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BRIEF REPORT

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Botswana's HIV response: Policies, context, and future directions

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Abstract

This brief report describes key periods in the history of the national public health response to the human immunodeficiency virus (HIV) epidemic in Botswana. It reveals the context leading to the development of HIV policies presently in place and current challenges that remain. The report concludes with opportunities for future directions, initiatives, and policy changes to reduce the high rates of HIV.

1 | INTRODUCTION

Botswana continues to have the second highest rate of human immunodeficiency virus (HIV) in the world. Yet Botswana is also as an exemplar in terms of a national public health response to one of the most devastating diseases of modern time. It was the first country in sub-Saharan Africa to offer universal access to HIV care and remains among a handful of countries investing in care at this level in the world. Contextualizing the current

challenges that Botswana faces with HIV requires consideration of how HIV policies and practices developed, as that development continues to inform care today. Botswana's response was unique and utilized a multilevel as well as multinational approach to address the demands of the disease. The goal of this paper is to understand the history and current context of HIV policy in Botswana to inform future directions, initiatives, and policy changes to reduce the high rates of HIV and other potential negative psychological and social outcomes.

2 | POSTCOLONIAL BOTSWANA-INITIATION OF HEALTHCARE REFORMS PRIOR TO HIV (1966–1985)

Following the peaceful transition from British rule and the discovery of diamonds in 1967, a modernized healthcare sector began to emerge in Botswana. Essential to this postcolonial development was the idea that "diamonds are for everybody and every Motswana benefits." Diamonds were instrumental in the formation of a free education system, a free healthcare system, and the development of key infrastructure including roads and hospitals. Throughout the early years of this new healthcare system, there was an emphasis on primary as well as preventative healthcare, modeled after the Nordic countries. Given this, there was also access to vaccinations and free antenatal care, and thus a large proportion of women were accessing services because they traditionally cared and looked after all members of the family.

3 | EMERGENCE OF HIV AND INITIAL RESPONSE (1985–2002)

Reports suggest the first case of HIV in Botswana was reported in 1985 (Hardon, 2006). The response that followed began slowly as little was known about the source and transmission of the disease, and how to treat those infected. Community workers went throughout affected areas and were instrumental in palliative care. They became a support structure built into communities due to the high mortality rates. HIV threatened the preventative care structure that had worked so well previously; the system became inundated with cases of the disease and had to shift from prevention to hospice care. Monitoring of HIV therefore began in earnest in 1995 as more information became available of the benefits of triple-drug treatments involving on protease inhibitors. In addition, it became clear that in Africa, HIV spread largely through heterosexual encounters and as such was mainstreamed into healthcare. Early commitment and resources to address HIV stemmed from civil society and the government that was then followed by donor support. In 1999, Botswana established the National AIDS Coordinating Agency to develop and support partnerships, harmonize initiatives, and coordinate and facilitate implementation of the national response to HIV and acquired immunodeficiency syndrome (AIDS). During this first stage of responding to HIV, both counseling and testing was free and offered as opt-in services at government health facilities; however, the lack of access to treatment and high levels of stigma diluted the value of testing for the average person.

Of equal importance, in 1999, Botswana was the first country in Africa to implement azidothymidine (AZT) nationally as part of the prevention of mother to child transmission (PMTCT). The initial idea with PMTCT in Botswana was to save the next generation of people and hence there was a goal to test all pregnant women. Yet, with limited resources, there was a policy dilemma: AZT was offered to mothers as a free preventative program during pregnancy and delivery to protect the child but it was not feasible to offer it free to mothers following pregnancy. From 1999 to 2001, there was not yet universal access to HIV treatment in place for both men and women. With a sole focus on child protection, many HIV-positive mothers often did not survive. When health workers went into communities and talked about protecting the next generation, community members asked what kind of generation there could be if the mothers were not there. Although this exclusive provision to prioritize the child's protection seems morally contentious now, it is also important to recognize that at the time, there was limited evidence of the long-term effects of living on antiretroviral therapy (ART).

4 | UNITED NATIONS SPEECH AND FURTHER INTERNATIONAL INVOLVEMENT (2001–2004)

In 2001, then President Festus Mogae addressed the United Nations General Assembly and urged for international support to address the epidemic (Mogae, 2001). He emphasized that without such support, Botswana could become extinct as a nation. In addition, he stressed the widening health disparities evident throughout the world given this new disease and its impact on the already limited health systems' ability to respond, particularly in sub-Saharan Africa. The President sought partnership from the international community to support HIV preventative strategies; help develop social support systems to address the fatal consequences of the disease; support scientific research for treatments, and improve access to ART for countries that were the poorest and most afflicted. He also urged support for the National HIV/AIDS Strategic Plan in Botswana, which encompassed a multisectoral strategy involving both the private and public sectors as well as significant investment from the government itself. The purpose of the plan was to target those most vulnerable to HIV, provide both home-based and hospital care for HIV, and introduce ART in all health facilities across the country. President Mogae was successful in these goals, and the decision was made to start a national HIV treatment program. This was to be a comprehensive treatment program, opening the doors for the donor community to fund further efforts.

5 | WIDESPREAD LAUNCH OF PMTCT AND ART SERVICES—AVAILABILITY OF SERVICES + OPT-OUT POLICIES (2002–PRESENT)

In 2002, Botswana established the Masa Program, the flagship national HIV treatment program. Furthermore, in 2002, government officials collaborated with Merck, the Merck Foundation, and the Bill & Melinda Gates Foundation and formed the African Comprehensive HIV/AIDS Partnership. In 2003, 52% of pregnant women receiving prenatal care nationwide learned their HIV status. In addition, starting in 2003, support from the U.S. government President's Emergency Plan for AIDS Relief (PEPFAR) allowed for the development of HIV training and mentorship programs; voluntary counseling and testing for HIV; support for laboratory services and supplementation of the government's provision of ART. In 2004, to increase the use of free national PMTCT and ART programs, Botswana began routine, noncompulsory "opt-out" HIV screening in prenatal and other healthcare settings to treat as many people as possible. This shift to universal free ART represented a major departure from prior strategies focused on behavior change, especially condom use.

Botswana adopted initial messaging around HIV from the PEPFAR launched in 2003 to offer international aid for HIV programs, particularly in sub-Saharan Africa. However, Western strategies such as the ABC approach ("Abstain, Be faithful, Condomize") were not effective at creating behavior change in Botswana. Botswana needed to find a message that worked for it. Decisions needed to be made quickly, given the high rate of infection. This urgency may have contributed to inadequate consultation with traditional leaders and church leaders, as was typically expected and done in Botswana. Given this, initial policies regarding HIV did not have buy in from the community, which had serious consequences including low uptake of programs. Despite the limited involvement during development of these policies, there were efforts at least to engage the community during implementation of the programs. Nonetheless, the effect on behavior change and uptake of services remained largely out of the discourse within communities themselves.

In June 2016, President Ian Khama launched the "Treat All" strategy (BMH, 2016). It aims to provide immediate ART for those diagnosed with HIV, regardless of one's immune status as measured by the CD4 count. Concurrently, Botswana adopted the use of tenofovir, lamivudine, and dolutegravir as the first line ART regimen for HIV treatment. Since then, the treatment regimen has simplified to a single, once a day tablet. The inclusion of dolutegravir as part of the first line therapy in Botswana's public sector was another first for public health care settings globally.

6 | IMPLEMENTATION CHALLENGES AND NEXT STEPS (2020 ONWARD)

Botswana has had an incredible emergency response and developed well-intentioned policies and programs to combat HIV. These efforts have contributed to significant progress toward the 90-90-90 UNAIDS goals for achieving epidemic control of HIV (UNAIDS, 2014). According to the Masa program, in 2019, knowledge of HIV status is at 86%; ART coverage is at 84% with approximately 312,000 people on ART; and viral suppression is at 96%. The benefits for early treatment are well established for both the individual's health and population-level epidemic control. Early treatment, with a preference for same day ART initiation, has risen significantly in 2019; however further work is needed before it is fully institutionalize in all health facilities.

Yet, stigma has emerged as a barrier across each phase of addressing HIV in Botswana, from earlier education programs that emphasized condom use but perpetuated perceptions of promiscuity and carelessness to the launch of free universal programs that are not resonating with all community members (PHR, 2007). There continues to be relatively high rates of infection, compared with surrounding countries with less robust systems in place. To date, the focus has been on building up the infrastructure and having sufficient resources to make testing and treatment available for all. Now that this is in place, Botswana must expand beyond the biomedical model of ensuring survival and take a more biopsychosocial approach that addresses stigma to ensure quality of life and social integration for people living with HIV. Interventions to promote a broad base of knowledge of "Treat All" and the benefits of early treatment within the community are required.

Current challenges include differential treatment use among women and men, with treatment coverage estimates for women higher than for men. As they are often predominately responsible for the household caregiving from a young age, women tend to access health services, particularly maternal and child health care, early on. Men tend not to access care at younger ages because traditionally they are not in need of health services at an earlier age as women are. The rising incidence of HIV among adolescent girls and young women requires high impact prevention interventions as well. There is also the challenge of masculinity with men, who often feel they do not need to go to the hospital until they fall very sick. In addition, recent evidence on strategies for finding men require differentiated care models, which expand treatment access with evening antiretroviral services at clinics and "red-carpet" services with minimal waiting times.

Finally, with over 300,000 adults on ART and Botswana's priority of integrated primary healthcare, there is both a need and an opportunity to integrate ART service provision into primary health care services. This too, will require community education as well as patient-centered approaches for provision of these integrated health services.

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