence? iii) What is the level of PLWHA adherence to ART services?

2. Theoretical and Conceptual Framework

Gender Analysis Framework

The study adopted Moser's gender analysis framework commonly known as Moser triple roles Framework. The choice of the framework was guided by the key study questions where the interest was to assess how household labour division and households' decision making on resources affect ART access and adherence.

The framework has six tools for undertaking gender analysis. In this study, only three relevant tools were applied in conducting gender analysis on adherence to antiretroviral therapy (ART). The first one is the gender roles identification tool; the tool was useful in exploring division of labour within the household and community by asking "who does what between various gender groups". Moser's idea of women's 'triple role' in production (farm work), reproduction (household work and childcare), and community affairs, and the multiple roles women perform simultaneously were useful in analysing how all these roles affect women and men access and adherence to ARTs.

The second tool is disaggregating control of resources and decision-making within the household. The tool assesses who has control over which resources within the household, and who has what power of decision-making have been expected to influence access and adherence to ART services. For example, regular visits to scheduled clinics require patient's access to transport facilities like bicycles or having transport fare in case the family does not own one. Other studies have revealed that the inability to access basic resources like food, housing, and transportation had a direct negative effect on adherence (Ankomah *et al*, 2016; Cornelius *et al*, 2017). In these cases, women might be largely affected since they have no control over various transport facilities that are owned by their male partners.

The third tool is a gender needs assessment that focuses on practical and strategic gender needs that are required for the patients to adhere to ART services. While the free ARTs services by the government intend to meet practical gender needs of improving access to health services it is important to examine how far the intervention addresses structural factors that may limit various gender groups in adhering to the services. Evidence suggests that efforts to provide and scale-up ART to all HIV+ persons must be accompanied by interventions that address structural and individual level access barriers (Ankomah *et al*; 2016). For example, some structural factors like stigma, lack of social support, male involvement, self-efficacy, and agency among pregnant women diagnosed with HIV positive reported limiting women participation in prevention of mother-to-child transmission (PMTCT) participation under Option B+ (Flax *et al*; 2017).

3. Methodology

The study was conducted in Njombe District of Njombe Region, Tanzania from October to November 2015. The region recorded the HIV prevalence of 14.8% which is the highest in the country (TACAIDS, *et al.*, 2013). A cross-sectional design was used, in which data were collected once by the project team. The study population consisted

of males and females living with HIV/AIDs in Njombe District who were registered at the one public permanent CTC located at Lupembe Village and one mobile CTC from Matembwe village CTC centre within the district. These CTCs are among the oldest and most well-established in Njombe District. The study's inclusion criteria required the PLWHA to be more than 18 years of age, registered at one of two ART programs within Njombe District for at least three months. The researchers guided the respondents to offer verbal or written consent to show their willingness to participate in the study. With the support of the CTC staff, participants were selected daily from those who attended a scheduled clinic visit on that day for five days consecutively. Owing to the sensitivity of the study topic, a convenience sampling technique was used to identify and select respondents who meet inclusion criteria and offer consent to participate. Whenever the selected respondent was not willing to participate, a replacement was made with assistance from the CTC staff. A total of 132 respondents (97 females and 35 males) completed the structured questionnaire that was used for the quantitative data.

The study used a mixed-method approach in data collection. For the quantitative component, a structured questionnaire was used at the CTCs to capture individual patient information related to adherence and treatment. Personal information was collected on lifestyle and risk behaviours, ARVs missed doses, attendance at the clinics, and HIV/ART knowledge. The structured questionnaire also captured data on socio-cultural and gender-related challenges influencing ART access and adherence. The qualitative component consisted of semi-structured interviews with key informants (KIs) and Focus Group Discussions (FGDs) participants. The KIs involved, health workers, staff working with Non-Governmental Organizations (NGOs) that provide direct support to the visited CTCs and community caretakers. A semi-structured interview checklist and FGD guides were used to collect information from key informants and FGD participants on gendered factors related to the care and treatment of HIV and AIDS. Given the fact that HIV/AIDS issues are sensitive, two separate sexes disaggregated FGDs were conducted to complement information from the structured questionnaire. One FGD consisted of eight women and the other had seven men.

The qualitative data were analysed using content analysis while quantitative data were analysed using descriptive analysis. The adherence to ART was descriptively analysed based on four components. The respondents conduct a self-assessment/rating on each component based on the specific scale provided in the questionnaire. The first component was adherence based on the ability of the patient to take all medications prescribed for the past 4 weeks. In this scale, the respondents rate him/her in five scales i.e. from very poor to excellent. The second component was adherence to scheduled clinical visits for the past four weeks where a respondent indicates if her/his attendance is a little bit of the time, most of the time or all the time. The third component was measuring the percentage of medication taken for the past four weeks whereby the respondent indicated the estimated percentage from 60, 70, 90 to 100. The last component focus on how frequently the respondents follow recommended food instructions.

4. Findings and Discussion

4.1 Participant Characteristics

Table 1 shows that about 87 % of study participants were 26–58 years of age. Very few clients were ages 18–25 or older than 58 years of age. Half (50.8%) of all respondents were married. Almost one- third (30.3%) were widows or widowers of which 29.5% were women. More than half (56.8%) of all study respondents (24.2 M and 32.6 F) were heads of households of which 32.6% were the female heads of households. About 86 percent of all respondents had a primary level of education. Study findings reveal that 91.7 percent of participants reported farming as their major occupation. Very few reported being employed in the formal sector or keeping livestock as their primary occupation. More than half (56.1%) of all respondents had a household size of 4–6 members, and 39 percent had a household size of fewer than four members. More than half of respondents (52.3%) reported earning less than 50,000 Tanzanian shillings (Tsh) per month (equivalent to US$22), and 21.2 percent earned Tsh 51,000–Tsh 100,000 (US$23–$46). Only about 19 percent earned more than Tsh 151,000 (US$69) per month. This can be attributed to the fact that nearly three- quarters (73.5%) of the study participants were women, who tend to earn less than men.

Table 1:Socioeconomic characteristics of respondents (n = 132)

Category	Male		Female		Total Percentage
	Frequency	Percentage	Frequency	Percentage	
Age 15–25 years	2	1.5	6	4.5	6.0
26–36 years	7	5.3	29	22	27.3
37–47 years	16	12.1	39	29.6	41.7
48–58 years	7	5.3	17	12.9	18.2
59+ years	3	2.3	6	4.5	6.8
Marital Status					
Married	29	22	38	28.8	50.8
Widow/widower	1	0.8	39	29.5	30.3
Divorced	1	0.8	14	10.5	11.4
Single	3	2.3	4	3	5.3
Separated	1	0.8	2	1.5	2.3
Relation to Household Head					
Head	32	24.2	43	32.6	56.8
Spouse	0	0	40	30.3	30.3
Relative	0	0	1	0.8	0.8
Child	3	2.3	13	9.9	12.2
Education Level Achieved/Completed					
No education	2	1.5	9	6.8	8.3
Primary Education	30	22.7	83	62.9	85.6
Secondary education	3	2.3	3	2.3	4.6
College education	0	0	2	1.5	1.5
Occupation					
Farming	32	24.2	89	67.4	91.7
Petty business	2	1.6	5	3.8	5.4
Livestock keeping	0	0	2	1.5	1.5
Employed in the formal sector	1	0.7	1	0.8	1.6
Household Size (Persons)					
1–3	11	8.3	37	28	36.3
4–6	19	14.3	50	37.9	52.2
7 and more	5	3.8	10	7.6	11.4
Average Monthly Income (in Tanzanian Shillings)					
<50,000	17	12.9	57	43.2	56.1
51,000–100,000	7	5.3	21	15.9	21.2
101,000–150,000	6	4.5	4	3.0	7.5
>151,000	5	3.8	15	11.4	15.2

4.2 Household Division of Labour's Effect on Access and Follow-Through of ART

The findings reveal that women were the ones playing a central role in most activities in households. As shown in Table 2,

The East African Journal of Social Sciences and Humanities (EAJSSH)
ISSN: 2619-8894 (Online), 2619- 8851 (Print)

respondents reported most activities to be either done by women only: namely feeding children (64.0%), washing clothes (81.8%), and cooking for the family (83.3%) or done by women with support from other household's members like agricultural activities (53.0%) and livestock management (32.6%).

In Table 2, only 4.5% of the respondents indicate men to be responsible for household income generation while in the same activity 45.5% reported women to be responsible for income generation. Other household members like children and relatives were involved largely in supporting wife/mother in carrying most household chores.

Men acknowledged the existence of unequal distribution of household roles. A male FGD participant said the following:

> *In most households, there is no equal distribution of responsibilities among men and women, so in that case, women are the ones who perform the majority of the work at home than the men.*

It was reported by women in the female FGDs that men were less engaged in agricultural activities. They stressed that some men helped with land preparations, but not other farm activities. The findings in Table 2 revealed that women were much more involved in activities related to livestock management than men.

Table 2: Gendered Division of Labour at the Household (n = 132)

Activity	WA (%)	WO (%)	OM (%)	MO (%)
Feeding the young children (n= 94)	64.0	5.3	1.5	0.0
Washing family members' clothes (n= 130)	81.8	14.5	2.3	0.0
Cooking for the family (n= 132)	83.3	11.3	5.3	0.0
Taking care of the elderly (n= 21)	11.4	3.9	0.8	0.0
Household income- generating activities (n = 126)	45.5	40.1	5.3	4.5
Agricultural activities (n= 131)	37.8	53.0	8.4	0.0
Livestock management (n= 98)	34.1	32.6	6.1	1.5

Key: WA=Women alone, WO = Women with some support from other households' members, MA=Men alone, OM=Other household members (children and relatives)

Unequal division of roles was reported to have negative implications on women's adherence to ART especially on sticking to the recommended time of taking the medicine. A key informant reported that the biggest challenge women faced with taking their medication on time were their heavy workload, as expressed below:

> *There is a high level of commitment on the part of women on adhering to medication since they know medication is their life, but the challenge is on taking the medication on time due to so many activities they have to do at home.* (*Female FGD participant*)

Women engagement into tight household chores affect the adherence to another important schedule like eating time that affected taking medication that required to be taken with food as expressed in FGD below:

> *Given so many activities shoulder on women…. Sometimes we fail to prepare food on time or once you have prepared the food you don't get time to eat on time…….. if this happens women will always push their medication later though wonted miss it. (Female FGD participant)*

Another female FGD participant supported the argument as expressed below:

> *Men can rest but not women.* (Female FGD participant)

It was reported by men in the male FGD that, even when both partners were HIV-positive and recommended to get time to rest women experienced more difficulties to adhere to the recommendation because they were overburdened with household chores., These were chores that men rarely did, as indicated by one male FGD participant in the quoted statement :

> *We love our wives, but there are some duties men cannot do. . .. They should continue doing them unless they are too sick to do them (Male FGD participant).*

Even though the FGD participants said that household chores limit women from taking their medication on time but the majority had never missed their doses (Fig. 1 and 2). This is because they will always push the medicine later till when they get free time to take them.

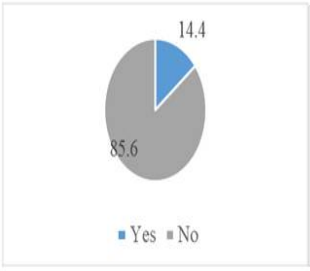

Figure.1: Ever missed dose since started A RV medication

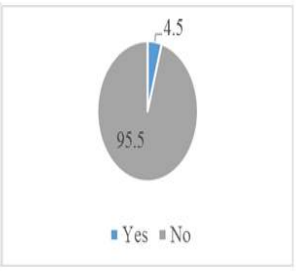

Figure 2: Ever missed dose for the past one month

The findings further show that both men and women (89.7% M and 85.7% F) reported not to have a specific household activity that kept them too busy to attend scheduled appointments. During the FGDs, women participants reported that, despite a heavy workload, they still managed to adhere to the scheduled clinic visits more consistently than did men. Patients valued attending scheduled clinics in person rather than sending someone to collect the medication for them, as expressed by one woman:

> *"Attending in person is very important since you're supposed to check the progress of your CD4 count. ..... Our doctors do not encourage sending representatives several times; they want to see you in person."(Female FGD participant)*

This shows that most PLWHA are aware of the importance of visiting clinics in-person check-ups. This also explains why women, despite heavy workloads, try not to skip their clinic visits. One female FGD participant said the following:

> *"How can I not come to the clinic? I am now depending on these pills; my health was very bad as compares to now..... this is a place you cannot ignore to come if you have this disease (Female FGD Participant) ."*

Male FGD participants confirmed that women are more likely to attend scheduled appointments. Men usually go to clinics when their health conditions worsen. One male participant declared the following:

> *In most cases, women are more likely than men to attend clinics. . .. Most men prefer to go to the clinics after their health conditions have started to become critical. You will hear somebody saying 'ndifwa' "* [a native word implying, "I am dying"] *and that is when he remembers to go for medications (Male FGD participant*).

One key informant reported that patients attend scheduled clinic visits more frequently than before:

> *Nowadays things have improved, unlike in the past. Many patients try to keep the schedule for visiting the clinic. Even if they are not able to come, they usually send someone to collect some medication for them. Currently, when patients are requested to indicate next of kin, who in case of emergency is allowed to collect medication for them, they normally mention their partners or a close relative.* (Male key informant from CTC).

Generally, unequal household division of labour still burdens women more than men. Women engage in most of the household chores and income-generating activities. However, this has not affected women's adherence to scheduled clinic visits but interfere with the medication schedule. Although the study found that women don't miss their dosage the challenge was revealed on taking dosage on time as per prescription. The finds compare well with the study that was conducted in Papua New Guinea where half of the respondents reported never had taken their medication on time (Gare *et al*, 2015). In this study, we found that the coping mechanism adopted by women is to push the medication later once they find themselves to be busy. This tendency has reported having health implications for the people living with HIV and AIDs because dose timing has a stronger association with viral suppression (Gill *et al*, 2010) and the overall success of ART.

4.3 Household decision making on Access to and Control over Resources and ART Adherence

Access to and control over the various resources is an important aspect for people living with HIV/AIDS. The study underscores how access to transport services, income, and food affects access and adherence to ART. The participants were specifically asked on time spent going to the clinic; transport used and who pays the transport costs; if their dependence on transport facilities or charges; their access and control of diet needed by people who are on ARTs.

4.3.1 Travel Time to Clinic and Means of Transport

More than half of participants (58.5%) spent one hour or less traveling to the CTC and more than a third (38.6%) spent one to one-and-a-half hours (Table 3). Most participants (71.2%) went to the clinic on foot. Though no women reported using a bicycle, about 17 percent of men said that they used a bicycle to the clinic. Women were not restricted from using the family bicycle, but they preferred not to do so, because, culturally, bicycles are seen as being for men only. One female FGD participant expressed this sentiment:

> *Hmm! How can I use a bicycle? In this area, women usually don't use bicycles.*

Given that most women walked to the clinic (81.4% of women, compared to 42.9% of males), only 14 percent of females indicated they use paid transport to get to the clinic, compared to 40 percent of males. One female FGD participant said the following:

> *Women are facing the challenge of getting money for a bus or motorcycle fare. Most of the time, women wake up early in the morning and walk to the clinic. . .. If you have the same clinic appointment as your husband, he is likely to pay for you, but not when you go on your own (Female FGD Participant).*

Very few participants (2.9% of males and 6.2% of females) declared that their dependence on transport affected their access and adherence to ART. This is because the ART services have been brought close to the clients. The evidence is provided by short walking distance reported by the majority.

Table 3: Access to, Control Over Resources and Adherence to ART (n = 132)

Statements	Male	Female	All
Travel time to the clinic			
Less than 1hour	9.1	24.2	33.3
1 hour	6.1	18.9	25.0
1.5 hours	3.0	10.6	13.6
2 hours	5.3	14.4	19.7
3 hours	2.3	3.8	6.1
More than 3 hours	0.8	1.5	2.3
Transport used to reach the CTC			
Bicycle	17.1	0.0	4.5
Public transport	22.9	16.5	18.2
Private transport	17.1	2.1	6.1
Walk (on foot)	42.9	81.4	71.2
Do you pay for the transport fare? (n=80)			
Yes	40.0	14.4	21.2
No	42.9	38.1	39.4
N/A	17.1	47.4	39.4
Does the dependence on transport affect adherence to scheduled clinics? (n=60)			
Yes	2.9	6.2	5.3
No	51.4	36.1	40.2

medications. .. .. We just eat anything available in our homes. (Male FGD participant)

One key informant stated the problem as follows:

> *Some few clients complain that food is not available, but the majority, they get food. . .. The problem is for some food items, like meat and milk, which needs to be bought.* (Key informant from CTC)

4.3.2 Accessing a Special Diet

Nearly all the respondents (99.2%) were aware of the fact that taking ARVs requires someone to eat well and about 80 percent of the respondents agreed that a special diet was required for those on ART. One female focus group participant said:

> *We are not allowed to take any medication without taking enough food. If you don't take food, you are advised to take a lot of water before the medicine. It has been a norm for us to make sure that we eat something before taking our tablets. If you take tablets before eating, you feel very bad.*

Men in the FGDs reported the following:

> *We are usually advised by the doctors to eat frequently varieties of food, including fruits, vegetables, and* [whole] *grains.……The doctors also insist on a balanced diet, due to what they said it will strengthen our body immunity systems and thus enable the proper functioning of medications (Male FGD participant*).

A CTC staff member pointed out that ART clients are advised on eating well.

> *We always advise our clients who are enrolled on ART on eating diverse foods for the maintenance of their health. . .. Most of them, they do adhere, since failure to eat well affect the intake of medicines (Male key informant).*

The findings revealed that fewer than half all survey respondents (47.7% of all, including 48.6% of men and 47.4% of women) reported having access to the special diet needed by someone on ART. Nearly twice as many women as men (about 30% versus 17%) said they did not have access to that diet. The same problem was reported during the FGDs:

> *For some foods, like the ones which are good sources of protein, we have to buy from the markets or neighbours in the village. For example, one litre of milk is sold at Tsh1000 of which some cannot afford. The challenge is low income for the majority of the people. For the people who are doing small business or casual labour, you can buy most of the foods.* (Female FGD participant)

The limited access to some food items was confirmed by male discussant as follows:

> *Due to tough economic conditions for most of us, it is often not possible to afford all the dietary requirements suggested by doctors as part of*

Table 4: Access to and control over food and adherence to ART (n = 132)

Statements	Male	Female	All
Do you have access to a special diet for people taking ARVs?			
Yes	48.6	47.4	47.7
No	17.1	29.9	26.5
N/A	34.3	22.7	25.8
Do you have control over the special diet?			
Yes	42.9	46.4	45.5
No	2.9	8.2	6.8
N/A	54.3	45.4	47.7

4.3.3 Access to Income

As explained before, some foods that are important for people living with HIV/AIDs are not locally available. Hence requires someone to buy. When asked which activities were done by women to earn money to buy food, the primary activities mentioned in female FGDs were plucking tea and carrying timber. However, the availability of employment or farm work for women did not mean that the income earned would be controlled by them and be used for their own needs, such as paying for transport to the CTC or buying food. One female FGD participant said the following:

> *Some few crops, like millet, beans, can be controlled by women. . .. These are women crops; but once you sell, the money will be spent on the family.*

Women in the FGDs said that it was common for men to exercise full control over the household finances, even when the income was a result of the women's efforts. One said the following:

> *Some men tend to steal the harvested crop and sell so that they can get money for drinking alcohol.*

When the female FGDs participants were asked what would happen if a woman decided to sell crops to contribute to the household income, the women said that their husbands would physically abuse them. One said this:

> *If a woman decides to sell some crops for supporting family needs, their husbands beat*

them. . .. Men can even leave their home once a woman had sold some crops without his permission.

It is well known that income is one of the factors facilitating access to and follow-through with care and treatment services for PLHIV (Grede, *et al.*, 2014; Tomori *et al*., 2014; Mugisha *et al*., 2014). The study findings show women have no decision-making power over household resources particularly income. This affects women's position, ultimately making them financially dependent on their partners. Unlike men who reported using paid transport means as motorbike women opt for walking to health centres during scheduled clinics due to lack of financial independence. Therefore, financial dependence underscores women's lack of agency in relationships hence continue to be one aspect of disempowerment that women face when trying to address their healthcare needs. The study by (Brashers, *et al.*, 2004; Weitz, 1989) reported that people living with HIV experience medical, social, and personal uncertainties that require an appropriate management strategy if they are to avoid negative consequences. In this study we argue that even though women often support their husbands' adherence to ART, they continue to be more vulnerable, owing to poor access to reproductive resources and decision-making power.

4.4 Overall Adherence to ART

The findings in Table 5 indicate that most patients (96.6% of females and 85.6% of males) could take all their medication as prescribed and attended scheduled clinics (97.1% of men and 93.8% of women) as planned. When asked about adherence to clinic visits, one key informant said the following:

Nowadays it is not like in the past. The patients try to keep the schedule for visiting the clinic. ... Women are the leading in terms of registered clients and adherence to the [clinical] visits.

Table 5.Adherence to ART prescribed medication and scheduled clinics

Statements	Male	Female	All
Ability to take all medications prescribed for the past 4 weeks			
Very poor	5.7	2.1	3.0
Fair	8.6	1.0	3.0
Good	17.1	15.5	15.9
Very good	31.4	43.3	40.2
Excellent	37.1	38.1	37.9
Adherence to scheduled clinical visits for the past four weeks			
A little bit of the time	2.9	6.2	4.5
Most of the time	20.0	28.9	26.8
All the time	77.1	64.9	68.7
Percentage of medication taken for the past four weeks			
60	2.9	0	0.8
70	5.7	0	1.5
90	8.6	3.1	4.5
100	82.9	96.9	93.2
How often do you follow food instructions?			
a little of the time	1.5	0.8	2.3
a good bit of the time	3.8	15.2	18.9
most of the time	11.4	37.1	48.5
all of the time	9.8	20.5	30.3

Both male and female FGDs participants acknowledged that they had received sufficient education on dietary requirements, especially for people who were on ARVs. They reiterated that noncompliance with dietary recommendations was not due to lack of knowledge or interest, but rather lack of money or seasonal scarcity of some foods.

Despite these challenges, our study reveals that the overall rate of adherence to ART is more than 60 percent among men and women. This degree of adherence is attributed to a higher level of awareness about the importance of ART services among PLHIV and the increasing accessibility of CTC locations. These two factors have improved attendance to scheduled clinic visits even for the people with limited financial resources or means of transport. These findings regarding levels of adherence to ART compare well with those from similar studies reported in the literature. For example, a study conducted in Botswana; found that between 54 percent and 56 percent of patients had an optimal adherence rate of at least 95 Percent (Weiser, et *al*., 2003). Despite improvements in adherence, men and women have still not achieved the recommended adherence levels for ART. People with HIV must achieve at least 95percent ART adherence to avoid treatment failure and the risk of developing drug-resistant strains of the virus. For this reason, poor adherence to ART is a problem, with implications both for clients' well-being and public health (Sethi *et al*, 2003).

5. Conclusions and recommendations

Generally, the study reveals gender relations within a household to be a barrier to effective care, treatment, and prevention of HIV. As treatment programs are rolled out and scaled up, gender inequity still adversely affects adherence in different ways for women and men living with HIV and AIDs. Though the findings show both men and women scoring high in almost all dimensions of ART adherence like taking prescribed medications on time, adherence to scheduled clinics, taking a special diet, and taking all medications as prescribed there are still gendered challenges. The unequal division of roles was reported to have negative implications on women's adherence to ART especially on sticking to the recommended time of taking the medicine. Consequently, the health of these women is likely to be affected by failure to adhere to timely medication-taking as per doctor's prescription. Hence it is important to continue sensitizing patients to improve adherence to dose timing for their overall health benefits. Clients can be advised to use a mobile phone to set reminders for the time of medication as it was reported to be successful for a few people.

Household decision making on access to and control over resources affects access and adherence to ART services. Maintaining a good diet was a problem reported by most of the respondents regardless of their sex owing to a lack of financial resources. This limits the ability to purchase nutritious food. Although income reported being a challenge for both men and women, women have no decision-making power over household resources particularly income. There is a need to promote alternative livelihood activities to improve income for both men and women to increase access to food items that need to be bought.

Therefore, given the gender dynamics found in access and adherence to ART, the study recommends that the gender aspect should continue to be an integral part of ART programs to improve access and adherence for both women and men living with HIV and AIDs. There is a need to continue with awareness campaigns for the importance of joint decision making and the involvement of men in household chores among partners living with HIV and AIDs.

Acknowledgments

We humbly acknowledge the support of the United States Agency for International Development (USAID) and the United States President's Emergency Plan for AIDS Relief (PEPFAR). We thank the USAID- and PEPFAR-funded MEASURE Evaluation–Tanzania project, which facilitated the fieldwork and provided technical support. We thank our home institution—the College of Social Science and Humanities, Sokoine University of Agriculture, in Morogoro, Tanzania—for supporting this work. Many people made this study possible in different ways. First, our sincere thanks to respondents from Lupembe and Matembwe Counselling and Testing Centres, who devoted their time to engage in this study. We acknowledge the Njombe District Council staff, specifically the Office of the District Executive Director, for providing us with a data collection permit. Also, we thank the District Medical Officer, Michael Banyema, for his support in arranging the field logistics and facilitating a research permit from the district office. We appreciate the assistance of Edward Mapunda, of the Office of the District Medical Officer, who guided the team to the two data collection centers. Finally, we appreciate the readiness of Bridgit Adamou, of the USAID- and PEPFAR-funded MEASURE Evaluation project, based at the University of North Carolina at Chapel Hill, USA, to provide input on data collection tools and draft reports. We also thank MEASURE Evaluation's knowledge management team for editorial and production services toward publication of the working paper on which part of this paper is based on.

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