Vulnerabilities and intersecting issues as contributors to higher risk of transmission and acquisition of HIV

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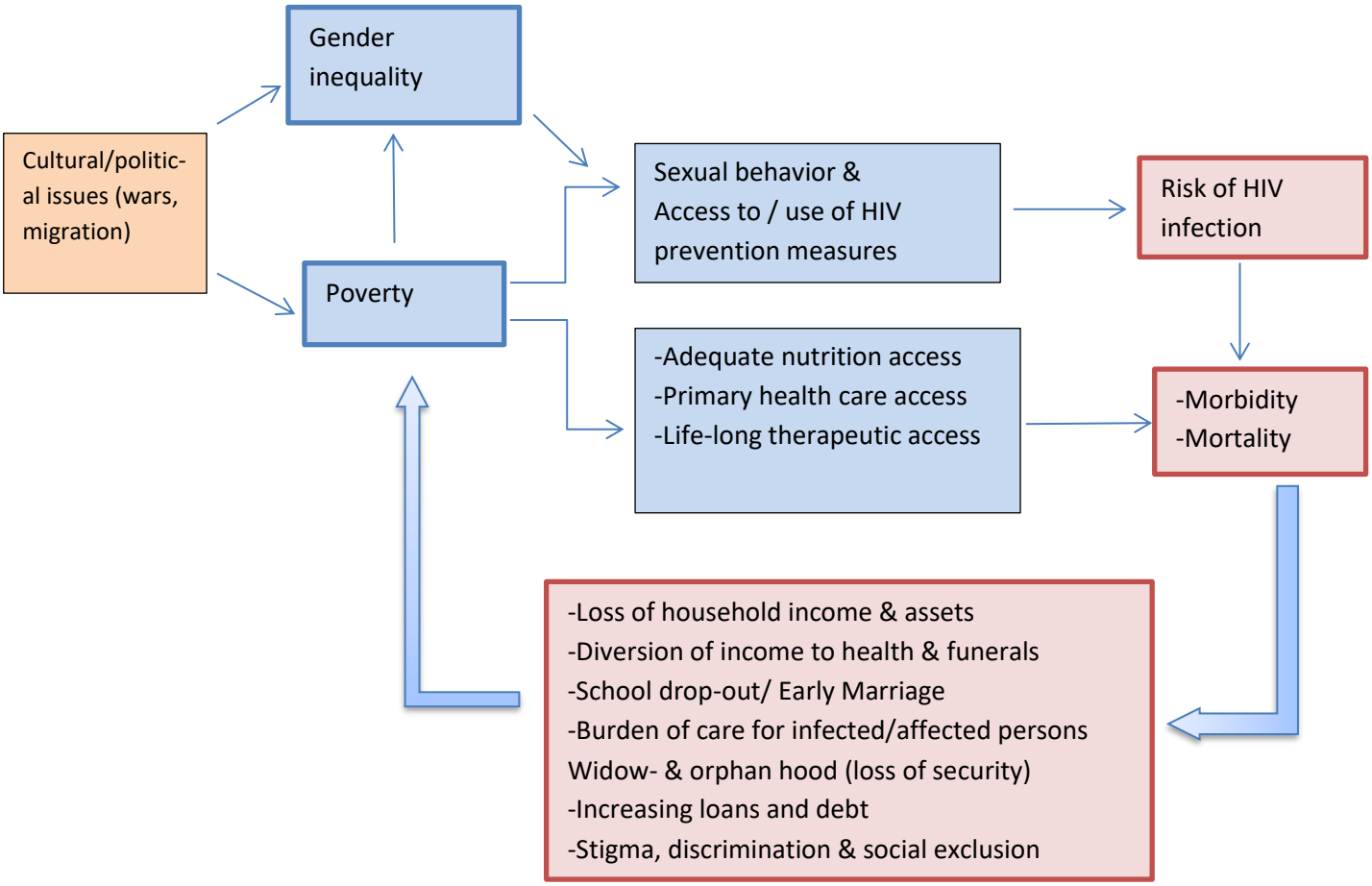
Introduction

It has been 40 long years of consistent combat against HIV yet there are almost 40 million people living with HIV (PLWHA) globally. HIV is a communicable disease yet with vast interplay of diverse socio-anthropological and economic contributing issues.

Majority of HIV/AIDS programs and research remain focused on preventive and therapeutic approaches, with key interest on behavioral change. This myopic view ignores the wider framework of the epidemic and disregards some of the more intricate aspects, compared to direct causes of the disease. This paper attempts to discuss the prevailing factors and how they support high risk of transmission and acquisition of HIV in the society. The framework below attempts to paint a picture of the intercalating drivers of this relationship, adapted from the work of Mirjam et al (58).



The intercalating link between socio-anthropological factors and HIV/AIDS

1. Early Marriage and HIV Risks

Early marriage, also referred to as child marriage holds an undeniable place of political, cultural and public health concern in the Africa. It is any customary or legal alliance where one or both participating parties are under 18 years. Though it seems to be common globally, disproportionate frequencies are documented in poorer countries in Southeast and Asia Africa (1). Enabling factors to this practice include poverty, as an agent of social reinforcement, belief in its protective potential, civil registration gaps, and cultural and religious norms (2). Among other drivers, several studies especially in sub-Saharan Africa have shown affirmative relationships between child marriage and the spread of HIV (3-5).

Several documented arguments have attempted to explain the association between child marriages to HIV (6). The youth-associated juvenile mucosal integrity of the vaginal mucosa, coupled with the likelihood for lacerations and tears, predisposes child brides to HIV risk (32, 33). Sexual partners tend to be five to 20 years older and more likely experienced, informing a strong link between intergenerational sex and increased risk of acquiring HIV (30). Inequalities in gender and women's empowerment constitute a link in that child brides joined in marriage quite often to older men, are at greater risk to gender-related disadvantages such as lack of her bodily control as well as her socio-economic potential (30). Girls in marriage also due to limited formal education have insufficient basic awareness of self-protection from HIV, condom use and autonomous health-seeking behavior.

2. Male Circumcision

Typically restricted to males ages 10 years and above, the absolute surgical resection of the foreskin better termed voluntary medical male circumcision (VMMC) (7), has surfaced in contemporary times as a potent strategy in negating the risk of HIV transmission; though an ambiguous assertion. Studies have highlighted the impact of VMMC in reducing the risk of HIV transmission from female to male by 50–60% (8-10). In addition, several reviews have suggested the individual and population level protective role of VMMC in the HIV burden reduction (11, 12, 17), as well as indicated an augmentation in efficiency up to 73% (11). Benefits of VMMC in combating HIV spread include targeting heterosexual men who invariably are a lot characterized by low HIV testing rate (13) and providing unique occasions to educate

young men who are likely to ignore testing (14). Furthermore, some evidence suggests there is significant reduction in HIV transmission risk among homosexual men (15). However, given the plausible connection between VMMC and reduction in HIV transmission risk, Van Howe et al suggest otherwise, concluding from their analysis that the circumcision intervention seem to be a wasteful decoy that diverts resources away from less expensive, less invasive, more effective options. By so doing, circumcision schemes are likely to negatively impact the gains towards HIV control. Other studies have supposed that a strictly biomedical approach towards combating the epidemic is most likely insufficient in curbing HIV spread in sub-Saharan Africa (17).

3. Gender inequality and male dominance

Amongst others, gender is an important social determinant of health, playing a vital role in health equity (18). It has been defined as a social construct which separates the responsibilities, power, obligations and roles of men from that of women (19). HIV/AIDS-associated gender inequalities are likely associated to disproportionate measure of predictors for men and women. For instance, the relatively low socio-economic level of females in sub-Saharan Africa tends to increase their behavioral risk for HIV, compared to their male counterparts (20, 21). There is a higher likelihood for women to be unemployed, under-educated or live in poverty compared to men, which unfortunately exposes them to transactional sexual activities (22) – most often engaged without any form of protection with casual sex partners. These sexual events are reportedly often made with and without preventive measures (23). Thus, vulnerability to HIV is invariably increased based on gender-associated economic imbalance (24). Several studies have clearly highlighted that inequality in power interplay as well as the female subordinate stance in relationships relative to their masculine counterparts also predisposes women towards higher risk for contracting HIV (25-28). Moreover, the women are generally not empowered to negotiate safe sex (29). In addition, other gender inequity norms such as intergenerational sex and social norms supporting gender-based violence including spousal abuse, rape and domestic violence reportedly perpetuate increased HIV infection in women particularly secondary to the fact that the violations tend to ignore use of condom and equally induce traumatic injury among the survivors (29-31).

4. Stigma and discrimination

The Joint United Nations Program on HIV/AIDS (UNAIDS) suggested that, persistent stigmatization with consequential discrimination of PLWHA have led to several hindrances in prevention of more infections, provision of continuous care, treatment and support of PLWHA (34). HIV-related stigma and discrimination refers to a process of disregard and relegation of people either associated with or living with HIV and AIDS. Discrimination results from stigma expressed as the irrational or undue approach to a person by virtue of their perceived or real HIV status (35). Stigma has been well documented across several studies especially in Cameroon as a true inhibitor to the gains towards combating HIV transmission as well as an enabler to acquisition of new infections (36-38). Studies have equally reported HIV-related stigma to even be perpetuated in religious circles (39-41) through their beliefs and representations.

In Cameroon, though the legal framework, for instance the labor code largely prohibits any form of discrimination at work, in education, businesses and in service provision yet the absence of specific laws protecting people PLWHA from discrimination seems to be a strong macro-level enabling factor against HIV epidemic control (59).

5. Poverty

The discussion on the association between HIV infection and poverty in SSA has been persistent and remains ambiguous. HIV historically has been linked with affluence, better buying power and in urban areas (42). In the course of the epidemiological progression, poorer income groups became at risk probably due to networking and globalization even in their sexual attitudes such as transactional sex and poverty –driven adaptive measures like survival sex-work. Loss of economic leverage through ill health, with high cost of caring for PLWHA, family poverty and orphaned children all constituted the unfortunate sequelae. Over time the immediate and long-term impact become obvious especially in those with lower socio-economic status. Coping technics such as selling key household items like livestock as a buffer against poorer agricultural productivity or lost wages secondary to diminished labor capacity further plunges the family into a downward economic spiral (47). This suggests a cyclical pattern where poverty impacts HIV transmission which in turn complicates the socio-economic level of the individual and his

family. Several studies have either highlighted the strong link of low socio-economic status to HIV in SSA (43-46) or expanded on this complex cyclical relationship (46, 47). Poverty-related predictors such as limited education and inadequate knowledge of HIV infection prevention have been reported (45).

6. Political Unrest and migration

Conflict and migration may also drive higher risk of HIV transmission and acquisition of new infections. Several studies have highlighted increased risk of HIV among rural to urban and seasonal migrants owing to difference in HIV prevalence gradients between the two communities, varied sexual pool, social disruption, increased substance abuse, and relatively increased rates of liberal and commercialized sex (48, 49).

Population displacement following political instability could potentially adversely impact the public health structure in receiving unaffected settings (50). As observed in Guinea-Bissau with exhibits of partiality by its armed forces, rounds of attempted and successful *coups d'état*, and political assassinations (51); as well as in Cameroon where both the government security and armed separatist forces are involved in incinerating villages, assassinating civilians, sexual violence and using incommunicado detention and torture (52), these events or factors have negatively impacted the gains made by the country in the combat against the HIV/AIDS epidemic and could be a key enabler of its increased disease burden relative to its counterparts (56). This observation is a common finding, consistent with other studies in Southern Africa and Nigeria (53, 54). In addition, conflict creates an enabling environment for propagation of promiscuous activity between people of mutually unaware HIV statuses thereby increasing transmission chances (55). In one study in a typical fragile setting in Cameroon, HIV incidence among partners tested was as high as 37.2% (58/156) (56).

Conclusively HIV/AIDS is inextricably a social problem to the dimensions of human lifestyle and core existence with potential global implications. Thus to truly achieve epidemic control public health approaches, interventions and research must entertain the multiplicity of ways by which HIV/AIDS relates to and is affected by human anthropology and economy.

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