

Exploring Underpinnings Weighing Down the Phenomenon of Adherence to Anti-Retroviral Drugs (ARVs) among the People Living With HIV/AIDS (PLWHA) in South Africa and Botswana: A Literature Review

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KEYWORDS Stigma. Sexual Libido. Traditional Concoctions. Bio Medics. Traditional Healers

ABSTRACT It is critical that People Living with HIV/AIDS (PLWHA) in African countries hard-hit by the HIV/AIDS pandemic such as Botswana and South Africa be the cornerstone of a successful HIV/AIDS campaign by taking responsibility and accountability of taking the ARVs according to the drug regimen. Anti-retrovirals (ARVs) are very expensive and drains national coffers immensely that translates to a heavy burden on the tax payers. The aim of this paper is, through a review of literature methodology, to debate and discuss a few underpinnings behind the PLWHA defaulting their drug regimen. The following environment promotes defaulting: poverty and its ramifications such as lack of food; excessive intake of alcohol; capacity of the ARVs to deform body structure; use of both biomedical concoctions and those of traditional healers in tandem; sexual libido emanating to the use of ARVs; and stigma associated with taking ARVs. The paper recommends: strong awareness to strengthen PLWHA ownership of the campaign; immense community support of the PLWHA and the campaign generally; and further research on how to reduce food appetite and sexual libido.

INTRODUCTION

Indubitably, the effects of HIV/AIDS and their impacts on society pose horrendous and pinching effects. This is because this pandemic is still surrounded by ignorance, prejudice, discrimination and stigma (Kang'ethe 2010a; Kang'ethe and Xabendlini 2014; Treatment Action Campaign 2007; Barnett and Whiteside 2006). It is estimated that 40 million people are infected with HIV worldwide, and 20 million people have so far died since the beginning of the pandemic in 1981 (UNAIDS, WHO, UNICEF 2011). Regrettably, about 22 million of those living with the virus hail from Sub-Saharan Africa with countries such as Swaziland, Botswana and South Africa experiencing very high prevalences. Painstakingly, South Africa has the highest number of HIV infections in the world (UNAID, WHO, UNICEF 2011). Statistically, 5.6 million people in South Africa are sero-positive (South

African National AIDS Council (SANAC) 2011; Irwin and Fallows 2003).

In her continuous struggle to fight against HIV/AIDS pandemic, South African government came up with South Africa's HIV/AIDS battle plan which was announced by President Jacob Zuma on World Aids Day in 2011. This new National Strategic Plan for HIV sought to ensure that at least 80 percent of the people who were eligible for HIV treatment were open to access it (Kagee 2011). This opened the door for many people living with HIV/AIDS to benefitting from the miraculous and empowering effects of the ARVs (Kang'ethe 2012). However, this would only be a panacea if every "Dick and Harry" living with HIV/AIDS would oblige to follow the drug regimen as prescribed by the doctors or health practitioners dispensing and administering the ARVs (TAC 2007).

Optimistically, perhaps the aforementioned arrangement would have an effect of stemming down the ever-burgeoning death statistics due to HIV/AIDS in both urban and rural settings of the country. This would be a great relief especially to the rural areas hardest hit by the epidemic. For example, a study by UNAIDS (2007) revealed that among the approximately 33.2 mil-

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lion people living with HIV/AIDS, 22.5 million were in sub-Saharan Africa by the end of 2007. Furthermore, there were 2.5 million new infections and 2.1 million deaths occurred. Gravely, 10 percent of the South Africans are believed to be living with HIV/AIDS making the country take first position in terms of the number of people living with HIV/AIDS in the world (Ramphele 2008). However, in 2013, Statistics South Africa (2013) indicated a slight decline on the total number of the HIV/AIDS related deaths from approximately 257 394 (40.4 percent) in 2002 to 178 373 (31.9 percent) in 2013. Generally, this high level of infections has had many perfidious effects. For example, Eastern Cape Province Aids Council (2012) believes that half of all Eastern Cape Province orphaned children have lost parents due to HIV/AIDS related mortality and orphans and vulnerable children (OVCS) have to be considered as a particularly vulnerable group.

Peltzer (2011) argues that efficient and effective antiretroviral treatment is determined by taking medication in the correct way and at the right time; while Lima et al. (2008) also corroborate Peltzer's contention with the idea that the effectiveness of antiretroviral drugs requires at least 95 percent of adherence by the users. Disappointingly, eclectic literature on adherence to antiretroviral treatment have found that approximately 8-10 percent of ARV users fail to maintain the requisite and recommendable 95 percent adherence benchmark in order to guarantee effectiveness of the antiretroviral drugs (Kang'ethe 2010a; Peltzer 2011; Norton et al. 2010).

To this end, Kang'ethe (2010a) posits that the national roll-out of the antiretroviral (ARV) drugs in many African countries hardest hit by the epidemic such as Botswana and South Africa has made the previously distracted nations sparkle with hope for the future. However, he contended that the victory in ARV access and administration has not been commensurate with prevention endeavours. Hence, he believes that people living HIV/AIDS have failed to fully take the advantage of the ARVs. In Botswana, for example, cases of high rate of alcohol intake, repeated pregnancies, and weaker adherence to HIV regime derailed and undermined prevention efforts (Kang'ethe 2010a).

Research findings by Skhosana et al. (2006) also revealed that 52 percent of the ARV users who could not reach a 70 percent adherence benchmark level were people of lower socio-economic

backgrounds. They further revealed that the ARV users' spirit of adherence was thwarted by factors such as failure to afford transport facilities to dispensing points. This point to the naked fact that poverty is a critical cornerstone to the phenomenon of defaulting (Kang'ethe 2010a). Cheever and Wu (1999) allude that living with HIV/AIDS is a challenge on its own, especially in contexts where HIV infections still embraces pangs of stigma and yet people living with HIV/AIDS (PLWHAs) lack necessary social support. In such situations, adherence to treatment becomes an arduous and an uphill task.

Problem Statement

In South Africa as in many other countries hard hit by the HIV/AIDS epidemic in the region such as Botswana, anti-retroviral drugs are apparently promising a new lease of life to the people living with HIV/AIDS (Barnett and Whiteside 2006). However, the situation has not always been taken advantage of by all and sundry with a chunk of beneficiaries turning a deaf ear to the ARV prescriptions from the doctors. To this end, the governments of these countries and their populations have been perturbed by increased number of people reported to be non-adhering to ARVs. This poses social, psychological and emotional challenges to health practitioners, families, and relatives of PLWHA, and government generally. This is because non-adherence is believed to cause early deaths, PLWHA may have to change medication from one line to another within a short time frame, are likely to become weaker and thereby have their social functioning gets impaired. This may mean they may not be productive and therefore jeopardize their economic position as well as the productivity of their country. Worse more, ARVs especially of second and third lines are believed to be expensive and hence pose a serious financial burden to the tax payers and the governments at large. It is therefore central that all the possible underpinnings weighing down the success of the PLWHA following the drug regimen are brought to the fore with the hope of coming with packaged information to advise them to change the state of quagmire.

Aims and Objectives

The aim of the paper is to explore the underpinnings acting as stumbling block lying along

the path of adherence to anti- retroviral drugs (ARVs) by the People Living With HIV/AIDS in Botswana and South Africa.

METHODOLOGY

The paper uses a review of literature methodology to raise debates and discourses on the underpinnings behind continued ARV defaulting. The paper has immensely benefitted from an array of literature sources such as academic journals especially on ARVs and HIV/AIDS generally, books and the researchers' experiential knowledge on the domain.

OBSERVATIONS AND DISCUSSION

Factors Underpinning Increased ARV Defaulting

Poverty and Excessive Alcohol Intake

Although an array of reasons can be computed contributing to PLWHA defaulting, excessive use of alcohol constitutes the lion's share of the reasons. People turn to excessive drinking due to the perfidious effects associated with living with the virus. Such factors include stigma and discrimination, hopelessness and apathy. Although the use of ARVs appear to have given the ARV users a new lease of life, experiences of most PLWHA still indicate that many feel desperate and despondent and take to abuse of alcohol as a way of sedating and comforting themselves (Kang'ethe 2010a, 2012). Also, several researches appear to indicate that people of lower socio-economics are usually affected by defaulting then those of modest socio-economics. On alcohol use and non-adherence to antiretroviral therapy in HIV-infected patients in West Africa, Jaquet et al. (2010) found that alcohol intake for both men and women was reported to be approximately 22 percent and 1.6 percent respectively.

Furthermore, there were 40 percent men and 15 percent women who were on treatment that admitted to take 25 percent of alcohol in more than four drinks per day for men and more than once a month for women. Similarly, studies by Kang'ethe (2010a) and Bhagwanjee et al. (2011) on adherence to ARVs by PLWHA also strongly implicated poverty and excessive alcohol intake as hindrance to the effectiveness of the treatment. Majority of the participants in a focus

group of ARV users in Botswana revealed that PLWHA were excessively taking alcohol as they tried to console and sedate themselves from the shame, despondency and apathy associated with living with the HIV/AIDS (Kang'ethe 2010a).

In the same vein, studies on ARVs adherence by Van Dyk (2010) and Kip et al. (2009) also found that environmental issues such as poverty and hunger were some of the factors that negatively contributed to patients' adherence to their treatment. This sends signals that governments and communities need to find a solution to the food situation of the PLWHA, otherwise they are likely to weaken and possibly move to other lines of treatment that signals their near distance to death, and also higher cost of the ARVs.

Perhaps also people living with HIV/AIDS need to take responsibility through refraining from taking alcohol which compromises the working of the ARVs and therefore their health. Perhaps incessant counselling and social support systems from their families and community members could strengthen the PLWHA to observe drug protocol and avoid alcohol. These researchers think that inadequate knowledge pertaining to the complexities and the meaning of the ARVs could be one important factor weighing down prevention among people of lower socio-economics. A score of especially those with lower literacy levels may still be experiencing some difficulties in understanding the working of the ARVs. On the other hand, such people are also likely to believe in myths, mistruths and stereotypes surrounding HIV/AIDS and taking of ARVs (Kang'ethe and Xabendlini 2014a).

Side-effects Associated with ARVs

It is a common secret that antiretroviral drugs have their own gaps due to various side-effects that are associated with them. They are regarded by many people living with HIV/AIDS as poisonous due to multiple side effects associated with them such as nausea and strange dreams, just to mention a few (McGilvray and Willis 2004; Treatment Action Campaign 2007). Sadly, majority of the people especially in the rural areas of many African countries have not adequately understood the aetiology of HIV/AIDS and the benefits of antiretroviral drugs which in many respect outweighs the possible side effects which may be caused by these drugs. Therefore, some people find scapegoats and amid many other intermediaries such as the tra-

ditional healers who dissuade some PLWHA from following the biomedical drug regimen, many default to follow the drug protocol (Kang'ethe 2010, 2012). Perhaps it is good to also indicate that some people are dissuaded to follow and even take medication by some religious leaders who claim to have some powers to cure them from HIV/AIDS. Inadequate information dissemination, therefore, has been identified to be among the most common hindrances to ARV treatment both in the first and third world countries (WHO 2002; Kang'ethe 2014; Kang'ethe and Xabendlini 2014).

ARVs Deforms the Body

Usually, most PLWHAs are reluctant to resume the ARV program and those that have started to use ARVs happen to stop the treatment due to the belief that ARVs cause one's body to be deformed. Although this was believed to be one of the misconceptions of HIV/AIDS treatment at nascent stages of the campaign in many African countries such as South Africa and Botswana, there were some grains of truth in it. To this end, Dr van Zyl of Anova Health Institute in Johannesburg asserts that ARVs specifically D4T, also known as Stavudine to a certain extent worked effectively, but had quite a number of side effects such as the loss of fat in the legs, face and arms, leaving people's bodies disfigured and apparently unbalanced (Malam 2011). She further claims that D4T was removed in the list of South African ARVs drugs in April 2010 and was replaced by the TDF which is just as effective as D4T, but with lesser side-effects. Unfortunately, information mainstreaming and dissemination especially to the poor rural communities that are also of lower literacy levels has not been good in South Africa. Perhaps, if all these information is availed adequately and competently, people who default due to fear associated with ARV side effects could have been saved. This state of poor information dissemination has caused many people to rely on myths, stereotypes and mistruths, with the ultimate goal of some becoming victim of defaulting (Kang'ethe and Xabendlini 2014).

The Use of Traditional Healers and Bio Medics in Tandem

Eclectic literature on HIV/AIDS and traditional healing suggest that 70 percent to 95 percent of the population in developing countries, es-

pecially in Africa is strongly engrained in traditional and herbal medicine to deal with all sorts of ailments and issues pertaining to their health, with HIV/AIDS being no exception (Kang'ethe 2009; Soai 2012 and Strupat 2012). Interestingly, PLWHA are being widely discouraged by the health fraternity for consulting traditional healers as they perceive them as being superstitious, misleading and without requisite scientific knowledge to handle complex diseases such as HIV/AIDS (Jackson 2002; Kang'ethe 2009, 2012).

Ironically and with the discouragement factors by the biomedical fraternity notwithstanding, many people still continue to use the services of traditional practitioners as their first point of reference to treat HIV/AIDS and related complexes. Perhaps the rationale used is that HIV/AIDS just like any other social vice is traditionally viewed as witchcraft usually caused by the forces of darkness that needs spiritual intervention and exorcism (Robinson and Zhang 2011). This became evident in the findings of the study in the Eastern Cape in which one of the above researchers' study participants believed that his HIV sero-positive status was a result of witchcraft that he acquired through sexual intercourse before he got married and that could not be understood bio-medically (Neves 2008). Such belief system, other researchers such as Kang'ethe (2010a) in Botswana found was responsible for possible weakening of the PLWHA, possible change of ARVs from one line to another and possible death. This also means that the governments are likely to lose a lot of money through ARVs and have to contend with people weakening fast and therefore becoming unproductive, possible dependence on hand-outs such as grants, and a heavy burden to the taxpayers (Kang'ethe 2014). The use of the services of biomedical practitioners and the traditional practitioners in tandem, therefore, has a huge impact in derailing the success of the HIV/AIDS campaign especially in Southern African region where the role of traditional practitioners such as the healers, diviners (*sangomas*) and spiritualists takes a bigger toll. The process leads to ARV defaulting, or failing to be effective (Soai 2012; Kang'ethe 2012).

Lack of Adequate Food

It is an incontrovertible fact that an inextricable relationship between poverty and HIV/AIDS prevalence exists. Poverty is believed to

provide an environment for the flourishing of the virus (Kang'ethe 2013). As the former SADC secretary General Dr Salmao indicated, the ARVs cannot work on people's empty stomach. Otherwise, without adequate food, PLWHA are at risk of moving from one line of medication to another which poses serious financial obligations to the tax payers (Kang'ethe 2010a 2012). Poverty and its ramifications such as lack of adequate food compromise the working of the ARV drugs. In a research by Kang'ethe on PLWHA in Tšabong in Botswana, PLWHA indicated that due to poverty with lack of food being a grave consequence, adherence was not a priority. Some indicated that poverty was driving them to prostitution as an alternative means of getting food on the table at the end of the day, for their children and for themselves. Since prostitution depends on the wish of the client, whether to accept the use of a condom or not, prevention becomes a secondary option. This was an indicator of possible reinfection and low commitment to prevention endeavours (Kang'ethe 2012). Perhaps this is why non-adherence to ARVs has been sturdily associated with complex dynamics of poor socio-economic conditions.

ARVs Increase Sexual Libido Driving PLWHA to Desire More Sexual Engagement

One of the rare but widely implicated ARVs side effects by various studies is its ability to increase sexual libido on the users making them to desire more bouts of "sleeping around" and thereby increasing their chances of re-infection and possibly making the ARVs fail. There are also allegations that ARVs also increase food appetite. It is therefore critical that more and more research is done to validate or invalidate this allegation. However, there's not so much known about the perceived sexual libido effect of ARVs on PLWHA and their lack of adherence to the treatment as factors that affect adherence varies from person-to-person and their social context. In his study of attitudes to ARV access and factors undermining HIV/AIDS prevention in Botswana, Kang'ethe (2010a) found that increase in sexual libido is one of the most commonly implicated barrier to adherence to ARVs by majority of the PLWHA participants. He further argued that the ARV users' sexual libido effect had a negative impact as it contributed to

promiscuity by PLWHA as well as providing an opportunity for re-infections and therefore ineffectiveness and inefficiency of ARV treatment. These researchers do not know how the libido effect associated with ARVs could be reduced. However, it is appropriate and urgent that PLWHA have adequate food that the ARVs can work on. However, PLWHA also need to challenge themselves to be disciplined enough and stop sleeping around. They need to yearn to live positively. This calls for moral and ethical conduct knowing that some people elsewhere are paying for ARVs they use. Individual responsibility and accountability is therefore central to the HIV/AIDS campaign generally. The information above actually can be corroborated by the 1995 AIDS Day message "shared rights shared responsibilities". It was directed to PLWHA to also consider being accountable and responsible for their actions in order to contribute immensely in the battle against HIV/AIDS. This might have been prompted by a notable sheer lack of responsibility and accountability to PLWHA in their actions and behaviour (Kang'ethe 2006).

Stigma Subjected to PLWHA

In countries such as South Africa, the majority of the PLWHA who are in the ARV program in various studies indicate gaps in confidentiality and privacy in their own areas (Kang'ethe and Mutopa 2014). Many PLWHA have had fear that upon taking ARV treatment from the dispensing points, the dispensing nurses will not uphold their ethical obligation of confidentiality and therefore not tell anybody about their status. This, in many settings forms a distressful and pathetic state of affairs. In a research done by Kang'ethe and Mutopa (2014) in one of the Black Universities in South Africa, the PLWHA and student participants indicated they feared to seek the prevention services in the university clinics because of fear that the officials will not uphold the principle of confidentiality and anonymity.

Several studies by Dlamini et al. (2009), Kip et al. (2009) and Kang'ethe (2010b) found that lack of support, prejudice, discrimination, and stigmatization from the society were just some of the reasons why most ARV users were not adhering to their treatment as they had to sometimes hide or refrain from taking their medication

especially when they were in the company of family and friends. Furthermore, a study by Van Dyk (2010) established that 58.3 percent, 68.8 percent and 50 percent of the adherence groups respectively had to ensure that they were not seen taking their ARV treatment due to fear of stigma from the society. In addition, this indicates that the war against HIV/AIDS cannot be won if institutional stigma is still rife. Perhaps more efforts from South African health fraternity is needed to caution and mobilize its health workers on the need to stick and comply with ethical guidelines particularly the ethics pertaining to confidentiality. They need to know that it is liable to legal prosecution. Also, the HIV/AIDS campaigners and managers need to work hard to engage communities and the professionals to de-stigmatize the HIV/AIDS disease. If other countries such as Botswana have managed to lower their state of stigma subjected to PLWHA, other countries such as South Africa where stigma is still a huge norm should tread in the same direction. In a study describing the experiences of HIV/AIDS, Hosegood et al. (2007) assert that some respondents felt strongly that their impoverished predicament dissuaded people from visiting or helping them out, and that poverty exacerbated the stigma around HIV and AIDS.

CONCLUSION

The governments of Southern African countries such as South Africa and Botswana need to be acknowledged for their formidable efforts to put prevention strategies in place. The national roll-out of the antiretroviral (ARVs) drugs has given many disadvantaged communities with HIV/AIDS a new lease on life. Although such initiatives by the government prove to be helpful, apparently there are other aspects or factors such as poor socio-economic ramifications that hinders every possible intervention strategy in the fight against HIV/AIDS pandemic. It is critical that PLWHA also hold themselves accountable and responsible towards embracing prevention based behaviours. The PLWHA should comply with the 1995 AIDS theme message of "shared rights, shared responsibilities" so that they avoid reinfection and bolster prevention meaningfully.

RECOMMENDATIONS

- ♦ Government and HIV/AIDS bodies should initiate strong awareness campaigns that will

focus more on educating communities about the importance of taking full advantage of the interventions that are put in place to deal with HIV pandemic and its limitations in the 21st century.

- ♦ Government and HIV/AIDS bodies should launch awareness campaigns that will focus on educating people living with HIV about the benefits or advantages of owning the HIV pandemic and being truthful to themselves by living a positive life.
- ♦ There should be an adequate encouragement and promotion of community-based support groups that will educate communities about the significance of accepting HIV pandemic as a reality that the communities have to deal with.
- ♦ Furthermore, research needs to be conducted in order to explore whether ARVs increase food appetite and sexual libido as many ARV users that are non-adhering to ARV treatment claim.
- ♦ Research that will investigate the benefits of disclosing HIV positive status and the effectiveness of the post-test support group in the fight against HIV/AIDS pandemic.

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