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SEXUAL HEALTH

Time, scope and resources: why U=U makes programmatic sense for Nigeria

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ABSTRACT

Nigeria's widespread mixed epidemiology HIV program has achieved a 26% reduction in new infections since 2010. New HIV infections in Nigeria remain higher in key populations, adolescent girls and young women. Treatment as prevention was a relatively new concept in Nigeria in 2016, with U=U adopted and launched in 2019 by the Federal Ministry of Health. This paper provides justification on why a sustained focus on U=U campaigns in Nigeria will contribute to the successes of the Nigerian HIV program, improving the possibility of HIV epidemic control and attaining equitable health outcomes for all sub populations in Nigeria.

Keywords: adolescents, behaviour, cost benefit, HIV/AIDS, HIV prevention, key populations, Nigeria, policy, program management, sub-Saharan Africa, U=U.

Introduction

Nigeria's widespread mixed epidemiology HIV program[1] has achieved a 26% reduction in new HIV infections since 2010.[2] Young women in Nigeria are at high risk of acquiring HIV due to a combination of factors including gender inequality, social and economic marginalisation, and biological vulnerability.[3] Key populations such as men who have sex with men, sex workers, and people who inject drugs are also at high risk of acquiring and transmitting HIV due to stigma, discrimination, and criminalisation of their behaviours.[4] The intensified drive towards HIV epidemic control in Nigeria has required an equal increase in allocated resources such as funding, personnel and logistics, which are critical elements for the success of the program.[5] Detailed and cost-effective program management strategies remain critical in order to ensure the most vulnerable and most at-risk populations in Nigeria continue to receive the required prevention, care and support services they require.[6] This applies to the Nigerian HIV program because of the perennial domestic under investments in, and the enormity of the demand for, available resources, though there has been an increase in domestic public spending on HIV by the Nigerian government alongside the increased funding from The United States President's Emergency Plan For AIDS Relief (PEPFAR) and global funds in recent years.[4–6]

Program management

McKenzie *et al.*[7] detail how ineffective program management and misaligned health systems can affect health outcomes. They go further to stress the need for effective program management functionality to ensure that available resources are accounted for and used appropriately for the desired end.[7]

In order to maximise efficiencies, improved oversight, program management, community leadership and government ownership of key resources and program strategies are necessary to ensure a sustainable and acceptable level of HIV prevention, testing, treatment, and care services.[8,9]

U=U and the Nigerian HIV program

Treatment as prevention was a relatively new concept in Nigeria in 2016.[3] The idea that if treatment access was accelerated and viral suppression was achieved to interrupt the onward sexual transmission of HIV was a novel and welcome idea.[10] U=U, which means 'Undetected equals Untransmittable' was science that could be proven and shared as a message of renewed hope for the HIV community.[11,12] For instance, individuals with undetectable viral load could have more meaningful and safe sexual relationships with accompanying reduction in stigma.[12] In 2019, Nigeria's Federal Ministry of Health launched the U=U campaign, with participation of several key actors in the Nigerian HIV sector.[13] Social media campaigns, radio jingles, branded tee-shirts, and billboards were used to spread the message.[14,15] The visibility of U=U messaging remains heightened during World AIDS day activities and during outreach programs by HIV implementing partners in the country.

Very little data, qualitative or quantitative, are available on the perception, uptake and internalisation of this vital HIV prevention message by the general public, service users or health providers in Nigeria. This paper provides justification on why a sustained focus on U=U campaigns in Nigeria will 'make programmatic sense', contribute to the successes of the Nigerian HIV program, and improve the possibility of HIV epidemic control while supporting equitable health outcomes for priority sub populations in Nigeria.

Nigeria currently implements a test-and-start approach to HIV care and treatment, with a rapid scale up of antiretroviral therapy (ART) coverage since the implementation of the innovative ART surge approach that ended in 2022.[5] The ART surge was an accelerated drive to provide HIV testing services across a wider demographic of people, using a mainly community-driven approach and ensuring timely linkage to lifelong ART services for all persons living with HIV. In the past 4 years, Nigeria has begun to reap the benefits of an expanded HIV program, achieving treatment saturation in several states.[5,16] Viral load monitoring, optimised treatment protocols and an upswing in community participation and leadership has directly translated to a year-on-year reduction in new infections.[2,6] Sustaining these gains, even in the face of a global coronavirus disease (COVID)-19 pandemic, raises hope that the end of the epidemic is in sight.[14–17] HIV/AIDS-related deaths, as in most countries who have been able to improve treatment saturation and improved population viral loads, have also begun to decline.[8,9]

Resource considerations

In 2020, the Nigerian HIV program spent US$532 371 498 from a mixture of domestic and international funding platforms.[2] This included all funds that were spent on human resources for health (HRH), antiretroviral medicines, viral load monitoring, HIV health and awareness campaigns, support group meetings for persons living with HIV and differentiated service delivery. Though the population modelling required to calculate the cost benefits of U=U can be multivalent and complicated,[18] and would need to account for other prevention strategies in the prevention tool box such as pre-exposure prophylaxis (PrEP), post-exposure prophylaxis (PEP) and condom use,[19] a simplistic approach would be to divide the amount spent by the number of persons currently receiving lifelong and lifesaving ART in the country. In 2020, this number was 1 492 154 people living with HIV who were on treatment, resulting in a cost per patient of US$357 for the year in review,[20] translating to a net value of treatment costs for one patient for a period of one calendar year. Another approach would be to estimate only the medication costs to maintain each newly infected patient on first-line Dolutegravir (DTG)-based regimens for a minimum of 30 calendar years[17] at an estimated cost of US$75 per patient per year.[21] This number might be significantly higher and would vary by geographical area within the country and per type of service delivery point and service provided, especially if the additional costs of possible opportunistic infections and other health-related issues such as cervical cancer and non-communicable diseases are taken into consideration.[20,22,23] Appropriate U=U implementation in Nigeria would save an equivalent amount for every new HIV infection averted. Policymakers and implementing partners would benefit from exploring this.

Community-led peer-to-peer communication has been shown to be a low-cost effective measure for Social and behavioral Change Communication (SBCC).[24] Though there are some bursts of program communication on U=U, it remains limited in formal HIV program spaces and is not well known or well understood by the general public. In a country where conversations about safe sex and sex education remain slightly taboo and less talked about, limiting the roll out and emphasis of U=U messaging to HIV treatment facilities and World AIDS day celebrations on 1 December misses the opportunity to include people with unknown or undocumented HIV status in Nigeria who have not been contacted for index testing in the conversation.[24] This aligns with findings from studies from other countries and may be a missed opportunity for productive dialogue and stigma reduction efforts.[24,25] Consistent and continuous advocacy campaigns that explain the importance and complexities of U=U incorporated into accessible language for the general public remain a cost-effective measure for the HIV program.[24] Grace *et al.* explore the need for more culturally acceptable messaging in communicating U=U to service users, and this may be applicable to the Nigerian context as well.[26] The Network of People Living with HIV and AIDS in Nigeria (NEPWHAN)[27] also needs to be more visible and involved in prevention programing in this regard.

Recommendations and next steps

As with all programmatic endeavours in public health, the Nigerian HIV program operates within the time-honoured triangle of time, resources and scope.[22] The timeline has been set by the UNAIDS global targets.[16,17] The scope remains the goal to achieve and surpass those targets (95–95–95). As at 2021, Nigeria's scorecard was 90–86–72.[2] The prudent and targeted use of available resources is the only movable part of the triangle.[17]

Allocating more resources to bringing U=U messaging to the fore in all patient interactions, social and traditional media has the potential to be a pareto efficiency for the Nigerian HIV program and should be strongly considered by the Nigerian HIV program and its multilateral donor partners. Studies have shown that U=U messaging has the potential to improve patients' sense of self determination, commitment to treatment adherence and promote positive mental health outcomes.[28–31]

U=U should have a major place in peer-to-peer communication, health talks in treatment facilities and in clinical encounters. Positive reinforcement of the message of love, hope and faith that is entrenched in U=U – faith that the medications work, hope that life and intimacy can continue despite a HIV-positive result, and love and acceptance help, has the potential to eliminate the ignorance and fear that drive stigma and discrimination against people and, in turn, perpetuate the spread of HIV.[24,25] This will be particularly effective for key populations, adolescent girls and young women who are at high risk for new HIV infections, alongside other prevention and harm-reduction activities.[24,29]

Scaling up U=U messaging therefore will have a net positive result on the health and wellbeing of persons living with HIV in Nigeria, while also contributing to a reduction in new infections and uptake of HIV testing,[30] freeing up more resources for resilient and people-centred approaches for the care and treatment of people living with HIV who are currently on treatment.[30] Tailored and culturally sensitive messaging should also be layered on to platforms for differentiated service delivery models currently implemented in Nigeria in order to support the goal of patient- centred, stigma-free service provision for persons living with HIV.[12,28,30,31] Implementing partners will need to apply deliberate efforts into ensuring future U=U implementation efforts are well documented and contribute to the body of evidence for primary prevention of HIV in Nigeria.[28,32] This is even more appropriate in light of current considerations of sustainability and should be considered by policymakers for the Nigerian HIV program.[32,33]

Conclusion

Considering that rates of new infections in Nigeria remain higher in key populations and in adolescent girls and young women,[2] sustained focus on peer-led and community-driven U=U campaigns[31] in Nigeria will improve the possibility of attaining equitable health outcomes for all sub populations in Nigeria.

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