Published in final edited form as:

Qual Health Res. 2021 July; 31(9): 1680–1696. doi:10.1177/10497323211001361.

Identifying 'what matters most' to men in Botswana to promote resistance to HIV-related stigma

Supriya Misra^{*,a}, Haitisha T. Mehta^b, Evan L. Eschliman^c, Shathani Rampa^d, Ohemaa B. Poku^e, Wei-Qian Wang^f, Ari R. Ho-Foster^g, Mosepele Mosepele^h, Timothy D. Beckerⁱ, Patlo Entaile^j, Tonya Arscott-Mills^k, Phillip R. Opondo^l, Michael B. Blank^m, Lawrence H. Yangⁿ

^aDepartment of Public Health, San Francisco State University, 1600 Holloway Avenue, San Francisco, CA 94132, United States

^bTeachers College, Columbia University, 525 West 120th Street, New York, NY 10027, United States

^cMailman School of Public Health, Columbia University, 722 West 168th St. NY, NY 10032, United States

^dDepartment of Psychology, University of Botswana, Private Bag UB 00705, Gaborone, Botswana

^eBloomberg School of Public Health, Johns Hopkins University, 615 North Wolfe Street, Baltimore, MD 21205, United States

^fTeachers College, Columbia University, 525 West 120th Street, New York, NY 10027, United States

⁹Faculty of Medicine, University of Botswana, Private Bag UB 0022, Gaborone, Botswana; Perelman School of Medicine, University of Pennsylvania, 3400 Civic Center Boulevard, Building 421, Philadelphia, PA 19104, United States

^hFaculty of Medicine, University of Botswana, Private Bag UB 0022, Gaborone, Botswana

ⁱlcahn School of Medicine at Mount Sinai, 1 Gustave L. Levy Place, New York, NY 10029, United States

^jBotswana-UPenn Partnership, University of Botswana, Private Bag UB 0022, Gaborone, Botswana

^kDepartment of Pediatrics, Perelman School of Medicine, University of Pennsylvania, 3400 Civic Center Boulevard, Building 421, Philadelphia, PA 19104, United States

¹Department of Psychiatry, University of Botswana, Private Bag UB 0022, Gaborone, Botswana

^mPerelman School of Medicine, University of Pennsylvania, 3400 Civic Center Boulevard, Building 421, Philadelphia, PA 19104, United States

^{*}Corresponding author: supriya@sfsu.edu.

ⁿDepartment of Social and Behavioral Sciences, NYU School of Global Public Health, 715 Broadway 12th Floor, New York, NY 10003, United States; Mailman School of Public Health, Columbia University, 722 West 168th St. NY, NY 10032, United States

Abstract

Despite a comprehensive national program of free HIV services, men living with HIV in Botswana participate at lower rates and have worse outcomes than women. Directed content analysis of five focus groups (n=38) and 50 in-depth interviews with men and women with known and unknown HIV status in Gaborone, Botswana in 2017 used the 'what matters most' (WMM) and 'structural vulnerability' frameworks to examine how the most valued cultural aspects of manhood interact with HIV stigma. WMM for manhood in Botswana included fulfilling male responsibilities by being a capable provider and maintaining social status. Being identified with HIV threatened WMM, which fear of employment discrimination could further exacerbate. Our findings indicate how cultural and structural forces interact to worsen or mitigate HIV stigma for urban men in Botswana. These threats to manhood deter HIV testing and treatment, but interventions could capitalize on cultural capabilities for manhood to promote stigma resistance.

Keywords

stigma; HIV; AIDS; Botswana; culture; men; masculinity; qualitative

Introduction

Gendered manifestations of HIV-related stigma in sub-Saharan Africa (SSA) result in women bearing the burden of higher risk and prevalence of HIV, while men experience more severe prognoses and greater mortality (Dworkin et al., 2015; Shand et al., 2014; Sileo et al., 2018; Sileo et al., 2019). Men participate less across the HIV care continuum, avoiding testing, entry into care, and use of antiretroviral therapy (ART) (Shand et al., 2014; Sileo et al., 2019; Colvin, 2019). Compared with women, men often endure greater disease progression and complications before initiating treatment (Shand et al., 2014; Sileo et al., 2018), leading to higher mortality rates even when receiving treatment (Beckham et al., 2016; Druyts et al., 2013). While structural and cultural conditions across much of SSA place women in more vulnerable positions for acquiring HIV and suffering social consequences (e.g., being left by partners) that warrant focused attention, gender disparities in clinical outcomes highlight the need for more research on men's experiences of HIV-related stigma to lower the population burden of HIV in SSA (Dworkin et al., 2015; Shand et al., 2014).

Stigma refers to the ways in which human differences (i.e., HIV diagnosis) are linked with undesirable characteristics (i.e., stereotypes) that result in harmful impacts for the stigmatized via both negative attitudes and beliefs and discriminatory actions and behaviors within an inequitable power context (Link & Phelan, 2001). Stigma includes multiple dimensions for the stigmatized starting with the general public's negative attitudes and beliefs (perceived stigma), which can be expressed through specific experiences of discrimination (enacted stigma) and also applied by the stigmatized individual to themselves

(internalized stigma). HIV-related stigma is one of the most salient barriers to HIV testing in SSA (Musheke et al., 2013), and men describe male-specific aspects of HIV-related stigma such as being blamed for the spread of HIV (e.g., due to their sexual risk behaviors), perceiving clinics as spaces for women (e.g., such that when men access them it is assumed to be because of HIV), and being seen in health services as a sign of weakness (Russell, 2019; Shand et al., 2014; Sileo et al., 2018; Skovdal et al., 2011). Studies on the gendered dynamics of HIV-related stigma tend to focus on the disproportionate impact for women (e.g., Shamos et al. 2009). However, HIV-related stigma also interacts with gendered expectations and cultural norms for men, which can directly threaten men's social value starting as early as adolescence (Ganle, 2016), and jeopardize his role as a provider; his reputation and ability to achieve respect; his strength and self-reliance; and his sexual prowess (Shand et al., 2014; Sileo et al., 2018).

These gendered and cultural dynamics also affect men in Botswana, which has one of the highest HIV prevalence rates globally (20.3% of adults, 16.2% of men age 14–49) (UNAIDS, 2019), despite having substantially reduced common structural barriers to HIV care such as accessibility and affordability. Launched in 2002, Botswana maintains a flagship national HIV program which currently includes free, comprehensive services includes routine, opt-out HIV testing and free ART for any citizen with HIV (Ramogola-Masire et al., 2020). Although treatment programs can help reduce HIV-related stigma by making it more socially normative (Castro & Farmer, 2005; Wolfe et al., 2008), treatment alone does not eliminate stigma, which continues to impact people living with HIV (PLWH) in Botswana (Ramogola-Masire et al., 2020; Letshwenyo-Maruatona et al., 2019). Consequently, men's rates of testing and treatment are below 90-90-90 targets despite this universal HIV care; only 89% of men with HIV know their status (compared to >95% of women), and only 80% of these men are receiving ART (>95% of women), leading to only 69% being virally suppressed (93% of women) (UNAIDS, 2019).

Within the context of colonialism and contemporary globalization, the violent social processes that generate hegemonic masculine ideals in SSA directly impact health (Connell, 2012), but this gender discourse has not yet been incorporated into Botswana's HIV strategies (Rakgoasi & Odimegwu, 2013). One prior qualitative study in Botswana found that 'manhood' is not assumed by birth but rather earned through fulfilling social obligations, such as being married and having a family, adequately providing for their needs, and dealing well with any challenges that occur (Rakgoasi & Odimegwu, 2013). However, high rates of unemployment, poverty, and lack of education have made it more difficult for all men in Botswana to fulfill these responsibilities – difficulties that can then be further compounded by HIV (Rakgoasi & Odimegwu, 2013). In particular, experiencing HIV-related discrimination can threaten employment and economic status by undercutting multiple masculine ideals including providing for one's family, having status in society, and being seen as strong, healthy, and independent (Rakgoasi & Odimegwu, 2013). While Botswana has legal protections against HIV-related discrimination (Botswana, 2010; Botswana, 2012), many PLWH remain concerned that their employability is threatened with fewer opportunities and greater insecurity (Farahani et al., 2013; Rakgoasi & Odimegwu, 2013).

To advance the understanding of how HIV-related stigma interacts with cultural notions of 'manhood' and structural vulnerabilities such as employment discrimination – and especially how these findings can be used to inform interventions to resist HIV-related stigma - we apply two complementary frameworks to qualitative data collected in Botswana. First, the 'what matters most' (WMM) framework facilitates identification of the most salient activities and values that "matter most" within an individual's local moral world and illuminates how stigma is experienced in a specific cultural context (Yang et al., 2007; Yang et al., 2013; Yang et al., 2014a). Importantly, moral experience can simultaneously worsen and mitigate stigma – stigma can be exacerbated when a condition, such as HIV, inhibits achieving WMM, and conversely, achieving WMM in the face of HIV can protect against the impact of stigma (Yang et al., 2013). Second, moral experience occurs in the context of larger social and economic structures (Yang et al., 2014b). The structural vulnerability framework considers how inequality embedded within these large-scale structures creates vulnerability based on one's location within hierarchical relationships of power (in this case, if employment discrimination relegates those with HIV into positions of greater disadvantage) (Bourgois et al., 2017; Quesada et al., 2011). By situating our analysis at the nexus of the two frameworks, we can articulate how one's social positions constrain or foster one's ability to pursue and achieve WMM, which in turn might further worsen or lessen HIV-related stigma and associated health outcomes (Yang et al., 2014b).

HIV-related stigma remains an understudied topic for men in SSA, including in Botswana. To our knowledge, this is the first study that seeks to elucidate how HIV-related stigma interacts with cultural capabilities and structural vulnerabilities to deter HIV testing and treatment for men in SSA, and further, the first to do so within the unique context of a country that has been a leader in combatting HIV with a long-standing national program offering free HIV care. Moreover, our approach uniquely illuminates how achieving gendered cultural capabilities can also protect against HIV-related stigma, offering important insights for interventions that can promote stigma resistance and improve engagement in HIV care.

Methods

Study Setting and Participants

Participants (N=88) were purposively recruited for five focus groups (FGs; n=38) and 50 semi-structured in-depth interviews (IDIs) in June 2017 in Gaborone, Botswana. Gaborone (population ~200,000) is the capital and largest city in Botswana, a democratic, middle-income country in southern Africa (total population ~2 million). The majority of the population lives within 100 kilometers of the capital and 61% of the population is urbanized (World Population Review, 2019). Botswana has experienced rapid urbanization and socioeconomic development since the 1970s, including the establishment of robust public healthcare and education systems that has shifted some cultural practices (Sabone, 2009), while some aspects such as religiosity (Haron & Jensen, 2008) and rural farming and cattle (Molosiwa, 2015) remain important, resulting in a complex dynamic of modern and traditional.

Because the interpersonal engagements that "matter most" are shared by the stigmatized (i.e., those living with HIV) and stigmatizers (i.e., those living without HIV), both FGs and IDIs were conducted with PLWH and people with unknown HIV status, and men and women, with separate FGs for each of the four categories (2 FGs with men living with HIV, 1 FG with men of unknown HIV status, 1 FG with women living with HIV, and 1 FG with women of unknown HIV status). PLWH were recruited from a large, publicly funded HIV clinic that provides basic HIV care and specializes in complicated HIV disease (e.g., higher rates of resistance), and community members with unknown HIV status were recruited from Main Mall, a communal shopping area. To maximize comfort and facilitate dialogue around these sensitive topics, all participants were offered the option between FG and IDI, and between English or Setswana. To define terminology, Setswana refers to the main language and the culture of Botswana, while Motswana describes a single individual and Batswana refers to multiple individuals.

Data Collection and Procedures

Data collection and procedures have been described elsewhere (Yang et al., *under revised review*). The interview guide was based on prior studies (Yang et al., 2014b), including questions adapted from the Devaluation-Discrimination Scale, which enumerates stigma across major domains including family, friends, marriage, education, and work (Appendix). One item focused on risk of employment discrimination ("Most employers in your community will hire a person with HIV if he or she is qualified for the job") (Link et al., 1989; Link & Phelan, 2001), and two closely-related items explicitly asked about capabilities that enabled 'personhood' ("What does it mean to be a proper man (or woman) in Botswana?"; "Does having HIV affect a proper man (or woman's) status?"). Participants could also spontaneously speak about WMM and structural vulnerability across items. While many aspects of stigma can be ascertained using validated scales such as the Devaluation-Discrimination Scale, taking a qualitative approach allowed for inductive investigation of culturally-salient aspects that would not otherwise have been elicited.

FGs and IDIs were conducted sequentially. First, FGs (4–10 participants each) were facilitated by the principal investigator (Yang) alongside a Setswana-speaking research team member for 90–120 minutes. FG findings were used to iteratively modify the IDI guide by adding probes to questions; IDIs were then used to capture in-depth responses to core themes. IDIs were conducted in participants' preferred language by four trained bilingual research assistants for 60–90 minutes. FGs/IDIs with PLWH were conducted in a private conference room at the HIV clinic and with people with unknown HIV status in a private space at a centrally located community center. All interviews were audio-recorded and transcribed verbatim; Setswana transcripts were translated into English by four experienced bilingual research assistants who had at least college level training in the social sciences and prior experience in public health qualitative research. Written informed consent was obtained. Participants were compensated 50 Pula (~USD \$5) for travel. Study approval was received from the institutional review boards of the Botswana Ministry of Health and Wellness, University of Botswana, Princess Marina Hospital, University of Pennsylvania, Columbia University, and New York University.

Data Analysis

In this analysis, we prioritized the articulation of WMM from men's perspectives while including verification (or disconfirmation) from women as appropriate. In other words, we focused on how men articulated 'what matters most' and its intersections with stigma but, given these are theorized to be shared cultural views, considered whether or not women also shared these views. We performed deductive qualitative analysis using a two-step directed content analysis approach, which allowed us to utilize the theoretical frameworks to 1) define the categories for WMM and structural vulnerability, and 2) identify relationships between them (Hsieh & Shannon, 2005).

For the first step, we operationally defined four major coding categories based on prior qualitative work indicating how stigma is exacerbated (or mitigated) in relation to WMM and how these disparities could be heightened via structural vulnerability: a) cultural capabilities that matter most to manhood (i.e., WMM); b) how WMM shapes stigma; c) how WMM protects against stigma (Yang et al., 2013), and d) structural vulnerabilities (i.e. fear of employment discrimination) (Yang et al., 2014b; Quesada et al., 2011). Within each category, specific codes for men and women were identified during an iterative coding process. Two pairs of coders discussed two FG transcripts over six meetings to arrive at theoretically derived, operational definitions for each category. Next, four pairs of coders used the codebook for the remaining transcripts; pairs reconciled codes and resolved discrepancies through consensus. These codes were presented to the full multidisciplinary, multicultural team during weekly 60-minute calls over 18 months (~70 meetings); new codes were added to the codebook through full consensus. All transcripts were coded using word processing software; for analysis, coded transcripts were reviewed, and excerpts were extracted and organized into the four categories using a spreadsheet.

For the second step, we identified relationships between categories to determine how WMM intersected with structural vulnerabilities to create greater marginalization for men. A subteam (led by Misra) met weekly for 90-minute calls over six months (~24 meetings) to review the coded transcripts and discuss the conceptual relationships between categories until saturation was reached and no new themes were emerging for men (63 of the 88 participants). A spreadsheet specific to this male-focused analysis was generated to group and arrange coded text. Major themes and subthemes within each of the four major coding categories were retained if they were confirmed by a majority of participants and unanimous agreement of the coding team. Within each theme, we explored for differences by participation method (FG vs. IDI), HIV status (known vs. unknown), and sociodemographic factors including age, education, employment status, and relationship status, and found that our findings were robust across each of these dimensions. We presented the identified themes to the full team for further refinement. Finally, to confirm if the themes were reflecting the data accurately, sub-team members re-read the transcripts to confirm the themes and sub-themes applied to each.

Results

Participant Characteristics

While the total sample (n=88) was purposively balanced, the analytic sample (n=63) prioritized men (n=37, 58.7%) and PLWH (n=44, 69.8%). Sociodemographic details for men and women included in the analysis are presented in Supplemental Table 1. Among men, over two-thirds (n=25, 67.6%) were above age 35, almost a quarter (n=9, 24.3%) did not have a Form 1 education (secondary school), and almost a quarter (n=9, 24.3%) were unemployed. About half (n=19, 51.4%) reported being single. These are similar to the demographics of men in Botswana more broadly – where 38.4% left school before Standard 5 (primary school), 17.7% of the eligible workforce were unemployed, and over a half (58.1%) have never been married (Statistics Botswana, 2014; Statistics Botswana, 2020a; Statistics Botswana, 2020b) – although our sample appears possibly more educated.

Operationalization of Coding Categories

We developed operational definitions including main themes for the four theoretically-informed major coding categories (Table 1) and present quotes to support the main themes within each category: 1) 'What Matters Most' among Batswana Men; 2) Stigma Shapes 'What Matters Most': Challenges Fulfilling Male Responsibilities Violate 'Manhood' to Intensify HIV Stigma; 3) Intersection with Structural Vulnerability: Fear of Employment Discrimination; and 4) 'What Matters Most' Protects Against Stigma: Fulfilling Male Responsibilities Promotes 'Manhood' to Resist HIV Stigma.

'What Matters Most' among Batswana Men

Cultural considerations for WMM to be a 'proper man' in Botswana center on the importance of fulfilling one's male responsibilities by (1) being a capable provider for women and children, and (2) maintaining social status as a respected man in the community. These two domains are interconnected, as being a capable provider earns the respect of others and having social status enables access to resources that facilitate being a provider. While specific descriptions ranged from more 'traditional' to more 'modern' ideas of how to fulfill these male responsibilities, the core conceptualizations generally appeared to be similar.

Being a Capable Provider—'Being a capable provider' is a core facet of moral experience for men in Botswana. Participants characterized a 'capable provider' as someone who has the ability to care for the needs of the women and children for whom they are responsible. This provision of care fulfills a fundamental aspect of male responsibilities and therefore is important for being viewed as a 'proper man.' When asked what makes a 'proper man' in Botswana, one participant described these male responsibilities:

You must show responsibility. When you show responsibility you must know that you have to plan for your life, marry, bring up your children, like, just as he has been saying, yes, that when you bring them together, you have to show responsibility.

- FG, man, living with HIV

A necessary precursor to being a capable provider is having partners or children for whom to provide. Importantly, this male responsibility to provide is not exclusively limited to partners and children to whom a man is legally bound (i.e., through marriage). A man is responsible for fulfilling his role as a provider to any partners and children he has at any given time, although a subset of participants felt that marriage is essential to determine for whom a man is expected to provide. For these participants, being married was requisite to achieving complete manhood by formally denoting for whom the man was responsible:

You are incomplete if you are a man or a woman if you are not married.

Even if you build the biggest of all houses, with 24 bedrooms, you are incomplete. However, if you are married, and have a one-roomed house, then you are complete.

- IDI, man, living with HIV

Participants also noted a variety ways in which one could be *seen* as a capable provider. It is not sufficient to simply be known among one's family as being a good provider; a man's ability to provide must be known by his community as well. Economic stability is one prominent way that a man can signal his ability to provide to others and therefore his capability to be a 'real man,' demonstrated specifically in Botswana through the ownership of cattle and land:

A Setswana man should be seen by the cattle he owns. And his home, taking care of his home. Yes, a home where your woman prepares hot water for you. Yes, having cleared the yard and cutting the trees, making a good fireplace. Those are the things that a real man will be praised for. If those things are missing then you should know there is no real man in that home.

- IDI, man, living with HIV

These notions surrounding the central importance of 'being a capable provider' to achieve 'manhood' were expressed by both male and female participants within the community. For example, one female participant corroborated the linkages between being a 'real man' and caring for one's partners and children, regardless of marriage:

A real Motswana man takes good care of his family. [...] Yes, so much that there will be no complaints from either the woman or the children. [...] Even if you are not married, for as long as you have children with her, you need to take care of them.

- IDI, woman, living with HIV

Maintaining Social Status—'Maintaining social status' also emerged as central to achieving full 'manhood.' Similar to being a capable provider, maintaining social status is not merely an internal process but also requires recognition by the community; a man's social status is based not only on what he achieves, but also how others in the community perceive him. Earning respect in society by having and being perceived as having partners, children, a good home, cattle and land, and a stable job establish a man's abilities to be a capable provider and earn and maintain social status:

A [real] man starts off by having self-respect. **He has to respect himself and assist the community. His home has to be exemplary**. The reason why maybe we don't

get promoted at work is because we are not married. [...] You will earn more respect just by the state of your home.

– IDI, man, living with HIV

Participants also emphasized that earning social status requires more than just 'being a capable provider'; being a capable provider is necessary for being a 'proper man' but not sufficient. There are various routes a man can take to earn social status, but most involve or require proper community engagement such as showing leadership in the community and attending community events. Being seen as someone who contributes to the community therefore is a prerequisite to having status and respect. For example, one man described how status is determined based on how other people observe you in community settings:

I would say having status is determined by how people look at you in respect to how you interact with others and participate at social gatherings, treat everyone equally and generally having self-respect.

- IDI, man, living with HIV

For a subset of men, adherence to certain moral beliefs also emerged as an aspect of a man's community standing. These men held strong opinions, rooted in religious and moral beliefs, that abstaining from alcohol and sexual promiscuity helps earn respect and social status:

If you are God fearing then you are a real man, they do not drink alcohol nor buy prostitutes and avoid hanging around bad temptations.

- FG, man, unknown HIV status

Stigma Shapes 'What Matters Most': Challenges Fulfilling Male Responsibilities Violate 'Manhood' to Intensify HIV Stigma

Fulfilling one's male responsibilities by 'being a capable provider' and 'maintaining social status' promotes one's ability to be seen as a 'proper man' in Botswana. However, HIV-related stigma is a social process that threatens to negate 'manhood' because having HIV is seen as a significant threat to a man's capabilities to achieve these cultural imperatives. At the most fundamental level, participants described that HIV-related stigma not only means someone cannot be a 'proper man,' but also signifies him being viewed as something less than human:

People think when you have HIV you are not a proper man.

– IDI, man, living with HIV

People do look down on this person, they don't consider him being a human being.

-IDI, man, unknown HIV status

Both men's and women's responses characterized the various ways that being identified with HIV can strip a man of his full manhood via the perception that he can no longer fulfill the two core capabilities discussed above. In particular, the stigmatizing perception that a man with HIV is physically weak can interfere with his perceived and actual capabilities

to be a capable provider and engender ongoing uncertainties about maintaining his social status.

Perceived and Actual Capabilities to Be a Provider—HIV could interfere with a man's ability to provide in real terms (e.g., physical weakness restricting the ability to work), but more often, the threat is that being labeled with HIV will lead to the *perception* that he cannot provide, thus inhibiting him from entering into and maintaining relationships and having children. Without partners and children for whom to provide, a man cannot be seen as a capable provider. Men frequently expressed fear of rejection from partners due to having HIV, claiming that disclosing one's HIV status to potential or current partners could jeopardize beginning or maintaining relationships:

Men are afraid to test because they don't want to take treatment because they think that people will stigmatize and most women now they will know their HIV status, they will start refusing their proposals.

- IDI, man, unknown HIV status

They [men] think that when they are HIV positive, women will reject them when they propose.

- IDI, woman, living with HIV

Men described potential reasons for this type of rejection including that partners might not accept their diagnosis, perceive the man as promiscuous and careless, and/or fear getting infected with HIV themselves. However, in spite of these concerns being highly prevalent among men, many women indicated that a man's HIV status does not matter to them as much as men fear it does (see section on 'Maintaining Relationships').

Ongoing Uncertainties about Maintaining Social Status—In addition to jeopardizing his ability to provide, being labeled with HIV also represents a pivotal moment in determining if a man can maintain his social status. The timeframe of this process is gendered; women describe their loss of status due to HIV as precipitous (Yang et al., *under revised review*), whereas men described greater variability in their anticipated loss of status. This variability in expectations allows men to hope that they will not lose status in the community due to HIV, while simultaneously fearing that they will. Although this labeling has different consequences between genders, both genders risk stigmatized labeling via the process of gossip. As one man described, the fear of gossip and ensuing social ostracization makes some men isolate themselves and lose social standing:

He says now people feel restricted with HIV because of this whole gossip thing. They end up isolating themselves from the community because they are afraid... they will ask themselves, if I engage in social gatherings once I leave people will talk bad about you."

- IDI, man, living with HIV

Despite the uncertainty of experiencing true loss of status due to HIV, this fear is heightened by the potential permanency of it. In line with common cultural beliefs, some men feel this

loss of status would be permanent and that there might not be anything they could do to salvage it. One man described its permanence in terms of a Setswana idiom:

It will be permanent, hence the Setswana saying, 'a word that goes out of mouth never returns empty.' You must know that when somebody says something to you, it will be difficult for you to forget, of course the one who said it might forget.

- IDI, man, living with HIV

Even though being identified with HIV may not immediately be stigmatizing for men, HIV-related stigma activates fears of being rejected, receiving less respect, losing work opportunities, and experiencing community exclusion that coalesce around on-going uncertainties about achieving WMM. Together, this perceived stigma can lead men to hide their status from their community in attempts to preserve their capabilities to be a 'proper man' and all that it entails. As one man explained:

If other people know your status in the community it is very hard to be successful as maybe employers will be reluctant to offer you jobs or tenders so the best way is to keep it to yourself.

- FG, man, unknown HIV status

A few participants believe that there is a chance for men to resist HIV-related stigma; in other words, that a man's own will power could prevent him from being rejected or experiencing status loss. This minority of individuals often cited their own lack of experiencing discrimination as proof that HIV-related stigma is not something to fear and that can easily be overcome:

I do not think [having HIV affects a man's status] since I have not been discriminated [against] that much.

- IDI, man, living with HIV

Intersection with Structural Vulnerability: Fear of Employment Discrimination

There are clear structural factors that contribute to the cultural capabilities of 'being a capable provider' and 'maintaining social status.' Participants described how one of these structural factors, employment, is essential to achieving WMM for men: it offers the material means to be a capable provider and maintain social status. Consequently, the data revealed how being identified with HIV could threaten employment and exacerbate HIV-related stigma by precluding WMM structurally.

The ability to retain employment can serve as a tangible marker for how much HIV-related stigma has impacted a man's cultural capabilities. Some men note that being sick does not threaten WMM *until* it intersects with employment. One man described how only after being fired would a man living with HIV's wife leave him because he could no longer support her:

If you are working for a company, then they notice that you are sick, then they fire you, your wife can go [...] when you can't support her.

- FG, man, living with HIV

Although the majority of participants who discussed HIV-related employment discrimination did *not* think it was an on-going issue, a robust subset – particularly in the men's focus groups – felt it was a real risk. A few even suggested that employment discrimination was the most salient barrier remaining to community acceptance of men living with HIV:

I: Most employers in your community will hire a person with HIV if he/she is qualified for the job? Do we agree that employers would hire you whether you have HIV or not, as long as you qualify for the job, or are there those who stigmatize?

R1: That is where the war is!

I: Really?

R2: Where there is war.

- FG, men, living with HIV

Few participants described employer concerns about HIV transmission to coworkers. More often, concerns were about job performance related to physical weaknesses, absences for medical appointments, and/or mental distractions due to HIV-related concerns. Any of these dimensions could lead to the employee being perceived incapable of fulfilling his job responsibilities, threatening a key element of 'what is most at stake' for men:

When you have HIV, it affects your ability to be a good Motswana because most of the opportunities nowadays they require the HIV test, and you are likely to be cast out because you are HIV positive. [...] When you are HIV positive, they will think that you are always tired and also you have too much stress. For example when you are working with machines, they will think that these machines, they will end up causing trouble to you, because your mind is not on the job, you are always thinking about your HIV status.

- IDI, man, unknown HIV status

Men also detailed how the policies that attempt to prevent employment discrimination due to HIV status fail to be protect individuals completely. Even though the government of Botswana prohibits discriminatory employment practices, some participants relayed their experience or knowledge of hiring practices that disproportionately disadvantage PLWH, such as requiring HIV testing or disclosure of HIV status:

They don't hire them because as we you know that people are encouraged to test and know their status, they would be wanting to know how long that person will be covered. [...]Most of the time, the employers in these companies, require to know the status of the employees.

– IDI, man, unknown HIV status

Other participants described indirect practices for marginalizing existing employees living with HIV such as reducing opportunities and promotions and finding excuses not to renew contracts or to fire them. Fear of these direct and indirect forms of employment discrimination leads to men living with HIV to conceal their HIV status from their employers, which can also interfere with their treatment if they miss appointments or medication to avoid being identified in the workplace. For example, one man described how

efforts to avoid disclosure of HIV status to employers could lead to inconsistent participation in HIV treatment:

Sometimes they are even afraid to ask for permission to go to see their doctors because **they don't want to share their medical statuses with their supervisors**, because they sometimes they miss their medications because of that.

- FG, man, living with HIV

Importantly, these experiences can also occur if the employer *suspects* an individual has HIV (e.g., because of appearance or absences), even when the employer cannot know or verify their HIV status. Finally, many participants felt that national policies against discrimination based on HIV status had been successful and it was no longer a salient issue:

The Government intervened and set strict rules that these people should not be discriminated, so nowadays they do hire them [people with HIV].

- IDI, man, unknown HIV status

HIV-Specific Threats to 'Manhood' Deter HIV Testing and Treatment—

Participating in HIV testing and treatment can threaten the ability to achieve WMM. When a man attends HIV clinics or takes ART, he risks being seen by others, being labeled as having HIV, and being a target of HIV-related stigma. In order to avoid being seen, being labeled, and becoming susceptible to HIV-related stigma, many men reported a tendency to avoid testing, delay entry into care, and take treatment inconsistently (e.g., refusing to initiate, disengaging when symptoms resolve, engaging irregularly). These behaviors can also impact their ability to be a 'proper man.' For example, one man described how fear of being seen at the clinic deters some men from getting and taking their medication:

Yes, some are affected in a way that they are even **sometimes scared to go to the clinic, to be seen going to the clinic to get their medications**, in that way it affects them to be a proper man since they won't be taking those pills.

- IDI, man, unknown HIV status

However, men also reported other consequences stemming from these types of stigma-based avoidance strategies. Delaying testing and treatment only increases the likelihood that one will appear ill from HIV (i.e., thin and frail), which directly threatens WMM by suggesting that a man is no longer physically able to be a capable provider and maintain social status. Overwhelmingly, participants said that men delay testing until becoming very sick, when physical weakness threatens their 'manhood' more than being identified with HIV would:

He says the men find out when they are very sick, [they are then] being pushed to the hospital. [...] He says men are afraid to know their HIV status.

- IDI, man, living with HIV

Further, even if men get tested for HIV, their participation in treatment for HIV is not guaranteed. Some men prioritize their immediate physical health and appearance over long-term management of chronic disease, only taking medication until their immediate symptoms resolve and they regain their physical strength and vitality:

They stopped treatment probably because **there are people who stop treatment as soon as they hear their viral load has gone down**. They would assume they have been healed.

- IDI, man, living with HIV

Several participants emphasized that these behaviors (i.e., avoiding testing, delaying entry into care, taking treatment inconsistently) are not merely preferences but are choices made because of the severe threat comprised by HIV-related stigma and its related processes (e.g., gossip). Stigma and fear of gossip are so strong that participants reported that some men prefer to die rather than take treatment regularly or ever know their HIV status in the first place. One participant described how the power of gossip in deterring treatment could even result in death:

He knows actually quite a few people who ended up not taking treatment, ended up dying, and he believes the main thing that was driving them out of our care here was because people were gossiping. [...] So once the HIV positive people hear about this they end up restricting their movements to the hospital and at the end some they just default from treatment.

- IDI, man, living with HIV

'What Matters Most' Protects Against Stigma: Fulfilling Male Responsibilities Promotes 'Manhood' to Resist HIV Stigma

Although there are many ways that WMM—when considered singly, and when intersecting with structural vulnerability—exacerbates HIV-related stigma for men in Botswana, identifying how WMM interacts with HIV-related stigma also revealed how achieving WMM by fulfilling one's male responsibilities can mitigate perceived stigma from others and internalized stigma applied to the self. Both male and female participants indicated that continuing to fulfill one's 'manly duties' could be highly protective against HIV-related stigma:

If you appear healthy and still continue doing your manly duties, interacting well and being involved in community gatherings, even if they are aware of your status, it won't have any effect on the way they look at you.

- IDI, man, unknown HIV status

Depending on their pre-existing attainment of WMM before being identified with HIV, some men never feel as if they are impacted by HIV-related stigma. In particular, sufficiently high social status prior to identification with HIV could completely buffer against enacted stigma for some participants:

Yeah you can succeed with HIV, because **when you are a top dog you can just disclose your status and no one will look down on you** because you are already a top dog in the community.

- FG, man, unknown HIV status

For men who are not at this privileged position beforehand and therefore still susceptible to HIV-related stigma, the potential negative consequences stemming from stigma and gossip

can still be mitigated by achieving WMM while living with HIV—particularly through successfully maintaining employment, relationships, and physical health. However, the ability to achieve these cultural capabilities depends in part on sufficiently overcoming aspects of HIV-related stigma by getting tested for HIV and consistently engaging in treatment for HIV.

Maintaining Employment—While the threat or actual loss of employment greatly exacerbates all aspects of stigma, maintaining stable work can protect against stigma as it enables a man to be a capable provider and maintain social standing despite having HIV both in the eyes of others and in how he applies those expectations to himself. Although the implications on HIV for seeking new jobs are less clear, most participants agreed that keeping their current job after HIV signified that they can take care of themselves, which appears to mitigate HIV-related stigma:

I: If you can work, does anybody care if you've got HIV?

R: No, people think you will take care of yourself.

- IDI, man, unknown HIV status

Not many insights were offered for *how* to keep jobs. A few participants described having supportive employers to whom they had disclosed their status; however, there was no pattern for ascertaining which employers would be supportive. Particularly beneficial to maintaining employment was looking healthy and vibrant (see below), reducing concerns that HIV would impact capabilities to fulfill work responsibilities. One participant said that as long as a person is physically able to work and keep their job, HIV-related stigma will not affect them:

They do hire, as long as you are fit and strong enough to work, you get hired. [...] No, even if you have HIV, as long as it doesn't weaken you to a state of being bedridden, or doesn't force you out of work, it won't affect you in any way.

- IDI, woman, unknown HIV status

Maintaining Relationships—Although about half of the men expressed concerns that HIV-related stigma would hamper relationships, a subset of men described having a relationship as a buffer against stigma. These men described how disclosing HIV status to current or potential partners mitigated stigma and made them more eligible for a relationship by being upfront about their status. This disclosure which could reflect desirable qualities such as honesty and trust, whereas learning about a partner's HIV status via gossip could cause more harm in the relationship:

He is just suggesting that **people should be upfront when they meet each other**, should state your status to another person **so that when they decide to be with you, at least they know your situation**.

- FG, man, living with HIV

As long as people are upfront with their status, then people are not that reluctant to date them.

– IDI, man, unknown HIV status

Female participants corroborated this notion that having HIV itself was not sufficient to jeopardize a relationship, and expressed that self-disclosure and open communication were key to having a healthy relationship:

Yes, for as long as you reveal your status to the other person, we don't have a problem, as soon as you meet that person you disclose your status. So that they would also know how to protect themselves and be on the safe side.

– IDI, woman, living with HIV

According to a few participants, taking the initiative to disclose could be seen as the man being responsible and suggest his potential for fulfilling other male responsibilities. However, this was not guaranteed. While disclosure of HIV status was generally perceived as necessary for both having and maintaining a relationship, it was not sufficient and did not always result in the successful initiation of relationships:

I may propose to a woman, but I will disclose to her that I have HIV, 'But I am not sure if whatever I am going to talk about, will you agree or no, it is up to you' Some do accept, some don't.

- FG, man, living with HIV

Looking Healthy and Vibrant—Looking healthy and vibrant cuts across WMM domains and benefits men in their relationships, families, workplaces, and communities. It protects against perceived and enacted stigma because of the assumption that a person who looks healthy cannot have HIV, likely based on the early years of the epidemic when PLWH could be identified by their appearance:

But nowadays we all look fresh. [...] Like I am working in the Construction Company, I am doing everything like anybody who is physically fit and everything, but they will simply say, 'No, no, you are lying.'

- FG, man, living with HIV

Several participants described that taking HIV treatment could protect them from being tarnished by gossip by ensuring their physical vitality. By initiating and adhering to HIV treatment, a man can regain his health and be perceived as physically healthy and vibrant by others, enabling him to maintain community standing and eliminate prior gossip:

It [gossip] will be forgotten because **I will enroll in ARV treatment, and be a glowing gentleman** like you, you see? Then people will ultimately forget the impact that once happened to you.

- IDI, man, unknown HIV status

They will forget [you have HIV] if you ignore and adhere to treatment, they would think all they gossiped about was not true since you would be healthier than they thought. [...] You just have to stay healthy, that is the only possible way to stop gossip.

- IDI, man, unknown HIV status

Framing HIV Testing and Treatment as Fulfilling Male Responsibilities—

Although not a dominant theme, an extension of how WMM could protect against stigma was indicated by a small subset who interpreted HIV care *itself* as part of being a 'proper man.' In addition to *looking* healthy, this focused on the importance of *being* healthy enough to fulfill male responsibilities. In other words, men should consider it necessary to take care of themselves to be able to take care of others. This closely aligns with the concept underlying the Setswana phrase '*go ithokomela*' (taking care of yourself). In this case, participants saw the importance of taking care of oneself as not exclusive to having HIV but also to being able to be a 'proper man':

As long as they take proper instructions just like I have been doing, like 10' o'clock I take my medications, you can still continue being a proper man.

- IDI, man, unknown HIV status

He should be responsible. [...] He should do what others do, he should be able to talk about his status to other men and encourage them to go for testing. That is responsibility, then I will also see if they take part in also knowing their status.

- IDI, man, living with HIV

R1: Honestly if you are not healthy, normally it will deprive you some of the things that you are supposed to do.

R2: Yes!

I: Right.

R3: Whether it's HIV or not!

R1: Yes! We should not blame HIV only.

R2: It is right, there is nothing to be done really but we have been told that we need to take care of ourselves so that we are able to provide for them as well.

I: So as long as you take care of yourself, everything is okay?

R2: Yes! As long as you take your medicines then...okay, then everything will be okay.

- FG, men, living with HIV

Discussion

HIV-related stigma could be considered the most potent remaining barrier to accessing HIV care for men in Botswana, a country that has eliminated other major structural barriers such as accessibility and affordability (Ramogola-Masire et al., 2020). In Botswana, women appear to experience more stigma but men express more *fear* of stigma (Physicians for Human Rights, 2007). Similarly, men in the neighboring country of South Africa reported five times higher anticipated stigma than women; this was even higher among those without HIV (Treves-Kagan et al., 2017). In our urban sample of men and women living in Gaborone, including those with HIV and those with unknown HIV status, we also found that men more commonly described fear of rather than experiences of stigma. Using

the WMM framework, we contextualize how HIV-related stigma interacts with cultural conceptions of being a 'proper man.' In other words, we find that perceived stigma is most severe if it threatens men's capabilities to achieve culturally valued responsibilities, including being a capable provider and maintaining social status (Rakgoasi & Odimegwu, 2013; Upton & Dolan, 2011; Sullivan et al., 2020). Additionally, by considering the structural vulnerability framework, we show how fear of employment discrimination and unemployment further undercuts opportunities to achieve WMM that can also exacerbate HIV-related stigma (Dageid et al., 2012; Sullivan et al., 2020). These findings build on findings of an earlier qualitative study on gender norms and HIV among men in Botswana (Rakgoasi & Odimegwu, 2013) to specifically consider how gender norms intersect with cultural capabilities and structural vulnerabilities to produce or reinforce HIV-related stigma for men in Botswana using rigorous and theoretically-justified sampling that included men and women with known and unknown HIV status from healthcare and community settings.

For the first time, we identified how culturally-salient fears about HIV-related stigma deter HIV testing and treatment in Botswana. We confirmed that men wait until they are acutely sick to enter care (Musheke et al., 2013), and illuminated that this likely occurs when physical weakness threatens WMM more than being labeled with HIV would. Even when men initiate treatment, they often discontinue ART as soon as they feel better, which makes sense in the context of our findings that looking healthy and vibrant protects against stigma while participating in treatment continues to threatens it. This parallels findings among Chinese immigrants with psychosis in the United States, who discontinue medications after obtaining WMM via employment (Yang et al., 2013). In general, intermittent ART use is more common among men than women in SSA (Shand et al., 2014; Sileo et al., 2019), and complicated by men's high rates of alcohol consumption (Gross et al., 2017; Velloza et al., 2019). Although not part of WMM, men in this study who mentioned alcohol use almost always did so in the context of lower treatment engagement. Finally, we found some men prefer to die than be labeled with HIV (Rakgoasi & Odimegwu, 2013), which we contextualize as an attempt to avoid losing the cultural capabilities that determine status as a "person" for them.

We further advanced the study of cultural and gendered aspects of HIV-related stigma by identifying how structural vulnerabilities brought about by HIV-related stigma influence one's ability to participate in WMM, which then further perpetuates stigma. While employment discrimination could happen to anyone with HIV, it emerged as a *perceived* structural vulnerability for men in urban Botswana, primarily of working age, due to the integral role of employment in enabling WMM. Similar to how fear of stigma appeared to be more common than experienced stigma, men report greater fear of employment discrimination than actual experiences of it. This likely creates on-going uncertainties that are harmful even when the feared outcome does not occur. While we also looked for other common structural vulnerabilities such as those related poverty and education, their intersections with WMM and HIV-related stigma did not emerge in these data. These findings also differ from what we found for women in Botswana, where the well-intended national HIV policies have inadvertently induced a structural vulnerability for women, who systematically get identified with HIV before men as part of routine antenatal care while pursuing WMM (i.e., being a mother) that then activates HIV-related stigma that threatens

their ability to achieve WMM (Yang et al., *under revised review*). In contrast, the structural vulnerability of employment discrimination for men is less systematic; only a subset of men reported this fear, which may be rooted more in historical perspectives than current realities or only salient to certain segments of the workforce. Since the epidemic started, national policies have been developed to protect PLWH from employment discrimination (Botswana, 2010; Botswana, 2012). However, prior qualitative studies in Botswana have found that having HIV has been linked to loss of income (Rajaraman et al., 2006; Farahani et al., 2013) and that fears of HIV-related job loss persist (Castro & Farmer, 2005; Weiser et al., 2003), which is particularly relevant given high unemployment rates (18%) (Statistics Botswana, 2020a).

Implications for Interventions: Incorporating WMM to Resist Stigma

Despite this evidence about how HIV-related stigma harms men in SSA, to date few HIV programs exclusively focused on men have targeted HIV-related stigma and discrimination (except special populations, e.g., men who have sex with men) (Sengupta et al., 2011; Stangl et al., 2013; Ma et al., 2019; Pantelic et al., 2019). When men are included in HIV efforts, they often focus on women's health and can lead men to feel alienated and suspicious about their involvement (Dworkin et al., 2015; Rakgoasi & Odimegwu, 2013). While gender-transformative programs are needed to change the socially-endorsed views that contribute to hegemonic masculinity and its impact on HIV for both women and men (Connell, 2012; Fleming et al. 2016), incorporating our findings about achieving WMM can also help mitigate HIV-related stigma and promote engagement in HIV care for men. Our theoretical frameworks and related findings showed that promoting opportunities for men to fulfill their male responsibilities – be a capable provider, maintain social status, maintain employment, maintain relationships, and look healthy and vibrant – could help overcome HIV-related stigma and encourage HIV testing and treatment. A few men went as far as to describe taking care of oneself by participating in HIV care as part of achieving WMM (i.e., staying healthy in order to pursue male responsibilities).

We also advance the study of HIV-related stigma for men in SSA by articulating how achieving culturally valued aspects of personhood in one's local moral world can counter both perceived stigma from others and internalized stigma applied to the self, and suggest how these insights can be incorporated by the Ministry of Health and Wellness and regional District Health Management Teams as part of their government-coordinated HIV response to adapt interventions for men in Botswana to promote engagement in HIV care by (1) aligning HIV services with WMM by offering more flexibility in community settings, (2) offering livelihood support to men living with HIV to counter fears around employment, provision, and status, and (3) targeting culturally-salient aspects of HIV-related stigma directly via peer-based programs. While the current COVID-19 pandemic has redirected funds from long-term HIV efforts to immediate crisis response, these recommendations could help ensure that reducing gendered HIV disparities remains a priority as resources become available again.

Align HIV Services with WMM via Flexible Community Services

Botswana's nationally-funded HIV services are currently primarily provided at clinics. The expansion of these government services into community spaces where men congregate (e.g., homes, workplaces, farms, cattle posts, bars/shebeens, sporting events) could help men retain their respect, agency, and sense of independence (Mukumbang, 2020; Sileo et al., 2019) and feel like they are engaging in activities that promote being a capable provider in the home and maintaining social status among peers that mitigates both the perceived stigma from others that they are unable to be a 'proper man' and the internalized stigma applied to the self that deter testing and treatment. Although community-based efforts are on pause due to COVID-19, prior forays into community-based care have been promising. For example, a Red Cross Program that ran from 2006-2010 used community workers to provide homebased care that the government went on to adopt (Botswana Red Cross Society, 2006). However, these programs focused on linkages to care after diagnosis. Promisingly, a recent large-scale multi-site cluster RCT testing novel strategies to increase reach for HIV testing among men in Botswana found that home-based testing identified the most new cases of HIV while mobile testing had the highest rate of testing among men (Alwano et al., 2019). PEPFAR is also currently working to scale up self-testing, partner testing (e.g., voluntary notification, distributing self-test kits), and linkages to treatment (United States Department of State, 2020). Deploying these innovative approaches will be further enhanced by understanding how they align with WMM (e.g., campaigns that use community leaders with social status as role models who get tested at these sites), giving men more agency and respect to make choices about their health (Eshun-Wilson et al., 2019), and emphasizing how treatment is part of male responsibilities in the home and community. One strategy to make such approaches sustainable is task-shifting, which has been implemented successfully in neighboring countries. In this model, lay health workers are trained to provide basic services such as testing and treatment delivery in the community (Philips et al., 2008); our findings suggest that male lay health workers may be particularly effective. National investment in a lay health worker model that reconceptualizes the long-term delivery of HIV services to honor the value that men place in being healthy and vibrant, being a provider, and maintaining social status could help increase HIV testing and treatment in Botswana.

Offer Livelihood Support for Men Living with HIV

However, these efforts will likely be insufficient without addressing the structural barriers that perpetuate HIV-related stigma. In Botswana, it is evident that being employed is an important source for mitigating stigma for men since the ability to earn money allows them to be a capable provider and ascribes value and status, such that work can be higher priority than health (Jacques-Aviñó et al., 2019). A prior qualitative study in Gaborone confirms the idea that having a job could help counter HIV-related stigma (Setlhare et al., 2014). While treatment itself improves livelihood capital (Hanass-Hancock et al., 2017), this may not be evident to men. Thus, to further align HIV programs with WMM, these could directly incorporate financial support and/or opportunities for employment (Russell, 2019) such as job creation, income-generating projects, and skills-building activities (Dageid et al., 2012). Interventions that provide livelihood support (e.g., farm work, nutritional support, school fee grants) have been shown to motivate men to initiate and adhere to treatment in other settings (Sharma et al., 2015), and promise to help reduce both perceived stigma

for not being able to maintain employment and internalized stigma about not being able to be a capable provider and maintain social status for men in Botswana. The Botswana government already runs programs to help its citizens become self-sufficient (e.g., small and medium loans for enterprise start-ups, adult literacy and basic education programs), which could be enhanced by integration into HIV services for men (Setlhare et al., 2014). Although the current economic recession constrains the ability to create sufficient jobs for the working population, these recommendations provide some insights about intersectoral efforts for targeting working-age men for HIV testing and treatment that aligns with their own priorities.

Target Culturally-Salient HIV Stigma via Peer-Based Programs

The main government partner in implementing stigma reduction programs in Botswana, BONEPWA (Botswana Network of People Living with HIV and AIDS), currently has some initiatives in place (e.g., community health workers to talk about HIV-related stigma in clinics while patients are waiting in the queue), but none focused exclusively on men. Given the emphasis on maintaining social status (i.e., among peers), peer-based programs may be particularly effective at reducing internalized stigma and promoting engagement in HIV care. Efforts to link men to peer support typically are found in clinical settings, but innovative strategies are needed to move these efforts into the community such as by community-focused non-governmental organizations (FHI360, Botswana Christian AIDS Intervention Programme (BOCAIP), Humana People to People) that can capitalize on leadership by men with social status. For example, in Botswana, age- and gender-appropriate mobilizers and community leaders were more effective at getting men to participate in voluntary male circumcision than mass media campaigns (Semo et al., 2018). An established method for reducing HIV-related stigma is 'contact-based' approaches, which incorporate peers who share the stigmatized status and have coped adaptively. This promotes stigma reduction among others with the stigmatized status by moderately disconfirming preexisting stereotypes (Perlick et al., 2011). In light of WMM, peers who have high social status, maintain their responsibilities as a provider and in the community, and demonstrate the physical benefits of treatment can disconfirm the idea that achieving WMM is not compatible with HIV testing and treatment. Further, men who are the peer leaders in HIV-related activities (e.g., support groups, health education) can also earn social status (Sileo et al., 2019; Dageid et al., 2012). Our team has successfully developed a group-based stigma reduction intervention for women in Botswana based on our WMM findings that focused on pregnant mothers at the site of structural vulnerability (i.e., during antenatal care) and incorporates peer mothers who have successfully delivered an HIV-negative child (Poku et al., 2020).

Limitations

Our data are limited to individuals in a single city, although the majority of the country's population lives within 100 kilometers of Gaborone. Our findings reflect WMM for the urban, city-based, working-age man, but might miss the nuances of cultural identities of men residing in more rural areas. The categories of 'man' and 'woman' are not homogenous; what was identified here might reflect what matters to the majority of men in urban Botswana of working age but does not apply to everyone and may continue to transform

based on 'core lived experiences' as men age and for other subgroups. In particular, we found that WMM in Botswana was highly gendered, and that some aspects of WMM to be a 'proper man' only appear to apply to heterosexual cisgender men (e.g., being a capable provider, maintaining relationships) and should be interpreted as such. While we did not ask participants their sexual orientation or gender identity, these specific findings suggest they may not be applicable to sexual and gender minorities (Jacques-Aviñó et al., 2019). While the majority of HIV transmission in Botswana is heterosexual, there are limited data on men who have sex with men despite being a vulnerable group for HIV risk and HIV-related stigma; same-sex sexual relations were only decriminalized in 2019. While focus groups can sometimes risk creating pressure around consensus, we attempted to minimize this by offering participants the choice of an individual interview or focus group based on their own comfort levels.

Conclusion

Although it is well-established that men experience greater morbidity and mortality due to HIV than women because of lower engagement across the HIV care continuum, there is a glaring lack of studies on culturally-salient aspects of HIV-related stigma that might contribute to this gendered disparity. In Botswana, which has a long history of reducing structural barriers to accessing HIV care, men still have lower rates of HIV testing, treatment initiation, and viral suppression. For the first time, we identified how HIV threatens a man's capabilities to be a capable provider and maintain social status and that, for some, these threats are exacerbated by fear of employment discrimination. We also advanced the literature by formulating how achieving these male responsibilities can be used to protect against stigma. These findings can be used to directly develop and adapt interventions such as aligning HIV services with WMM via more flexible community services, offering livelihood support to counter structural vulnerabilities related to employment, and targeting culturally-salient aspects of stigma via peer-based programs that can demonstrate the ability for men with HIV to still achieve WMM. Future research should also consider intersections of HIV-related stigma with other stigmas such as mental illness, which is syndemic in Botswana (Becker et al., 2019), and how findings can be operationalized into a quantitative measure of culturally-salient aspects of HIV-related intersectional stigma (Yang et al., 2020) for men in Botswana to assess the effectiveness of interventions in stigma reduction and resistance. The systematic approach used here can also be replicated in other countries in SSA to investigate similarities and differences in the intersections of cultural capabilities and structural vulnerabilities with HIV-related stigma for other populations and in other contexts.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgements:

Thank you to all participants for their time and insight, and to Christian Adames, Shikha Chandarana, Marlene M. Eisenberg, Lilo I. Blank, Lyla S. Yang and Dai Thi Xuan Cao for their assistance in coding the transcripts.

Funding:

This publication was made possible through support from the Penn Mental Health AIDS Research Center (PMHARC), an NIH-funded program (P30 MH 097488), the Penn Center for AIDS Research (CFAR), an NIH-funded program (P30 AI 045008), the Focus for Health Foundation (FFH) and its founders Barry and Dolly Segal, and a Fogarty International Center/NIMH-funded Grant to Dr. Lawrence H. Yang (R21 TW 011084-01). Ohemaa Poku is supported by the T32 Global Mental Health Training Program at the Bloomberg School of Public Health, Department of Mental Health (#5T32MH1032).

References

- Alwano MG, Bachanas P, Block L, Roland M, Sento B, Behel S, ... & Motswere-Chirwa C (2019). Increasing knowledge of HIV status in a country with high HIV testing coverage: Results from the Botswana Combination Prevention Project. PloS One, 14(11). 10.1371/journal.pone.0225076
- Becker TD, Ho-Foster AR, Poku OB, Marobela S, Mehta H, Cao DTX, ... & Molebatsi K (2019). "It's When the Trees Blossom": Explanatory Beliefs, Stigma, and Mental Illness in the Context of HIV in Botswana. Qualitative Health Research, 29(11), 1566–1580. 10.1177/1049732319827523 [PubMed: 30739566]
- Beckham SW, Beyrer C, Luckow P, Doherty M, Negussie EK, & Baral SD (2016). Marked sex differences in all-cause mortality on antiretroviral therapy in low-and middle-income countries: a systematic review and meta-analysis. Journal of the International AIDS Society, 19(1), 21106. 10.7448/IAS.19.1.21106 [PubMed: 27834182]
- Botswana (2010). Employment (Amendment) Act 2010 to Employment Act 1982.
- Botswana (2012). Botswana National Policy on HIV and AIDS. Revised Edition 2012.
- Botswana Red Cross Society (2006). Integrated HIV and AIDS Programme 2006–2010.
- Bourgois P, Holmes SM, Sue K, & Quesada J (2017). Structural vulnerability: operationalizing the concept to address health disparities in clinical care. Academic Medicine, 92(3), 299. 10.1097/ ACM.00000000001294 [PubMed: 27415443]
- Castro A, & Farmer P (2005). Understanding and addressing AIDS-related stigma: from anthropological theory to clinical practice in Haiti. American Journal of Public Health, 95(1), 53–59. 10.2105/AJPH.2003.028563 [PubMed: 15623859]
- Colvin CJ (2019). Strategies for engaging men in HIV services. The Lancet HIV, 6(3), e191–e200. 10.1016/S2352-3018(19)30032-3 [PubMed: 30777726]
- Connell R (2012). Gender, health and theory: conceptualizing the issue, in local and world perspective. Social Science & Medicine, 74(11), 1675–1683. 10.1016/j.socscimed.2011.06.006 [PubMed: 21764489]
- Dageid W, Govender K, & Gordon SF (2012). Masculinity and HIV disclosure among heterosexual South African men: implications for HIV/AIDS intervention. Culture, Health & Sexuality, 14(8), 925–940. 10.1080/13691058.2012.710337
- Druyts E, Dybul M, Kanters S, Nachega J, Birungi J, Ford N, ... & Mills EJ (2013). Male sex and the risk of mortality among individuals enrolled in antiretroviral therapy programs in Africa: a systematic review and meta-analysis. AIDS, 27(3), 417–425. 10.1097/QAD.0b013e328359b89b [PubMed: 22948271]
- Dworkin SL, Fleming PJ, & Colvin CJ (2015). The promises and limitations of gender-transformative health programming with men: critical reflections from the field. Culture, Health & Sexuality, 17(sup2), 128–143. 10.1080/13691058.2015.1035751
- Eshun-Wilson I, Rohwer A, Hendricks L, Oliver S, & Garner P (2019). Being HIV positive and staying on antiretroviral therapy in Africa: A qualitative systematic review and theoretical model. PloS One, 14(1). 10.1371/journal.pone.0210408
- Farahani M, Roumis D, Mahal A, Holmes M, Moalosi G, Molomo C, & Marlink R (2013). Effects of AIDS-related disability on workforce participation and earned income in Botswana: A quasi-experimental evaluation. Health, 5, 409–416. 10.4236/health.2013.53055
- Fleming PJ, Colvin C, Peacock D, & Dworkin SL (2016). What role can gender-transformative programming for men play in increasing men's HIV testing and engagement in HIV

- care and treatment in South Africa? Culture, Health & Sexuality, 18(11), 1251–1264. 10.1080/13691058.2016.1183045
- Ganle JK (2016). Hegemonic masculinity, HIV/AIDS risk perception, and sexual behavior change among young people in Ghana. Qualitative Health Research, 26(6), 763–781. 10.1177/1049732315573204 [PubMed: 25721715]
- Gross R, Bellamy SL, Ratshaa B, Han X, Steenhoff AP, Mosepele M, & Bisson GP (2017). Effects of sex and alcohol use on antiretroviral therapy outcomes in Botswana: a cohort study. Addiction, 112(1), 73–81. 10.1111/add.13538
- Hanass-Hancock J, Misselhorn A, Carpenter B, & Myezwa H (2017). Determinants of livelihood in the era of widespread access to ART. AIDS Care, 29(1), 32–39. 10.1080/09540121.2016.1201192 [PubMed: 27350256]
- Haron M, & Jensen KE (2008). Religion, identity and public health in Botswana. African Identities, 6(2), 183–198. 10.1080/14725840801934039
- Hsieh HF, & Shannon SE (2005). Three approaches to qualitative content analysis. Qualitative Health Research, 15(9), 1277–1288. 10.1177/1049732305276687 [PubMed: 16204405]
- Jacques-Aviñó C, García de Olalla P, González Antelo A, Fernández Quevedo M, Romaní O, & Caylà JA (2019). The theory of masculinity in studies on HIV. A systematic review. Global Public Health, 14(5), 601–620. 10.1080/17441692.2018.1493133 [PubMed: 29972098]
- Letshwenyo-Maruatona SB, Madisa M, Boitshwarelo T, George-Kefilwe B, Kingori C, Ice G, ... & Haile ZT (2019). Association between HIV/AIDS knowledge and stigma towards people living with HIV/AIDS in Botswana. African Journal of AIDS Research, 18(1), 58–64. 10.2989/16085906.2018.1552879 [PubMed: 30880585]
- Link BG, Cullen FT, Struening E, Shrout PE, & Dohrenwend BP (1989). A modified labeling theory approach to mental disorders: An empirical assessment. American Sociological Review, 400–423. 10.2307/2095613
- Link BG, & Phelan JC (2001). Conceptualizing stigma. Annual Review of Sociology, 27(1), 363–385. 10.1146/annurev.soc.27.1.363
- Ma PH, Chan ZC, & Loke AY (2019). Self-stigma reduction interventions for people living with HIV/AIDS and their families: a systematic review. AIDS and Behavior, 23(3), 707–741. 10.1007/s10461-018-2304-1 [PubMed: 30298241]
- Molosiwa PP (2015). A country of farmers: The social history of indigenous knowledge and rural development in Botswana. Botswana Notes and Records, 47, 45–55. 10.2307/90024303
- Mukumbang FC (2020). Leaving no man behind: how differentiated service delivery models increase men's engagement in HIV care. International Journal of Health Policy and Management. 10.34172/ijhpm.2020.32
- Musheke M, Ntalasha H, Gari S, Mckenzie O, Bond V, Martin-Hilber A, & Merten S (2013). A systematic review of qualitative findings on factors enabling and deterring uptake of HIV testing in Sub-Saharan Africa. BMC Public Health, 13(1), 220. 10.1186/1471-2458-13-220 [PubMed: 23497196]
- Pantelic M, Steinert JI, Park J, Mellors S, & Murau F (2019). 'Management of a spoiled identity': systematic review of interventions to address self-stigma among people living with and affected by HIV. BMJ Global Health, 4(2), e001285. 10.1136/bmjgh-2018-001285
- Perlick DA, Nelson AH, Mattias K, Selzer J, Kalvin C, Wilber CH, ... & Corrigan PW (2011). In our own voice-family companion: reducing self-stigma of family members of persons with serious mental illness. Psychiatric Services, 62(12), 1456–1462. 10.1176/appi.ps.001222011 [PubMed: 22193793]
- Philips M, Zachariah R, & Venis S (2008). Task shifting for antiretroviral treatment delivery in sub-Saharan Africa: not a panacea. The Lancet, 371(9613), 682–684. 10.1016/S0140-6736(08)60307-4
- Physicians for Human Rights (2007). Epidemic of Inequality: Women's Rights and HIV/AIDS in Botswana and Swaziland. An Evidence-Based Report on the Effects of Gender Inequity, Stigma, and Discrimination.
- Poku OB, Ho-Foster AR, Entaile P, Misra S, Mehta H, Rampa S, ... & Melese T (2020). 'Mothers moving towards empowerment' intervention to reduce stigma and improve treatment adherence in

- pregnant women living with HIV in Botswana: study protocol for a pragmatic clinical trial. Trials, 21(1), 1–16. 10.1186/s13063-020-04676-6 [PubMed: 31898511]
- Quesada J, Hart LK, & Bourgois P (2011). Structural vulnerability and health: Latino migrant laborers in the United States. Medical Anthropology, 30(4), 339–362. 10.1080/01459740.2011.576725 [PubMed: 21777121]
- Rajaraman D, Russell S, & Heymann J (2006). HIV/AIDS, income loss and economic survival in Botswana. AIDS Care, 18(7), 656–662. 10.1080/09540120500287010 [PubMed: 16971272]
- Rakgoasi SD, & Odimegwu C (2013). "Women Get Infected but Men Die...!" Narratives on Men, Masculinities and HIV/AIDS in Botswana. International Journal of Men's Health, 12(2). 10.3149/jmh.1202.166
- Ramogola-Masire D, Poku O, Mazhani L, Ndwapi N, Misra S, Arscott-Mills T, ... & Yang L (2020). Botswana's HIV response: Policies, context, and future directions. Journal of Community Psychology, 48(3), 1066–1070. 10.1002/jcop.22316 [PubMed: 31951283]
- Russell S (2019). Men's Refashioning of Masculine Identities in Uganda and Their Self-Management of HIV Treatment. Qualitative Health Research, 29(8), 1199–1212. 10.1177/1049732318823717 [PubMed: 30764720]
- Sabone MB (2009). The promotion of mental health through cultural values, institutions, and practices: A reflection on some aspects of Botswana culture. Issues in Mental Health Nursing, 30(12), 777–787. 10.3109/01612840903263579 [PubMed: 19916812]
- Semo BW, Wirth KE, Ntsuape C, Barnhart S, Kleinman NJ, Ramabu N, ... & Ledikwe JH (2018). Modifying the health system to maximize voluntary medical male circumcision uptake: a qualitative study in Botswana. HIV/AIDS, 10, 1–8. 10.2147/HIV.S144407
- Sengupta S, Banks B, Jonas D, Miles MS, & Smith GC (2011). HIV interventions to reduce HIV/AIDS stigma: a systematic review. AIDS and Behavior, 15(6), 1075–1087. 10.1007/s10461-010-9847-0 [PubMed: 21088989]
- Setlhare V, Wright A, & Couper I (2015). The experiences of people living with HIV/AIDS in Gaborone, Botswana: stigma, its consequences and coping mechanisms. South African Family Practice, 56(6), 309–313. 10.1080/20786190.2014.975484
- Shamos S, Hartwig KA, & Zindela N (2009). Men's and women's experiences with HIV and stigma in Swaziland. Qualitative Health Research, 19(12), 1678–1689. 10.1177/1049732309353910 [PubMed: 19949218]
- Shand T, Thomson-de Boor H, van den Berg W, Peacock D, & Pascoe L (2014). The HIV blind spot: men and HIV testing, treatment and care in sub-Saharan Africa. IDS Bulletin, 45(1), 53–60. 10.1111/1759-5436.12068
- Sharma M, Ying R, Tarr G, & Barnabas R (2015). A systematic review and meta-analysis of community and facility-based approaches to address gaps in HIV testing and linkage in sub-Saharan Africa. Nature, 528(7580), S77. 10.1038/nature16044 [PubMed: 26633769]
- Sileo KM, Fielding-Miller R, Dworkin SL, & Fleming PJ (2018). What role do masculine norms play in men's HIV testing in sub-Saharan Africa?: a scoping review. AIDS and Behavior, 22(8), 2468–2479. 10.1007/s10461-018-2160-z [PubMed: 29777420]
- Sileo KM, Fielding-Miller R, Dworkin SL, & Fleming PJ (2019). A scoping review on the role of masculine norms in men's engagement in the HIV care continuum in sub-Saharan Africa. AIDS Care, 31(11), 1435–1446. 10.1080/09540121.2019.1595509 [PubMed: 30909724]
- Skovdal M, Campbell C, Madanhire C, Mupambireyi Z, Nyamukapa C, & Gregson S (2011). Masculinity as a barrier to men's use of HIV services in Zimbabwe. Globalization and Health, 7(1), 13. 10.1186/1744-8603-7-13 [PubMed: 21575149]
- Stangl AL, Lloyd JK, Brady LM, Holland CE, & Baral S (2013). A systematic review of interventions to reduce HIV-related stigma and discrimination from 2002 to 2013: how far have we come? Journal of the International AIDS Society, 16, 18734. 10.7448/IAS.16.3.18734 [PubMed: 24242268]
- Statistics Botswana. National Literacy Survey 2014. Available at: http://www.statsbots.org.bw/sites/default/files/publications/National%20Literacy%20Survey%202014.pdf
- Statistics Botswana. Data Portal: Labor Force. Accessed online April 10, 2020a: https://botswana.opendataforafrica.org/hekfujg/labor-force

Statistics Botswana. Data Portal: Population & Housing Census. Accessed online April 10, 2020b: https://botswana.opendataforafrica.org/PHCDB2016/population-housing-census-of-botswana

- Sullivan MC, Rosen AO, Allen A, Benbella D, Camacho G, Cortopassi AC, ... & Kalichman SC (2020). Falling short of the first 90: HIV stigma and HIV testing research in the 90–90–90 era. AIDS and Behavior, 24(2), 357–362. 10.1007/s10461-019-02771-7 [PubMed: 31907675]
- Treves-Kagan S, El Ayadi AM, Pettifor A, MacPhail C, Twine R, Maman S, ... & Lippman SA (2017). Gender, HIV testing and stigma: the association of HIV testing behaviors and community-level and individual-level stigma in rural South Africa differ for men and women. AIDS and Behavior, 21(9), 2579–2588. 10.1007/s10461-016-1671-8 [PubMed: 28058565]
- UNAIDS (2019). "Country: Botswana." Accessed Jan 31 2020: https://www.unaids.org/en/regionscountries/countries/botswana
- United States Department of State (2020). PEPFAR Botswana Country Operational Plan 2020 Approval.
- Upton RL, & Dolan EM (2011). Sterility and stigma in an era of HIV/AIDS: narratives of risk assessment among men and women in Botswana. African Journal of Reproductive Health, 15(1). 10.4314/AJRH.V15I1.67862
- Velloza J, Kemp CG, Aunon FM, Ramaiya MK, Creegan E, & Simoni JM (2019). Alcohol Use and Antiretroviral Therapy Non-Adherence Among Adults Living with HIV/AIDS in Sub-Saharan Africa: A Systematic Review and Meta-Analysis. AIDS and Behavior, 1–16. 10.1007/s10461-019-02716-0
- Weiser S, Wolfe W, Bangsberg D, Thior I, Gilbert P, Makhema J, ... & Marlink R (2003). Barriers to antiretroviral adherence for patients living with HIV infection and AIDS in Botswana. JAIDS, 34(3), 281–288. 10.1097/00126334-200311010-00004 [PubMed: 14600572]
- Wolfe WR, Weiser SD, Leiter K, Steward WT, Percy-de Korte F, Phaladze N, ... & Heisler M (2008). The impact of universal access to antiretroviral therapy on HIV stigma in Botswana. American Journal of Public Health, 98(10), 1865–1871. 10.2105/AJPH.2007.122044 [PubMed: 18703447]
- World Population Review 2019. Botswana Capital and Urbanization Rate. Accessed Jan 31 2021: https://worldpopulationreview.com/countries/botswana-population
- Yang LH, Kleinman A, Link BG, Phelan JC, Lee S, & Good B (2007). Culture and stigma: Adding moral experience to stigma theory. Social Science & Medicine, 64(7), 1524–1535. 10.1016/ j.socscimed.2006.11.013 [PubMed: 17188411]
- Yang LH, Purdie-Vaughns V, Kotabe H, Link BG, Saw A, Wong G, & Phelan JC (2013). Culture, threat, and mental illness stigma: identifying culture-specific threat among Chinese-American groups. Social Science & Medicine, 88, 56–67. 10.1016/j.socscimed.2013.03.036 [PubMed: 23702210]
- Yang LH, Thornicroft G, Alvarado R, Vega E, & Link BG (2014a). Recent advances in cross-cultural measurement in psychiatric epidemiology: utilizing 'what matters most' to identify culturespecific aspects of stigma. International Journal of Epidemiology, 43(2), 494–510. 10.1093/ije/ dyu039 [PubMed: 24639447]
- Yang LH, Chen FP, Sia KJ, Lam J, Lam K, Ngo H, ... & Good B (2014b). "What matters most:" A cultural mechanism moderating structural vulnerability and moral experience of mental illness stigma. Social Science & Medicine, 103, 84–93. 10.1016/j.socscimed.2013.09.009 [PubMed: 24507914]
- Yang LH, Ho-Foster AR, Becker TD, Misra S, Rampa S, Poku OB, ... & Blank MB (2020).

 Psychometric Validation of a Scale to Assess Culturally-Salient Aspects of HIV Stigma Among Women Living with HIV in Botswana: Engaging "What Matters Most" to Resist Stigma. AIDS & Behavior, 1–16. 10.1007/s10461-020-03012-y [PubMed: 30903450]
- Yang LH, Poku OB, Misra S, Mehta HT, Rampa S, Eisenberg MM, Yang LS, Cao DT, Blank LI, Becker TD, Link BG, Entaile P, Opondo PR, Arscott-Mills T, Ho-Foster AR, Blank MB Unintended stigmatizing consequences of beneficial HIV healthcare policies: Structural vulnerability and "what matters most" among women living with HIV in urban Botswana. Under revised review.

Table 1.

Operational Definitions of Coding Categories

Category	Operational Definition
Cultural capabilities that 'matter most' to manhood ('what matters most')	Participating in the activities or capabilities that determine "personhood" (or "manhood") in Botswana by achieving full status as a man including (but not limited to) being a capable provider in the family, which involves having women and children for whom to provide in the first place; and maintaining social status in the community, which includes respect from others for both personal choices and community engagement.
How 'what matters most' shapes HIV-related stigma	The ways in which the stigma of being identified as having HIV , via perceptions of weakness, exerts its effects by threatening the capabilities that determine "full manhood" in Botswana , including (but not limited to) perceived and actual capabilities to be a provider , which involves being able to have women and children; and ongoing uncertainties about maintaining social status , which activates fears of exclusion across domains; and how this stigma impacts participation in HIV testing and treatment .
Structural vulnerabilities (i.e., fear of employment discrimination)	The ways in which lack of employment, or fear of not being able to gain or keep employment due to HIV-related employment discrimination, can inadvertently initiate and intensify the marginalization associated with HIV identification to locate men differentially within disadvantaged hierarchical positions because lack of employment jeopardizes being a capable provider and maintaining social status.
How achieving 'what matters most' could protect against HIV-related stigma	The ways in which achieving cultural capabilities can protect against HIV stigma; i.e., how HIV stigma can be potentially mitigated if a man with HIV in Botswana fulfills the capabilities of being a capable provider and maintaining social status, primarily indicated by maintaining employment, having relationships, and looking healthy and vibrant. Other ways in which stigma were contested were also captured.