

Evidence based HIV prevention strategic plan in a fragile setting: Mamfe Health District in focus

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Abstract

An individual action is insufficient to stop HIV. Preventive measures must be tailored to the populations and countries they affect. This is particularly true in fragile contexts where persistent natural or man-made disasters pose a challenge to the established health systems and policies. Effective HIV prevention programs can be created utilizing a well-considered combination of techniques to combat HIV transmission, and in this paper, I explore a number of strategies to motivate HIV preventative actions in Mamfe Health District.

Background

Mamfe Health District is one of the major health districts in Manyu division. Mamfe is a city and the capital Manyu Division located in South West Region. It is home to some 40,000 inhabitants, most of which are business men and farmers. It shares a border with Nigeria and two cities with a strong business presence, Kumba and Bamenda. It is interconnected to these neighboring towns by tarred roads. Mamfe is a cosmopolitan town, characterized by constant migration of business men, commercial goods such as farm produces, utensils, electronics and services. Being a point of entry or exit for economic reasons, the region is home to a diverse mix of ethnicities. The city also contains several rural communities interconnected with seasonal farm-to-market roads. The rural dwellers rely on subsistence farming, as well as small-scale sale of farm produce. Mamfe health district is one of the earliest and heavily affected localities by the ongoing North West/South West socio-political crisis characterized by conflict between the non-state armed groups and the national arm forces leading to forced migration. The effects of this have been diverse, transforming the district to a humanitarian field. In addition to security concerns, irregular network access, no communication device, user's inability to travel due to lack or expired identification documents compounds difficulty of recipients of care (PLWHA, vulnerable population) access to care and treatment.

This evidence-based strategy plan for HIV prevention was prepared to provide an integrated HIV prevention plan in response to these barriers to care in a globalized setting.

Biomedical prevention interventions

1. Treatment as prevention

Treatment as prevention (TasP) refers to HIV prevention strategy that utilizes antiretroviral treatment (ART) to mitigate HIV transmission risk. People with an undetectable viral load who are on successful ART are incapable of HIV transmission to others. TasP thus lowers the viral load at community level and the frequency of new HIV infections. The "test and treat" or "treat everyone" approach is advised by the WHO. This means that irrespective of their viral load or CD4 count, everyone who has been diagnosed with HIV should start ART right away. People following their treatment plans are crucial to TasP's effectiveness. The current global goal is for

95% of all HIV-positive individuals to be on ART and for 95% of those on ART to achieve viral suppression by 2030. (1).

Mamfe District Hospital is the lone divisional referral health facility. There are over 2000 PLWHA who registered and receiving ART within the facility. There are also at least 7 other spoke health facilities providing PMTCT services. Within the framework of TasP, regular continuity of care of the infected and affected population, who serve as index cases, will break the chain of HIV transmission in the community.

2. Key awareness programming on Undetectable = Untransmittable

Twenty years' worth of research has shown that HIV therapy significantly lowers the spread of HIV. There is no danger of HIV transmission among HIV-positive individuals receiving antiretroviral medication who have undetectable levels of the virus in their blood. Between 2007 and 2016, three significant papers on HIV transmission by sexual means involving thousands of couples, one of whom had HIV and the other did not, were conducted. No single case was reported of sexual transmission of HIV from an HIV-positive spouse to a partner who was virally suppressed among these investigations (2-4). Therefore, ARVs now give HIV-positive people with suppressed viral load the opportunity for sex without a condom at essentially no HIV transmission risk to their partner, in addition to empowering PLWHA to stay healthy and have a truly comparable lifespan to HIV-negative individuals. In the world, 47 percent [35-58 percent] of HIV-positive individuals have viral suppression (5). As there is a broad scientific consensus that PLWHA who are consistently receiving effective ARVs with suppressed viral levels will not sexually transfer HIV, UNAIDS supports the idea that undetectable Equals untransmittable (6).

In light of this plethora of scientific data, patient drive towards virally undetectable levels and continuity of care as well as stigma mitigation can be encouraged through awareness message programming among Mamfe populations living with HIV; particularly emphasizing knowledge and recognition that undetectable = untransmittable is a fact.

3. Pre-exposure prophylaxis

Pre-exposure prophylaxis (PrEP) is the practice of HIV-negative individuals taking an antiretroviral drug to lessen their chance of contracting HIV. As part of comprehensive prevention, the World Health Organization (WHO) advises offering oral PrEP based on tenofovir disoproxil fumarate (TDF) to high risk individuals. When used as prescribed, oral PrEP is quite successful at preventing HIV. The WHO recommends that the dapivirine ring be made available as an alternative HIV prevention option for women in 2021. Various items are being researched as alternative PrEP solutions, such as implants and long-acting injectables (7). PrEP needs to be made available everywhere because it is currently unavailable in many nations. Only 28% of the 3 million persons in low- and middle-income countries who were supposed to be using PrEP by 2020 goal was accomplished (1).

Due to its cosmopolitan setting, predominately commercial activities, and ongoing armed conflict, the Mamfe community is home to a number of key populations, including commercial sex workers, inmates, and vulnerable groups like those who have been forced to flee to bushes and remote areas, orphans of conflict victims, and teenage girls. HIV prevention in the area will be considerably aided by a strategic plan involving the roll-out of PrEP targeting commercial sex workers (CSW) who frequent brothels and other unofficial settlements.

4. Condom programming

According to statistics from longitudinal studies, the efficiency of condoms in preventing HIV is believed to be between 80 and 85 percent, with the potential to reach 95 percent when used correctly and consistently. One of the best ways to prevent the sexual transmission of HIV, other STDs, and unplanned pregnancy is to use condoms, provided they are used regularly and correctly. However, adherence, which varies between groups, is the main factor influencing condom effectiveness. According to model estimates, condoms have prevented around 50 million HIV infections, changing the trajectory of the HIV epidemics around the world (8). The context and needs of the various communities must be considered when developing condom promotion and distribution strategies and approaches. This must be represented in the distribution channels used, the messaging used, and the condoms themselves (8).

Adolescent girls, women of childbearing age, sexually active males, couples, CSW, and business migrants will all be the focus of this condom promotion campaign in the Mamfe neighborhood. The programs will involve educating the public about condoms at health facilities, markets, parks, and other social gatherings like football games; stimulating demand for condoms by purposefully examining the sexual health of health facility users and providing free condom offerings; and finally, distributing condoms to those in need in places like health facilities, hotels, and brothels.

Behavioral prevention interventions

By addressing hazardous behaviors, behavioral strategies aim to lower the HIV transmission risk. Consequently, a significant component of this technique is behavior change communication. Aiming to promote use of HIV prevention services, efficient behavior strategies address the cultural contexts around the risk behaviors. Behavioral interventions include the following examples:

1. Information provision (mass media)

Mass media-driven strategies can be defined as “an intervention message delivered in a natural setting through a mass media channel to which individuals may or may not attend (e.g., radio, television, newspaper, magazine, or mass distribution or mailing of printing materials)” (9). Mass media outlets can be used independently or in conjunction with individual information sources (such as peer educators and outreach workers). Mass media is seen as useful because it can access a wide community, repeat messages frequently and use different content formats. Mass media interventions usually address behavior change communication, which often is theorized to influence psychosocial factors such as knowledge, attitudes, and perceptions of self-efficacy and social acceptability. Changes in these aspects are thought to affect specific behaviors or practices, including condom use, delayed sexual debut and overlapping sexual partnerships. There are several existing studies that support the impact of mass media on varied aspects of sexual behavior which include varied effects on condom use and reduction in sexual partners in some contexts (10). Mass media can also be directed at knowledge related to HIV transmission and HIV prevention in order to enhance increase in HIV transmission

knowledge, and result in larger increases in prevention knowledge. It has also resulted in short-term reductions in stigma (10).

Within the Mamfe district, behavioral interventions include setting up a mass media campaign involving local radio talk shows and local newspaper front pages.

2. Counselling and other forms of psycho-social support

VCT consists of the provision of counselling and risk evaluation by a trained counsellor prior to HIV testing. It requires an individual to seek testing, either at a VCT facility or a mobile VCT site. An HIV test is then administered and the result is delivered by the counsellor. The next step in VCT is post-test counselling, which contains an element of risk reduction counselling. The duration of counselling may vary, and the test result may either be given on the same day (rapid testing) or individuals may return to the clinic another day to receive their test result. While post-test counselling is intended to be used both for those who are HIV negative and those who are HIV-positive, it is often truncated or less intense for people who test HIV-negative (10).

The following are the effect of VCT on sexual behavior from evidence

- It can contribute to reductions in the number of sexual partners.
- It increases the odds of condom use among those testing HIV-positive.
- It is associated with fewer sexual partners and increased use of condoms in sero-discordant couples.
- Couple testing in sero-discordant couples shows decreases in unprotected sex.
- Community-based HTC programs can affect prevention outcomes if they are focused on populations where positivity in HIV testing is high

VCT interventions in Mamfe district will include incorporating VCT activities as part of patient screening in all health facilities prior to consultation as an opt-out approach.

3. Economic incentives programs

In relation to HIV prevention, economic incentives aim to affect the sexual or HIV service related behavior of specific individuals and clearly defined groups. Cash payments provided without having to undergo certain activities may reduce financial barriers to school attendance, which is significant, because education, particularly for girls, is instrumental in achieving multiple development objectives, including a reduction in the risk of acquiring HIV.

Some studies showed that conditional or unconditional cash transfers were effective in reducing HIV and STI prevalence and some HIV risk behaviors. Subsequent larger, well-controlled trials have not replicated the earlier promising results mentioned above, suggesting that the effect of economic incentives on HIV prevention-related outcomes is specific to a context. Further research is needed to establish the effect of economic incentives on sexual behavior and HIV incidence (10).

In our Mamfe context payments can be made in the following scenarios for example; when an individual takes an HIV test, abstains from drug use, support for transport to clients for ART pick-up, achieves viral suppression or to a mother who attains a negative final outcome for their exposed infant.

Structural prevention interventions

The political, economic, social, or environmental variables that put people at risk for HIV are the focus of structural interventions. All spheres of society must support structural initiatives, from individuals to the national governments that enact legislation. Interventions could include:

1. Addressing inequality

Simply put, inequality is the unequal distribution of resources for health or health care due to hereditary or other characteristics, or a lack of resources (11). However, reducing inequality through social protection programs lessens social isolation, gender inequality, and financial inequality, all of which raise the risk of HIV infection. Additionally, they facilitate access to HIV and other healthcare treatments and help lessen the social and financial effects of HIV on

families and individuals. Social protection lowers the risk of HIV infection, improves treatment compliance for HIV and tuberculosis, and promotes resilience (12).

Through an organized program, young women, rape survivors, and widows who are either displaced or living in financially precarious situations in our society might all be empowered. For instance, cooperative agricultural initiatives, programs for vocational training, subsidized housing rents or purchases, subsidized health care, and community attention on the rights of girls.

2. Decriminalizing sex work, homosexuality or drug use

The purposeful promotion of heterosexual relationships as desirable by various churches and civil circles may lead to the exclusion of those who engage in homosexual behavior (13). According to studies on the experiences of homosexual men in Nigeria (13), their church leaders openly condemned them. This reinforced the idea that there is no chance of HIV infection among "good" individuals in the church, increased the stigma attached to this important community, and functioned as a deterrent to the body. Such alienation and "othering" can lead to same-sex practicing church members or PLWHA allowing internalized stigma by attaching guilt to them for their sexuality and HIV status (14).

Through training of sex workers and brothel managers, harm reduction initiatives in the context of sex work can be implemented in our environment.

3. Implementing laws to protect the rights of people with HIV

The labor code of Cameroon primarily forbids any type of discrimination at work, in institutions of higher learning, in the workplace, and in the supply of services (15). Despite government efforts to provide free ARV, decentralize treatment facilities, and establish HIV/AIDS support programs for patients, there are still persistent beliefs and discrimination related to the disease, according to Bissala, a spokesperson of the Cameroon Workers' Union. He stated that there are no laws in place to shield PLWHA from prejudice (15). Therefore, there is a critical need for institutionalized HIV-related stigma to be addressed by government and private cooperative

policies that respect the rights of PLWHA and provide consistent monitoring of their implementation.

Lessons learned from HIV prevention programs that can be used in the prevention management of the Covid-19 pandemic

- One of the most highly effective methods for reducing HIV transmission is the "Treatment as Prevention" (TasP) idea. Similar to how the COVID-19 vaccine aims to create herd immunity in the general populace (16), optimal vaccination coverage becomes a powerful COVID-19 preventative weapon.
- The COVID-19 quarantine technique can be used in conjunction with pre- and post-exposure prophylaxis as a model for HIV prevention to limit the spread.
- To lessen or stop the spread of the COVID-19 virus, physical tools in biomedical interventions of HIV prevention could be compared to mask use, social withdrawal, and hand washing.
- Additionally, behavioral interventions, such the use of media in health education, are effective for both the COVID-19 and HIV prevention agendas.
- Reducing inequality is just as important for COVID-19 prevention as it is for preventing HIV. Recent inequalities in the COVID-19 vaccine roll-out between the global North and South demonstrate this.

In conclusion, HIV cannot be averted with a single measure. For various populations and nations, various preventative strategies are required. Effective HIV prevention programs can be developed using a thoughtful combination of strategies to address HIV transmission in Mamfe District.

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