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**REDUCING HIV TRANSMISSION IN
DEVELOPING COUNTRIES:
A CASE STUDY OF UGANDA**

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BACHELOR'S THESIS ABSTRACT

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Abstract.

The purpose of the thesis is to explore Uganda's progress in the fight against HIV/AIDS. In this study, the groups that are most affected by HIV/AIDS are presented, the barriers to the control of HIV/AIDS are discussed and the way forward in the control of HIV/AIDS suggested. A literature review on research done on HIV prevention was used as the main source of data and information for this study.

Findings shows that in Uganda, the population groups facing high risk of contracting HIV/AIDS include adolescent girls, young women, commercial sex workers, men who have sex with men, people who inject with drugs and fishing communities. There are growing concerns that abstinence which is part of the ABC strategy of HIV prevention is not an effective method because sexually active people are not luckily to avoid sex by just being implored to do so.

Furthermore, the study found out that campaigns for condom use have met stiff resistance from moralists and Christian denominations as well as some media groups who view the strategy as an issuance of a blank cheque for people to engage in promiscuous sexual behaviors well knowing that condoms will guard them against the ramifications of those actions. Condom use has also been found to be ineffective in AIDS prevention since counterfeit condoms at times find their way to the market due to inefficient quality control organs of the state like the UNBS. There were also question of dissemination of conflicting message where people question how the strategy which campaigns for people to be faithful one another hand promote for condom use on the other.

Prejudices and social discrimination present a stumbling block to AIDS/HIV prevention and treatment most especially in groups such as sex workers and men who have sex with men. The study found out that due to these homophobic behaviors seeking health care and HIV testing services by these marginalized groups is very minimal. However, this unfair treatment is not unique to commercial sex workers and men who have sex with men generally once one is discovered that is living with HIV is automatically subjected to social stigma and negative judgment by the population. Generally, the paper argues that while there are still glaring challenges in the fight against HIV/AIDS in Uganda, the country has made significant progress in the fight against the epidemic.

KEYWORDS:

HIV/AIDS, Pre-exposure prophylaxis (PrEP), Antiretroviral treatment (ART), Transmission, Prevention

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LIST OF ABBREVIATIONS (OR) SYMBOLS

PMTCT - Prevention of mother to child transmission (World Health Organization,2020)

HIV - Human immunodeficiency virus (World Health Organization, 2020)

UNAIDS - The Joint United Nations Programme on HIV/AIDS (Unaids.org/en)

MSM - Men who have sex with men Joseph, S. (2005) Social Work Practice and Men Who Have Sex With Men. New Delhi: Sage Publications

1 INTRODUCTION

This thesis presents Uganda's progress in the fight against HIV/AIDS. The study addresses salient issues around HIV and its prevention in Uganda. These among others communities most affected by HIV in Uganda include men who have sex with men (MSM) and HIV in Uganda, people who inject drugs (PWID) and HIV in Uganda, HIV in fishing communities. The study discusses HIV testing and counselling (HTC) in Uganda. The study also focuses on the prevalence of HIV in Uganda. Issues concerning HIV testing, HIV prevention programs, condom availability and use, HIV education and approach to sex education in Uganda are also raised.

Furthermore, the research looks at prevention of mother-to-child transmission of HIV (PMTCT), Voluntary medical male circumcision (VMMC), access to PrEP (pre-exposure prophylaxis) and looking at the availability of Antiretroviral treatment (ART) in Uganda. Lastly but not certainly least the study discusses the role played by civil society in responding to HIV in Uganda, the intertwine between HIV and tuberculosis (TB). Barriers to the HIV response in Uganda herein social stigma and discrimination, gender, legal, structural and resource barriers to prevention, funding for HIV in Uganda and the future of HIV in Uganda are also discussed by this study. The thesis thus seeks to assess Uganda's progress in HIV prevention with the aim of suggesting possible recommendations for reducing HIV/AIDS in the country.

HIV/AIDS continues to ravage the population of many countries, especially in sub-Saharan Africa. In some countries with high rates of HIV prevalence, life expectancy has declined in more than a decade and in some cases in more than two decades. Even in countries with an HIV prevalence of about 5% (close to sub-Saharan Africa's average), the epidemic can reverse progress in life expectancy and other health outcomes achieved in the last two or two decades. According to the World Health Organization (WHO, 2016), HIV continues to be a global public health problem, requiring more than 35 million lives. In 2016, 1.0 million people died from HIV-related causes worldwide. At the end of 2016 there were about 36.7 million people living with HIV; 1.8 million people were infected in 2016, 54% of adults and 43% of children with HIV currently receive permanent antiretroviral therapy (ART). The global coverage of ART for pregnant and lactating women living with HIV is high, at 76%.

2 BACKGROUND

By 2016, 1.4 million people were estimated to be living with HIV and it is estimated that 28,000 Ugandans have died from AIDS-related diseases (UNAIDS, 2017). The epidemic is permanently established in the general population. As of 2016, the estimated prevalence of HIV among adults (aged 15 to 49) stood at 6.5% (UNAIDS 2017b). Women are disproportionately affected, with 7.6% of adult women living with HIV compared to 4.7% of men (WHO and Ministry of Health of Uganda, 2017). Other groups particularly affected by HIV in Uganda are commercial sex workers, girls and adolescents, men who have sex with men, people who use drugs and people from transitional fishing communities in Uganda (Uganda AIDS Commission, 2016).

There has been a gradual increase in the number of people living with HIV who have access to treatment. In 2013, Uganda reached a turning point in which the number of new infections per year was lower than the number of people starting to receive antiretroviral treatment (AUC, 2015). However, as of 2016, about 33% of adults with HIV and 53% of children with HIV have not yet received treatment (UNAIDS, 2017a). Disparities persist on who has access to treatment and many people who live with HIV experience stigma and discrimination (UAC, 2015). Therefore, the current thesis seeks to evaluate Uganda's progress in HIV/AIDS prevention.

3 THE PURPOSE OF THE THESIS

The thesis seeks to assess Uganda's progress in HIV prevention with the aim of suggesting possible recommendations for reducing HIV/AIDS in the country. It is envisaged that the findings and recommendations arising out of this thesis will be used to improve and scale up Uganda's response to the HIV/AIDS challenge and subsequently reduce the HIV/AIDS infections and deaths in the country.

3.1 RESEARCH QUESTIONS

1. Which are the most at risk groups of people in Uganda?
2. What are the HIV prevention programmes in Uganda
3. What is the role of civil society role in the HIV response in Uganda?
4. What is the linkage between HIV and tuberculosis (TB) Uganda?
5. What are the barriers to the HIV response in Uganda?
6. What is the state of HIV funding in Uganda
7. What is the future of HIV in Uganda?

4 LITERATURE REVIEW AS A RESEARCH METHODOLOGY

The thesis was purely based on an extensive review of literature on the topic under investigation. The review was primarily based on government reports, peer-reviews or edited publications: books, journal articles, book chapters, newspapers and conference proceedings. Data were believed to be reliable because they were drawn from reputable national and international organizations like the Uganda Aids Commission, WHO and UN agencies like UNAIDS. The review of literature was based on literature which addresses key issues like Groups most affected by HIV in Uganda; Men who have sex with men (MSM) and HIV in Uganda, People who inject drugs (PWID) and HIV in Uganda, HIV in fishing communities, HIV prevention programmes in Uganda, Condom availability and use, HIV education and approach to sex education in Uganda, Antiretroviral treatment (ART) availability in Uganda, Civil society role in the HIV response in Uganda, HIV and tuberculosis (TB) Uganda, Gender, Legal, Structural and resource barriers, Funding for HIV in Uganda and the future of HIV in Uganda.

Data were obtained from government publications, peer reviewed research articles, newspaper articles and international agencies like the WHO and UNAIDS among others. Overall, data were obtained from a total of 40 sources. For the internet sources, the key words were HIV/AIDS prevention strategies in Uganda. A number of articles that address the key themes of the thesis were included in the study and organized for analysis. Analysis was largely thematic and was based on the key research questions of the thesis as indicated in the specific research questions. The literature review should be able to act as a source of information for other researchers who are using the same methodology and seeking to obtain information connected to the same field (table 1). (Boote et 2005.)

	knowledge	comprehension	Application
skills used	information was primarily based on government reports, peer-reviews or edited	key areas of the literature were reviewed.	The points that are connected to research question were picked and

	publications: books, journal articles, book chapters, and newspapers.		compared with information from literature review.
2. Assumptions made by the writer.	All articles used have been published already.	All articles used in case they have been published without differentiating among research articles.	Main ideas were picked articles that are related to the topic.
3. Main organization and content of papers at each level.	Its based on the articles that have been read and not the topic through listening to what has been found out and not exactly the ideas of the source of information	Main ideas were based on information from the source article.	The thesis is based on source articles.
4. Main Ideas.	Main ideas from each source article are to be summarized in own writing	The summary is to be linked to the source and connected to the topic of study.	The summery is put together to develop the questions of thesis and how valid is it to the topic of reducing HIV in

			developing countries.
5.Assumptions made by writer on the findings	Emphasis were put on the results and findings of reducing HIV in developing countries guided by research questions.	Major parts eliminate information not linked to the topic.	Not applicable
6.Main organization and content of papers at each level.	Each article related to topic was checked in the thesis.	The main ideas and findings that arose from this thesis were most at-risk population groups are adolescent girls, young women, commercial sex workers and men who have sex with men.	The sources were analyzed basing on the strength and limitation
Tips to move to next level.	All articles were reviewed, key points outlined, detailed summery made .	Sources were selected and a distinguish sources with information was chosen.	Not applicable.

Table1: Promoting cognitive complexity in graduate written work: Using Bloom's Taxonomy as a pedagogical tool to improve literature reviews. (Boote 2005.)

Therefore, for the effectiveness of the literature review methodology, a procedure had to be followed which included; coming up with the research question, highlighting the key words in the research question, a systematic review which will put more emphasis on the research question, identify, appraise, select and synthesize or analyze the data collected(Boote et al 2005).

5 HIV PREVENTION INTERVENTIONS

HIV prevention programs are measures aimed at stopping HIV transmission. They are implemented to protect an individual and his community or are implemented as public health policies. Initially, HIV prevention programs focused primarily on preventing sexual transmission of HIV through behavioral change. For several years, the ABC approach - "abstinence, loyalty, using condoms" - has been used in response to the growing epidemic in sub-Saharan Africa (Avert, 2018). However, in the mid-2000s, it became clear that effective HIV prevention must take account of socio-cultural, economic, political, legal and other underlying factors (UNAIDS, 2010). Because the complex nature of the global HIV epidemic has become clear, forms of "combined prevention" have largely replaced ABC-type approaches. As a result, the decline in new HIV infections among adults has slowed in the last decade and has remained unchanged in recent years (UNAIDS 2106). To end the HIV epidemic as a threat to public health, in 2014 UNAIDS set ambitious global targets for reduction of new infections every year less than 500,000 by 2020, a reduction of 75% compared to 2010, and 200,000 by 2030 This is known as UNAIDS Accelerated Strategy (UNAIDS, 2014). However, with new infections in 2015, almost four times more than the 2020 target, progress is out of place (UNAIDS, 2016).

Combined prevention supports a holistic approach whereby HIV prevention is not a single intervention (such as condom distribution) but the simultaneous use of complementary behavioral, biomedical, and structural prevention strategies (UNAIDS 2010). The combined prevention programs take into account specific factors for each environment, such as levels of infrastructure, culture and local traditions, as well as the populations most affected by HIV. They can be implemented on an individual, community and population level (UNAIDS 2010). UNAIDS has called for the expansion of combined approaches to HIV prevention, revitalizing the global response and having a lasting impact on global HIV incidence rates. All combined prevention programs require a strong element of community strengthening and health protection systems, as well as actions to address gender inequality and stigma and discrimination (UNAIDS, 2016).

5.1 Behavioral Interventions

A behavioral intervention can aim to reduce the number of sexual partners that people have; improve adherence to treatment among people living with HIV; increase the use of clean needles among people who use drugs; or increase the consistent and correct use of condoms. To date, these interventions have proven to be the most successful (Coates et al., 2008). According to for United Kingdom Consortium on AIDS and International Development (2013), some behavioral interventions include: providing information (such as sex education); counseling and other forms of psychosocial support; safe infant feeding guidelines; stigma and discrimination reduction programs and money transfer programs (ibid).

The multimedia community mobilization activities in schools and in general complement the provision of biomedical HIV services, such as condom distribution, voluntary male circumcision physician (VMMC) and HIV testing (see the next section). Multi-channel large-scale programs that have the national program for behavior change in Zimbabwe and a campaign of Love in different countries in southern Africa (UNAIDS, 2016).

Likewise, through sharing project of Rakai district in Uganda, a country has seen a reduction in newly HIV cases and also violences at home has also reduced. This is achieved through involvement of community mobilization to change attitudes, social norms and behaviors (UNAIDS, 2016).

It has also been shown that sex education at school is an effective strategy to reduce the risk associated with HIV. It has been found that students receive rights-based sexual education interventions in schools and gender-based approaches. HIV Positive person have significantly higher HIV knowledge and are more likely to use condoms, have fewer sexual partners and delay sex (often called "sexual debut") (UNAIDS, 2016 and IPPF, 2016).

However, despite these successes, many countries have not implemented on good strategy on how to communicate and change peoples behaviors as its needed. On many occasions goverments have failed to prioritize and are also scaling down of these programs in recent years (UNAIDS 2016). As a result, most young people do not have the knowledge to protect themselves from HIV. Little progress has been made in reducing sexual partners in sub-Saharan Africa. Furthermore, many countries continue to invest in programs that promote abstinence and loyalty, and these interventions fail to

significantly reduce the number of sexual partners, the age of sexual initiation and teenage pregnancies (UNAIDS 2016).

5.2 Biomedical interventions

Biomedical interventions use a combination of clinical and medical approaches to reduce HIV transmission. An example of biomedical intervention, male circumcision, is a simple medical procedure that has been shown to reduce the risk of HIV transmission up to 60% during unprotected heterosexual sex (Auvert et al., 2005). To be effective, biomedical interventions are rarely implemented independently and are often used concurrently with behavioral interventions. For example, when a man is circumcised, he will often undergo HIV testing and receive advice and education on condom use and safe sex (Padian, 2008). Examples of biomedical interventions according to the UK Consortium on AIDS and International Development (2013) include: male and female condoms, sex and reproductive health services, voluntary medical male circumcision, post-exposure prophylaxis and treatment as prevention, HIV testing and counseling, testing and treatment of sexually transmitted infections, needle and syringe programs, opioid substitution therapy and blood screening.

5.3 Other gaps in biomedical prevention interventions include:

Although voluntary medical male circumcision (VMMC) has grown very first to about eleven million males in about fourteen countries in just few period of time, the yearly people circumcised in eight of these countries decreased in 2015 compared to 2014. The annual number of VMMC is expected to almost double between 2015 and 2020 to reach the fast track goal (UNAIDS 2016). The main harm reduction services are not available in most countries. For example, 43% of countries with documented parenteral drug use have no needle and syringe exchange programs (UNAIDS, 2016).

Treatment as prevention: strong adherence to antiretroviral treatment (ART) can reduce the level of HIV in someone's body to such a level that they are able to lead a healthy life and it is unlikely to transmit the virus to someone else (this is known as viral suppression). The preventive effect of treatment has been announced as a turning point in the global response to HIV. However, the impact of treatment-as-prevention (ASP) remains limited due to the fact that as of 2015, 40% number of those who are HIV

infected are not aware of their statuses (UNAIDS, 2016). As new biomedical tools: which PrEP and ASPD pull out, effective social-behavioral and structural programs are needed to help maximize their effectiveness, for example through key education populations affected on their disproportionate vulnerability to HIV, in this case way the creation of demand for preparation.

5.4 Structural interventions

Structural interventions try to address the underlying factors that make individuals or groups vulnerable to HIV infection. These can be social, economic, political or environmental. The vulnerabilities linked to HIV are fueled by inequalities and prejudices rooted in the legal, social and economic structures of society (Rao, 2008, UNAIDS, 2016). For example, laws that criminalize same-sex relationships often prevent men who have sex with men from accessing condoms. A woman's subordinate state can affect her ability to negotiate condom use, while lack of infrastructure, such as transportation, prevents many people from accessing clinics. By successfully addressing these structural barriers, people are allowed and can access HIV prevention services (UNAIDS 2016).

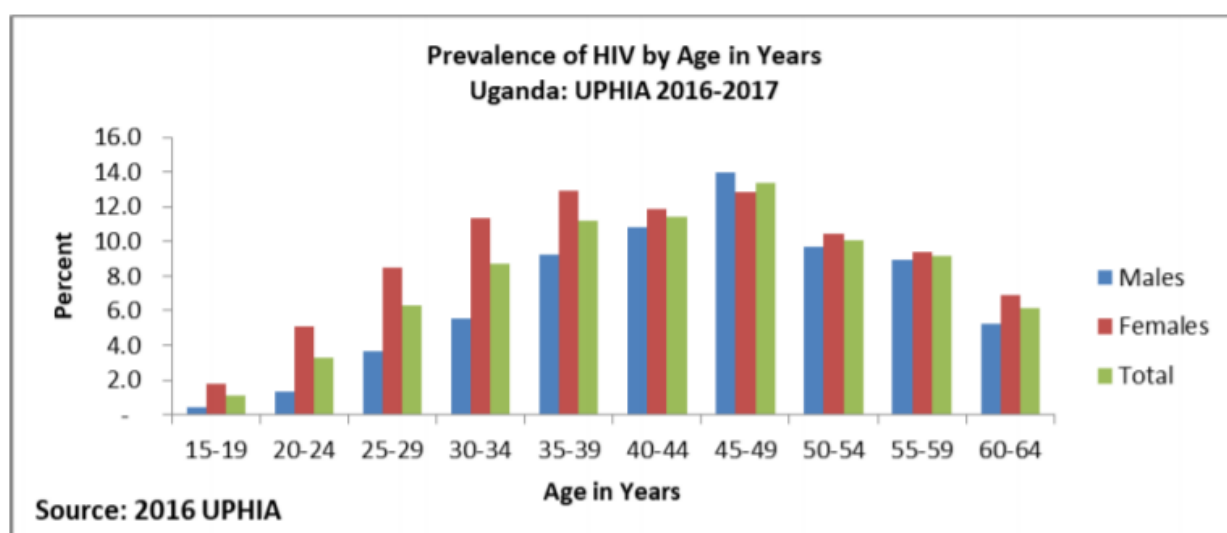
6 KEY FINDINGS ON THE STATE OF HIV/AIDS IN UGANDA

This subsection presents the key findings based on literature review about the topic under investigations. The section focuses on key issues in the research.

6.1 Most at Risk Groups of People in Uganda

Adolescent girls, young women and AIDs prevalence

HIV prevalence in Uganda by Age group



6.2 The plight of commercial sex workers and HIV in Uganda

Between 2015 and 2016, HIV prevalence among commercial sex workers stood at 37%. In the same period commercial sex workers together with their customers accounted for 18% of all total infections in Uganda. (AUC, 2016.) This seemingly high percentage is occasioned by the fact that unprotected sex is more expensive than the protected one. In 2015, between 33% and 55% of commercial sex workers inconstantly used condoms (Muldoon, 2015).

Violence is commonplace. In the recent past, 80% of prostitutes suffered from violence committed by clients and 18% experienced violence meted upon them by their partners. Over 30% of commercial sex workers underwent war related trauma. Sex trade is illegal and comes with a lot of social stigma. A situation which makes sex workers to shy away from seeking health services and conceal their jobs from healthcare professionals. Uganda is extremely homophobic towards same sex relations. Indeed, a good number of sex workers in Uganda are of the opinion that social discrimination poses a big hindrance to their willingness to go for voluntary HIV testing. (African Sex Workers' Alliance, 2011.)

6.3 Men who have sex with men (MSM) and HIV in Uganda

The incidence of HIV among men who practice sex with fellow men (commonly referred to as MSM) in Uganda stood at 13% in 2013 (UAC, 2015). A study conducted in 2017 among men who have sex with men in Kampala revealed that there are common high-risk behaviors accounted for 36% of the total number of interviewees, 38% intimated to have engaged in unprotected anal sex, 54% confessed having more stable partners, 64% have sex with various couples and 32% of MSM abuse drugs. (Hladik, 2017.)

Parliament, the law-making arm of government in Uganda outlawed homosexuality in December 2013 and the law took effect in February 2014. Despite the fact that the law was later annulled in August 2014, it left negative impacts on the homosexual community including gross mistreatment, discrimination and attempts to take homosexuals to courts of law because of their sexual orientation and gender. The law also caused hate speech towards homosexuals. among. (The Guardian, 2015.) Furthermore, even HIV professionals dealing with men who have sex with men find extreme difficulty to access them.

6.4 People Who Inject Drugs (PWID) and HIV in Uganda

Similar to men who have sex with men, in sub-Saharan Africa, people Who Inject Drugs (sometimes called PWID) are stigmatized and discriminated against. Marginalization is at various levels unfortunately even at government level. PWID are always left with few health and HIV. (IDPC, 2018). The 2014 Global State of Harm report estimated HIV prevalence in the PWID group at 16.7% in Uganda. Ugandan government made a

commitment to devise innovative ways of intervening in the plight of people in this group. (IHRA, 2015).

6.5 Fishing communities

HIV prevalence within Uganda's fishing communities is presumed to be three times higher than that of the general population. A study conducted in the year 2013 among 46 fishing communities revealed a 22% HIV prevalence in these communities regardless of sex (Opio et al., 2013). Among the causes of this rather high percentage in HIV prevalence among fishing communities include: a high degree of mobility, big numbers of fishermen willing to pay for sex, the use of drugs by injection and limited HIV prevention and testing services (Relief Web / IOM, 2014).

6.6 HIV Testing and Counselling (HTC) in Uganda

Without a shed of doubt, Increasing people's knowledge about their HIV status through HIV testing and counselling (HTC) is a major milestone in tackling Uganda's HIV epidemic. HTC services have been rolled out extensively, consequently people testing for HIV are increasing in number for instance the number doubled from 5.1 million in 2012 to 10.3 million in 2015 (UAC,2016). HIV testing is carried out in health facilities, communities as well as in peoples' homes. Recently, more emphasis has been put on HTC services for couples, workstation testing, making of outreaches to people characterized as those high HIV risk groups, mobile or mass testing through conduct of testing campaigns (Ugandan MoH, 2017). In 2017, the Ministry of Health pioneered oral HIV self-testing kits among female sex workers, fishermen and the male partners of women attending antenatal care (Ugandan MoH, 2017).

The percentage of women between the ages of 15 and 49 who tested for HIV and got their results in the last 12 months grew from 47.7% in 2012 to 57.1% in 2014 and from 37.4% to 45.6% amongst men. As a result of this difference, barely 55% of men and boys living with HIV are aware of their status in comparison to 82% of women and girls. Some men preferred that they would rather not know their HIV status instead of enduring the stigma which comes with being HIV-positive (UNAIDS, 2017).

6.7 HIV prevention in Uganda

In 2016, the total of new HIV Infections in Uganda were 52,000 (UNAIDS, 2017). Among the newly infected included women and adolescents. (UAC, 2016.) The country's 2015/2016-2019/2020 HIV prevention strategy aims at achieving three objectives: promotion of safer sexual behaviors, decrease engagement in risky sex behaviors and lastly but not least increasing coverage and use of biomedical HIV prevention interventions encompassing voluntary medical male circumcision and PrEP). This comprehensive strategy is aimed at addressing the socio-cultural drivers of HIV in Uganda (UAC, 2016).

6.8 Use of condoms in Uganda

The UNAIDS report of 2017 reported that 60% of men and 45.5% of women used a condom the last time they engaged in high-risk sexual intercourse. Higher-risk sex refers to sex someone involves in with someone other than his/her marital or cohabiting partner. (UNAIDS, 2017.) Male condoms supplied by government increased from 87 million in 2012 to about 240 million by the close of 2015. Nonetheless, this number is far less than the total number of required condoms given the population size (UAC, 2016). Ensuring that all Ugandans, both male and female in need of condoms get them shall go a long way in preventing HIV transmission in Uganda. If used properly and consistently, condoms are an effective way of reducing HIV and Sexually Transmitted Infections transmission. However, condom use has been received with mixed reactions among the Ugandan population. A substantial number of Ugandans including political lobbyists, media groups and religious organizations contend their moral values is against condom use based on personal, cultural and ideological beliefs. (Okare et al.2005.)

6.9 HIV and sex education in Uganda

Religious and cultural institutions have played and continue to play a major role in disseminating HIV prevention information for example between 2015 and 2016 more than 2 million Ugandans were reached through programmes organized by both cultural and religious institutions. HIV prevention messages are also got across to the population through the mass media. Uganda's mass media channels include use of the billboards,

radios, new papers and the growing number of both state- and privately-owned television channels.

Through curriculum review for lower secondary, modules for life learning, with major emphasis on sexuality education, were developed. Additionally, over 800 primary and secondary schools were educated on HIV prevention information. These outreaches carried messages cautioning youngsters on the risks of having multiple sex partners and engaging in cross-generational, transactional and early sex. The campaign was effective because in barely an hour about 360,000 children were reached with sex and health education sessions in 2015/16 (UAC, 2016).

6.10 Prevention of mother-to-child transmission (PMTCT)

Over 97% of HIV-positive pregnant women in Uganda accessed antiretroviral drugs to cut down on the danger of mother-to-child transmission (MTCT). This translated to 115,000 women who received this medicine in 2016 (UAC, 2016). In the same year, approximately 3,637 health facilities were dispensing antiretroviral treatment to pregnant women, new mothers and breastfeeding mother who were living with HIV (UAC, 2016).

Uganda's landmark success in PMTCT is witnessed by the 86% reduction in new infections among children born between 2010 and 2016 (UAC, 2016). However young people exposed to HIV tested remains at a low 38%. This is occasioned by the low retention of mother-and-baby pairs in PMTCT programmes (UAC, 2016).

6.11 Voluntary Medical Male Circumcision (VMMC)

Another trusted bio-medical HIV-prevention intervention is Voluntary Medical Male Circumcision (VMMC). This can ensure a 60% reduction in transmission of HIV from females to males. In 2011, HIV prevalence stood at 4.5% amongst circumcised men and 6.7% among uncircumcised men in 2011 (MoH, 2012). Despite the fact that the percentage of men opting for VMMC rose to 40% in 2014 from 26.4% in 2011, the smooth running of the VMMC exercise was hampered insufficient funding and low coverage (UAC, 2015). Consequently, annual circumcisions decreased in 2015 and 2016 (UNAIDS, 2017). Though traditional and religious circumcisions are still going on, they are very limited in terms of coverage and safety to contribute to meaningful HIV

prevention (UAC, 2015). In the year 2016, only 411,459 male circumcisions were conducted, a figure below per in terms of the country's projected annual coverage target of 1 million (UNAIDS, 2017).

6.12 Antiretroviral treatment (ART) availability in Uganda

Approximately 1,730 offered antiretroviral treatment (ART) in 2016 and about 898,200 people living with HIV had been enrolled on Antiretroviral treatment (UAC, 2016).

Previously in 2015, Uganda had adopted the World Health Organization treatment guidelines requiring all people testing positive for HIV to be enrolled on ART in spite of the patient's CD4 count. The CD4 count shows the level of damage done to the body's immune system). The following year, 2016 witnessed 67% of adults and 47% of children enroll on ART (UNAIDS, 2017).

About 60% of adults living with HIV and are on ART have the virus in their bodies suppressed. The major question of the day is to how to get people eligible to ART drugs enrolled. People who have their HIV virus suppressed cannot pass it on to others. Males in Uganda on ART are less likely to be virally suppressed than their female counterparts, with viral suppression rates standing at 53.6% and 62.9%, respectively. Children between the ages of 0 and 14 years) presented an even much less percentage of 39.3% virally suppressed (WHO & MOH, 2017).

Some groups of people in society find it hard to stay on ART. Young people aged 15–19 in Uganda are more likely to drop out of HIV care, both before and after beginning antiretroviral treatment compared to those aged 10–14 years. Available studies indicate that stigma, disclosure issues, discrimination and also travel and waiting times at clinics, are among the reasons for the cause of drop out on ART (Nabukeera-Barungi, 2015).

6.13 Civil Society role in the HIV response in Uganda

Civil Society Organizations (CSOs) play a key role in the fight against HIV/AIDS in Uganda. CSOs protect rights of patients. By and large in Uganda, the environment is favorable for civil society to carry out their work. Nonetheless, CSOs should be careful so ensure that their activities do not collide with the political agenda of government and that their activities are socially acceptable to the population. A good example to illustrate

this is when the President of Uganda accented to the Non-Governmental Organizations Act of 2016 which law is criticized for muzzling citizen by denying them the freedom to assemble and associate. The same law forbids CSOs and non-governmental organizations from carrying out activities in any part of the country before obtaining government's approval. In addition, legislating against the promotion of Unnatural Sexual Practices Bill in October 2014, threatened NGOs advocacy work involving men who have sex with men and members of Lesbian Gay Bi-sexual and Transgender community (International Centre for Not for Profit Law, 2017).

6.14 HIV and tuberculosis (TB) Uganda

Tuberculosis (TB) is still a major problem for people living with HIV in Uganda. HIV is the major risk factor for TB. Indeed, many people with HIV die of TB. In 2016, HIV prevalence in Uganda was predicted to be at 7.3% and 24% of people suffering from TB were also infected with HIV (SUSTAIN Uganda, 2014). For this reason, delivering integrated TB/HIV services started in 2010. Between 2011 and 2017, the USAID directed its resources in building HIV and TB care systems. These efforts led to a 13% increase (from 85% to 98%) for HIV testing and counselling for people with TB, and a 41% increase (50% to 91%) in inception onto ART for patients with TB who test positive for HIV (SUSTAIN Uganda, 2014).

6.15 Campaigns to fight HIV/AIDS in Uganda

Uganda aims at achieving the UNAids 90-90-90 global target. This envisages that by the year 2020, 90 per cent of all people living with HIV are aware of their status, 90 per cent of all people found to having HIV infection get sustained anti-retroviral therapy and 90 per cent of all people receiving anti-retroviral therapy have viral suppression. (Namirimo, 2017.) To pursue this, Uganda came up with number interventions to control HIV/AIDS among the population. By 1986 - four years after the emergence of the first AIDS patient dragonized, Uganda was in the thick of an HIV epidemic. In some towns nearly one in three people was infected with HIV. In 1987, the country embarked on a new campaign code named the ABC strategy of HIV prevention that is to say Abstain, Be Faithful or Use a Condom (Green, 2012). This campaign saw the HIV prevalence drop to 5%.

Unfortunately, the latest AIDS Indicator Survey showed that new infections are increasing again. Even if the increase was under one percent, the development dismayed health workers and HIV activists. New infections are from people who attest to being in long-term relationships, however having multiple sexual partners. In order to revert this sky rocketing rise in number of new infections, the country is changing to bio medically approved strategies that have been developed ever since the advent of Uganda's ABC campaign hence adopting a "combination prevention" approach. (Green, 2012.)

In 2015, Uganda Health Marketing Group and UNFPA conducted a communication campaign survey aimed at a social and behavior change. The campaign was about increasing awareness on condom use among youths between the ages 18 and 24. This campaign survey coined a simple message: 'If it is not on, it is not safe'. The campaign found out that 80.3 per cent of youths transformed their sexual behaviors after listening to radios messages, 23.8 % to televisions and 23.1% to billboards (Green, 2012). Survey participants exposed to the campaign through interpersonal communication channels formed 6.8 per cent. Furthermore, there has also been the participatory educative research done with teenagers entitled Obulamu What's Up. This campaign targets the adolescent sub-campaign. Obulamu campaign came up with print, audio and visual messages to address the adolescents' unique sexual and reproductive health needs. Both If is not on, it is not safe and Obulamu, Whats up campaigns awakened self-reflection, conversation and action towards adolescent behavioral skills that help them to navigate relationships; HIV prevention and early pregnancy. Such behavioral skills among others include partner reduction; safe male circumcision; HIV testing, care and treatment; and early TB detection and treatment.

7 CHALLENGES IN FIGHT AGAINST FACED BY UGANDA

Segregations are the main reasons why some people for example the one that are selling sex and guys who play sex with fellow guys, fear to go for HIV counseling services. More to that overall people who have HIV are discriminated and are always judged in a negative way (SUSTAIN Uganda, 2014). The most usual examples of segregation that the population who have HIV go through every day are harassment in public, being threatened, being insulted and many others (The National Forum of People Living with HIV Networks in Uganda, 2013).

From the findings, most districts in Uganda complain regular shortages in tools used to test HIV and limited manpower to do wide ranging HIV tests and to treat those one who are already affected by this disease. All these happens even with the existence of executing associates who offer these tools. Many more preventive measures are interrupted by shortages of medications, workers, and many more. All in all, the availability and supply of HIV medications is still nice. But however, in sum incidences some HIV treatment points get shortages of exact medications (UAC, 2014). These facilities rendered are also limited with shortages of working gears and trained manpower to cater for some exact requirement for main groups of people, poor information keeping and tracing of patients who are receiving medication, and poor management of hard work several executing associates that help in responding to HIV (UAC,2016).

When we consider the funds, it has been experienced by Uganda and figures shows that funds from donors is not a guarantee, its hard to predict and more so its reducing. Furthermore, these funds are associated with restrictions which doesn't correspond with set national aims for Uganda. The funds in Uganda for the recent National Strategic Plan (NSP) (2015/2016 to 2019/2020) was planned and said require US \$3,647 millions. Caring and to treat the people is budgeted to take 55% of the funds, efforts to prevent requires 23%, where as the supporting and the strengthen of the system takes a total of 4% and 18% correspondingly. The total sum of money needed for NSP for five years to come is below the anticipated funds of 2,868 US dollars expected from home and foreign expenditure, so this creates a shortage of 918 US dollars in 2019/2020. However, it is assumed that home funds may increase up to 40% for the funds required by NSP, rising from the 11% which is currently available (UAC, 2015).

8 ETHICS AND VALIDITY

There are several ethical issues which must always be considered when planning any type of data collection. Ethical action depends, in part, on the ability of people to recognize that a moral issue exists in a given situation knowing how to take appropriate ethical action if and when required, and on personal commitment and a genuine desire to achieve moral outcomes (Fry ym.2002). This thesis will be conducted through literature review with systematic approach meaning that there will be no interviews, observation, questionnaires used as part of the methodology. There will be no need for privacy and confidentiality of names and identities because there will be no personal contact with the patients, children and the writers of the articles in the data collection process, but ethical considerations will be taken into account while collecting and analyzing data.

9 DISCUSSIONS

This thesis presents Uganda's progress in the fight against HIV/AIDS. It identifies people falling in the HIV risk groups in Uganda, HIV prevention programs in Uganda, the role civil society play in providing response in addressing the HIV epidemic in Uganda, the linkage between HIV and tuberculosis (TB) Uganda, the barriers to the HIV response and the state of HIV funding and the future of HIV in Uganda. The population falling under high risk groups for HIV acquisition include adolescent girls, young women between 15 and 24 years, commercial sex workers, men who have sex with men, people who inject with drugs and fishing communities. Young women are faced likely to contract HIV due to a number of factors unique to their age group; they are the population that is most affected by gender-based violence (including sexual abuse) and insurmountable challenges to access education, social protection, health services and information on how to deal with inequities and injustices in their society.

Within commercial sex workers, HIV was found to be at 37% in 2015/16 (AUC, 2016). Sex workers and their clients represented about 18% of new HIV infections in Uganda in 2015/16 (AUC, 2016). This was due to irregular condom use because sex without a condom is remunerated ransonly (Muldoon, 2015). Commercial Sex Workers suffer violence at many fronts, recent studies show that over 80% of prostitute were violently abused by their clients and 18% suffered partner violence. Sex for money is criminal. This coupled with deep sited social stigma makes commercial sex workers shun health services and keep their jobs in secret. They keep their jobs away from health providers knowledge. Men sex workers who have sex with men are experience high homophobia. Majority sex workers confess that social discrimination drives them away from testing for HIV (African Sex Workers' Alliance, 2011).

Men who have sex with men (also referred to as MSM) in Uganda was estimated to have an HIV prevalence rate of 13% in 2013 (UAC, 2015). This is attributed to their involvement in unprotected anal sex which accounts for 38% of sex of sex they engage in. Among the MSM 54% have sex with more stable partners, 64% with more casual couples and 32% of injectable drugs (Hladik, 2017). Quick response is need among MSM to ensure that they practice safer sex through the use of condoms and right lubricants to prevent the acquisition of HIV and other Sexually Transmitted Diseases. The desired change can be realized through training peers within the MSM group who are likely to be

trusted among these closed groups. This comes from the back drop that gay communities suffer wide stigma and are discriminated against in Uganda. Efforts should be taken to establish drop in centers and information outreach programs where the message of encouraging condom use and use of appropriate lubricants is disseminated. (Bajunirwe et al. 2016.)

9.1 The HIV prevention programs in Uganda

Uganda's strategy against HIV has three main objectives: to popularize safer sexual behaviors and cut back on the size of risk behaviors. Lastly but not least to increase on coverage and use of biomedical HIV prevention interventions for example making voluntary medical male circumcision a good choice to make for Ugandan males and use of PrEP. This approach is seen as part of aggregate health care services and aims at debunking socio-cultural and gender-based factors that propel the HIV epidemic in the country. (UAC, 2016).

In 2017 UNAIDS reported that 60% of men and 45.5% of women had sex with a condom on the last time they had involved themselves in higher-risk sex (referred to as having sex with a non-marital, non-cohabiting partner) (UNAIDS, 2017). The results indicate low condom use among women in Uganda. Condom use is inconsistent, partially because condoms are not readily available to users, mostly women (Kibirige, 2017). More so condoms are not counted as essential drugs therefore the government does not make efforts to ensure their availability. The UNFPA (UN Population Fund) and USAID (the US Agency for International Development) or the Global Fund support condom supply in Uganda. However, support is given as and when the International agencies have resources other than when the country is in need of condoms. Lastly, condoms are principally supplied through the public health facilities. There is absolute doubt whether whoever wants a condom, will be always willing to withstand the long queues in these public facilities. Entertainment places open to the general public for instance bars, discotheques, stadia and restaurants do not have condoms.

As far as PMTCT approach is concerned in Uganda, this study found out that in 2016, over 97% of HIV-positive pregnant women received antiretroviral drugs to decrease the risk of mother-to-child transmission (MTCT). This made the total of women on PMTCT to be 115,000 women (UAC, 2016). In 2016, about 3,637 health facilities were dispensing antiretroviral treatment for pregnant women, new mothers and breastfeeding women

living with HIV (UAC, 2016). The positive gesture in Uganda in PMTCT evidenced by the 86% decrease in new infections among children between 2010 and 2016 (UAC, 2016). Nonetheless, the number of HIV-exposed infants tested for HIV stands low at 38% because of low retention of mother-and-baby pairs in PMTCT programs. (UAC, 2016.) The 2012 World Health Organization (WHO) guidelines on the use of antiretroviral drugs (ARVs) in the prevention of mother- to-child transmission PMTCT of HIV were reviewed in 2013. The revised guidelines suggested lifelong antiretroviral therapy (ART) for every HIV-positive pregnant mother as well as all breastfeeding women regardless of their CD4 count or clinical stage. This is termed as option B+ strategy. This strategy that started in 2012 in Uganda faced a number of challenges including the high cost for the treatment and the disappearance of mother -baby pairs. Option B+ services per mother-baby pair cost US dollars 441.9 on average. There is need for mobilization of enough money to be able to stock the required amount of ARVs in the country, buy enough HIV testing equipment and pay the health workers well. Lowering the cost ART for PMTCT makes Option B+ affordable and available for all those in need of it. (Mukose et al. 2020.)

The study also found out that Voluntary medical male circumcision (VMMC) as a scientific and proven bio-medical HIV-prevention approach reduce female-to-male sexual transmission of HIV. Following a study conducted in 2011, among circumcised men the HIV prevalence rate was 4.5% and 6.7% among their counterparts who were uncircumcised (MoH, 2012). Study results showed that even if the percentage of men eligible to VMMC rose to 40% in 2014 from 26.4% in 2011, access to VMMC is strained by inadequate coverage and lack adequate funding (UAC, 2015). Consequently, yearly circumcisions declined in the following years that's to say in 2015 and 2016 (UNAIDS, 2017). VMMC can be improved by using a Continuous Quality Improvement approach. However, care should bare taken to cater for unique needs of different healthcare facilities. This can be done through carrying out wide consultation with stakeholders. Health professions have answers to majority challenges they face they only need assistance on how to implement improvement. (Byabagambi et al. 2019.) In 2016, close to 1,730 health facilities were offering antiretroviral treatment (ART). Indeed 898,200 people living with HIV started ART treatment in the same year (UAC, 2016). The review of literature informing this study shows that Uganda has got several campaigns to fight HIV/AIDS for example the ABC campaign. This HIV prevention campaign stands for Abstinence, Being Faithful or Using a Condom (Green, 2012. The campaign's key message, borrowed from an agricultural practice, was "Zero Grazing." It meant stay faithful to your partner. The country rode on that message until HIV prevalence dropped

to around 5 percent. This paradigm shift where the ultimate aims of the ABC strategy were translated into the social ethic of "Zero grazing". Zero grazing was about changes in sexual behaviors. This brought on board the involvement of many different actors in the society including the civil society. HIV prevention was seen as an effort of nation building where a synergy was created between the work of Ugandan sexual network and the level of integration achieved in political, social, cultural, economic and medical endeavors where government worked in close contact with civil societies. The systematic change that involved the synergy between behavior and social change on one side and changes in the transformation of sexual networks explains Uganda's successful against AIDS. This had tremendous result and indeed by 1996 Uganda was recognized internationally for having declined AIDS prevalence substantially. (Thornton, 2008.)

However, a recently released AIDS Indicator Survey showed new infections are on the rise again in Uganda. Though the increase was less than one percent, the news alarmed health workers and activists. Uganda's ministry of health says most new infections come from people who report they are in long-term relationships, but have multiple sexual partners. In his recent State of the Nation address, President Yoweri Museveni said Ugandans had "relaxed" in following the ABCs. In order to prevent a sharper rise in new infections, the country's emphasis is shifting to bio medically-proven prevention strategies that have been developed since Uganda's initial ABC campaign. The approach is called approach "combination prevention." "In light of limitation and availability of resources, then priority has to be on evidence-based, high-impact prevent strategies. So, basically the trajectory has been from ABC to now, evidence-based, biomedical prevention strategies with a high impact (Green, 2012).

Other interventions are that of the Uganda Health Marketing Group and UNFPA run a social and behavior change communication campaign survey using a condom promotion campaign dubbed 'If it is not on, it is not safe', targeting youths between 18 and 24 years. The survey observed that 80.3 per cent of youths reformed their sexual behaviors after being exposed to radios, 23.8 per cent to televisions and 23.1 per cent to billboards (Green, 2012). Only 6.8 per cent of the respondents had been exposed to the campaign via interpersonal communication channels. Based on participatory formative research with adolescents, the *Obulamu* adolescent sub-campaign named 'What's Up' developed a series of print, audio and visual messages to address the unique sexual and reproductive health needs of this audience. The campaign messages trigger self-

reflection, dialogue and action towards desired adolescent behaviors such as skills to navigate relationships; pregnancy and HIV prevention; partner reduction; safe male circumcision; HIV testing, care and treatment; and early TB detection and treatment.

10 CONCLUSIONS

Whereas Uganda has made a significant step in preventing HIV/AIDS as evidenced by the declining prevalence within the population, it has not fully addressed the structural barriers that hamper effective prevention of the epidemic. Structural barriers like laws which discriminate against the most at-risk populations like MSM, commercial sex workers and women still undermine the country's effort to effectively tackle the HIV/AIDS challenge. Thus addressing these structural and other challenges to HIV prevention, Uganda needs to take a multi-sectoral approach. Notions of HIV/AIDS preventions need to continue to be part of the curriculum across all levels of the education system right from primary to university. Informal education needs to involve HIV prevention messages as well. This way achievements registered so far in the fight against HIV shall be upheld. It should be remembered that HIV is still alive and continues to spread if people do not take deliberate effort to prevent it.

11 RECOMMENDATIONS

To address these issues, the following key structural interventions are recommended by UNAIDS:

1. Adding some strength in regulations, rule of law implementations, plus the plans aimed at reducing misunderstanding among married couples.
2. Female children should be encouraged to join higher education and also schools should be easily accessed by them.
3. Some funds should be reserved for females to ensure that they are empowered financially. This could help them to be schools plus assisting them to choose lovers who are in good health.
4. The third-party authorities that are always required should be removed plus other limitations to females and other people ease to get HIV and other services that are related to their healthy needs.
5. Legalize sex for money, people who have sex with the same sex partners, don't punish people who do cross dressing.
6. Make the use of all the empowerment community programs that are have been confirmed to fight segregation, humiliation and disregarding, also health care facilities.

11.1 Increasing political and financial commitment

Getting the support of political leaders, religious leaders and other influential figures in society can help to raise awareness of, and strengthen global political commitment to, HIV prevention. However, this must be followed by strengthened financial commitment.

11.2 Using new tools and technology

Over the past decade, a number of new HIV prevention tools have emerged that increase the effectiveness of these services. For example, even in low-income countries, mobile

phone ownership and internet access have grown considerably and have changed how people interact and receive information. These interventions are often described as 'mobile health' or 'm-health' interventions.

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