

The Culture behind Referral: A Qualitative Exploration of the Facilitators and Inhibitors to Male  
HIV Testing in the Haitian Context

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**Abstract**

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In Haiti, roughly 54% of men who are HIV positive do not know their status, and heterosexual intercourse remains the predominant mode of HIV transmission. Knowledge of the sociocultural factors that influence men's willingness to get tested for HIV remains incomplete. Using the socioecological model as a guide, this study explored the factors influencing the promotion, desirability, and accessibility of HIV testing among men in Haiti. Nine focus group discussions with 87 participants were used to determine the facilitators, inhibitors and accepted methods for promoting HIV testing for heterosexual men. The results revealed that stigma from the community, self-image, the spousal relationship, and delayed care seeking in the Haitian context contribute to detection and linkage to care. Results also reveal that Couples HIV Testing and Counseling (CHTC) may be the most acceptable method of referral for men in this context. Future interventions should work to address these factors and delve further into CHTC.

## INTRODUCTION

HIV prevalence in Haiti comprises of 1.35% of the total population (1), and is a contributor to the life expectancy in the country: roughly 65 years for both men and women (2). Since the turn of the century, Haiti has made significant progress in addressing all aspects of the HIV care continuum, including HIV testing, linkage to care, and treatment in a low resource setting.

Despite its successes in expanding access and coverage of services along the HIV care continuum, Haiti faces challenges in reaching the 90-90-90 targets, a global initiative to diagnose 90% of all HIV-positive persons, provide antiretroviral therapy (ART) for 90% of those diagnosed, and achieve viral suppression for 90% of those treated by 2020 as a means to increase HIV epidemic control (3). One of these challenges is HIV detection and linkage to care for men. It is estimated that 54% of men do not know their HIV status in Haiti, compared to the 37.5% of women (4).

As of 2016, over 90% of HIV-infected pregnant and breastfeeding women received ART under the Option B+ policy established in October 2012 (5). The Option B+ policy provides a universal, triple Antiretroviral (ART) drug regimen to all HIV-infected pregnant women involved in the antenatal clinic setting and continues the therapy for life (6) with new initiatives seeking to expand provisions for all patients diagnosed with HIV to further accelerate expansion of access to treatment (7) and offer opportunities to leverage programs to reach male partners for diagnosis and linkage to care. Assisted Partner Services (APS) is one such opportunity.

Assisted Partner Services (APS) are voluntary public health services which assist consenting HIV-positive individuals to disclose their status to their sexual or drug injecting partner(s) or to anonymously notify those partners of their potential exposure to HIV infection with the help of a trained healthcare provider (8). The provider then offers HIV testing to these partner(s). Often times, APS link index patients to couples-based HIV testing and counseling (CHTC), where health

care providers disclose the HIV status of each partner to the couple together (9). These methods have been shown to markedly reduce HIV transmission to sexual partners of newly diagnosed HIV-positive individuals, leading to initiation of HIV care, compared to passive referral for HIV testing by index clients (10)(11)(12)(13). These approaches to HIV testing could be promising in Haiti, which is seeking an effective strategy for getting men tested and linked to care. In 2016, an APS pilot program was adopted in Haiti which has since expanded to care networks offering preventive services, diagnoses, and HIV treatment (14). However, there are unique distinct challenges for APS as applied to male partners of pregnant women.

Additional formative research of sociocultural factors that might influence Haitian men's willingness to get tested and their perceived acceptability of these programs or alternatives will be required to support this APS expansion. Without this information, identifying an acceptable model for the APS in a Haitian setting will be difficult to implement, and could result in negative outcomes.

This article presents results from focus group discussions on HIV testing among Option B+ patients, their male partners, and healthcare workers. Justification for using pregnant women from the Option B+ program as an informative group was based in sources that find women's rates of testing and knowledge of their status is higher than that in men, and using partner testing is one way to engage adult men, an underserved population in HIV testing (4).

We used the socioecological framework to explore the facilitators and inhibitors to male HIV testing in the Haitian context and to determine which APS or CHTC strategy may be most acceptable to implement in Haiti. This thematic exploration will help bridge beliefs into broader ideas within three key populations whose opinions regarding APS and CHTC impact the ability to implement programs successfully and detect previously diagnosed cases of HIV infection.

## **BACKGROUND**

The main modes of APS which are to be explored in this study are referral by client, referral by provider, and referral by the contract. **Referral by client** refers to healthcare workers reaching out to patients with a specific plan to refer to their partners with whom they have had sexual intercourse with recently (during the last year) to a health service provider for screening. These partners may have HIV but may not know. The clients can choose to reveal their HIV status to their partners (but can also choose not to). **Referral by provider** is a strategy involving patients who want their partners to be tested for HIV, but are not comfortable talking to their partners about their HIV status. Healthcare workers contact each partner individually to inform him that he has been exposed to HIV. They do not reveal which partner provided them with their contact number nor who exposed them. **Referral by contract** is a strategy that involves patients “contracting” themselves with healthcare workers to voluntarily share their HIV status with their partner(s) before a certain date. If the patient chooses not to inform their partner(s), the health worker would transition to the referral by the client process.

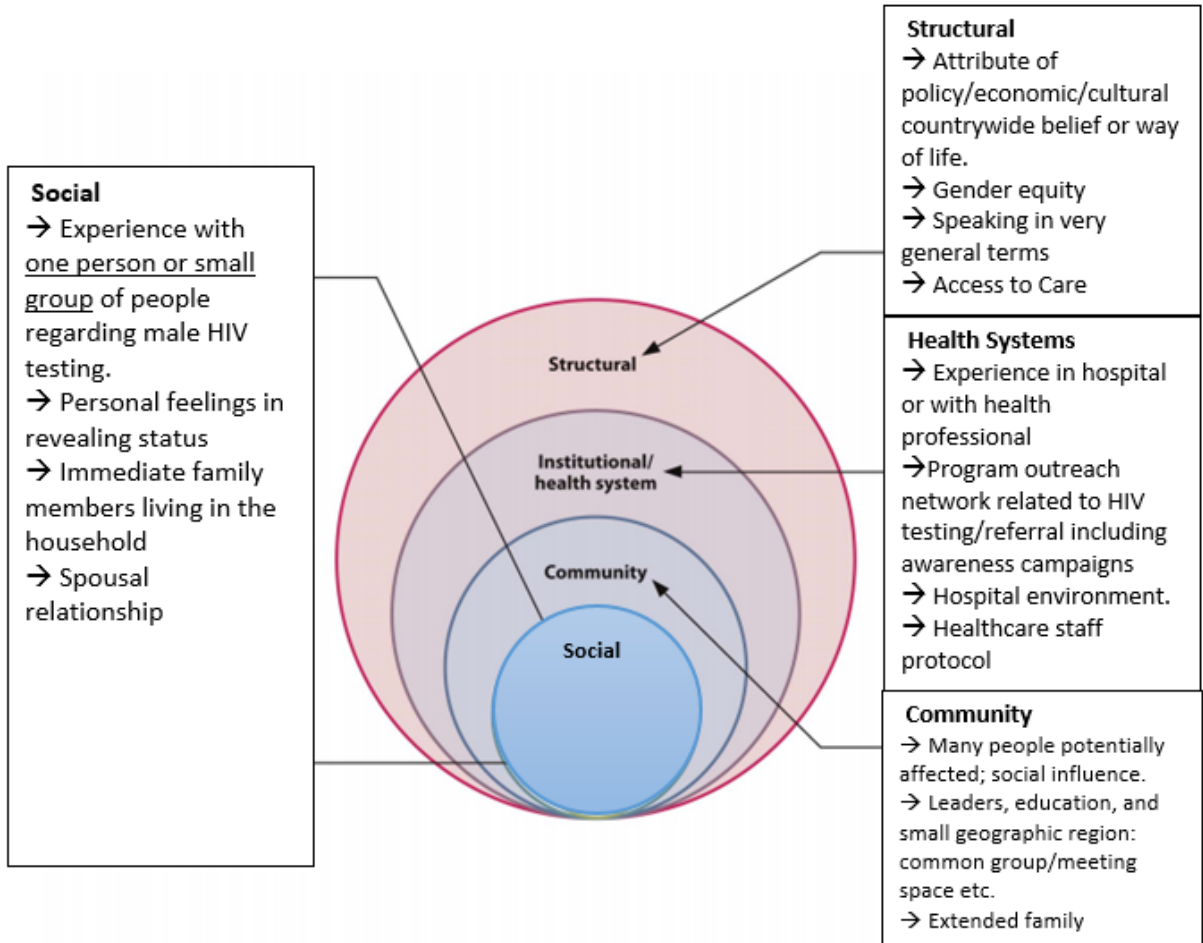
Additional forms of promoting male testing explored in the focus groups include use of self-testing kits and open invitation to testing sessions. The use of CHTC was also explored.

## **THEORETICAL FRAMEWORK**

The socioecological model was used as a guide to explore referral to HIV testing among men in Haiti. Developed in 1979 by Bronfenbrenner as an ecological framework for human development (15), the socioecological model emphasizes the need to focus not only on the individual but also on the surrounding population and community context that collectively shape health decisions. The socioecological model has four to five domains which can be variant between models (16) although they typically have a similar format. Our model was adapted to navigate codes that identify inhibitors and facilitators to HIV referral to male testing (see Figure 1). The four interconnected domains we used to comprise our socioecological model were social, community, health systems, and structural. Because we elicited points of view from men themselves, as well

as from women about spouses and partners and from health care workers, we did not draw a sharp distinction between individual and interpersonal perspectives about factors influencing male testing. Rather we grouped the individual and interpersonal factors into a single domain described as “social”. From our model (Figure 1) “community” is defined as larger groups of people congregated in the same geographic region, extended family members associated with study participants, a village, a meeting space, or leaders/educators with social influence on large groups of people and norms (17). Health systems considers the structure and environment of hospitals and healthcare facilities which influence testing ability, including resources and providers (17). The final and most macro-level domain affecting behavior, structural (sometimes referred to as policy), considers the economy, political climate, gender ideologies and enforcement of policies which influence the entire population (17).

**Figure 1 – Factors influencing referral to HIV testing at each level of the Socioecological Model**



## **METHODS**

### ***Study Area and Sampling***

Sociocultural factors and information regarding feasibility and acceptability of HIV testing referral services for Option B+ patients, their male partners, and health care workers in Haiti was collected from nine focus groups through 2017. Focus group data comes from the ongoing study *“Towards Evidence-Informed Program Strategies for Reaching the 90-90-90 Targets for HIV Elimination in Haiti: A Mixed Methods Study,”* whose primary aim is to improve efficient detection of previously undiagnosed cases of HIV infection and disclosure of HIV status to family members through assessment of HIV detection and linkage to care.

The focus groups were created to elicit opinions and experiences with HIV testing, disclosure of HIV status to partners, referral of partners and couples HIV testing, and opinions about the feasibility and acceptability of various strategies to facilitate male partner HIV testing. There was a total of 87 focus group participants and 6 to 15 participants per focus group, collected from two participating Departmental hospitals representing focal points for the national HIV burden (Port-au-Prince and Cap-Haitien). All participants were aged 30 and older. There were four focus groups with healthcare workers (both male and female), three focus groups with Option B+ clients (female), and two focus groups with male partners of pregnant or post-partum women (women with or without HIV). Many of the men recruited were partners of Option B+ clients, who knew their female partners' status.

In this case, Option B+ patients were those who were diagnosed with HIV during antenatal care or during breastfeeding and who enrolled in Option B+ within the 12 months preceding the study. These patients were recruited to participate by healthcare workers from the sites during their routine engagement with the health care workers in the clinic or community who participated in routine HIV testing and counseling services during pregnancy. During routine antenatal visits,

Option B+ clients were asked to provide the contact information for their male partners. Those partners were then invited by phone or in the community through household visits by members of the community health service. Women who were approached to invite their male partners included both antenatal and post-partum clients to avoid inadvertent disclosure of HIV status.

Focus groups of healthcare workers were conducted from a convenience sample of program leads and staff members from the HIV care and treatment program, the Option B+ program, the community health service program, and the HIV counseling and testing service. Participants in the healthcare worker focus group were identified in collaboration with the Medical Director at each site. Additionally, community health workers were used to recruit participants and volunteers, and spoke on behalf of the study at local HIV clinics.

Focus groups are ideal in this setting as they facilitate open discussions in ways that allow participants to express their views, including the opportunity to elaborate on comments made by members (18). This article focuses on the facilitators and inhibitors of methods for HIV referral and testing for heterosexual males, some of whom were in long term relationships. In addition to identifying facilitators and inhibitors to male HIV testing, passages which addressed referral methods throughout the focus group discussions were coded and organized by global theme (see Table II) to identify a feasible, accepted method of referral to HIV testing for males. These themes had a direct influence on the perceived acceptability of each testing method.

The focus group interviews were audio-taped with permission from participants, and the interviews were conducted in French and Creole, transcribed, and then translated into English. Ethical approval was granted by the University of Washington and the Haiti Ministry of Health National Bioethics Committee. Transcripts, individual codes, model categories, additional thematic connections, and pertinent information were transcribed using Microsoft Excel 2013 and Dedoose V.8.0.

## ***Analysis***

We used an inductive approach to identify codes that capture the meaning and content of participant responses regarding male partner referral and testing strategies proposed in all the question guides. Codes were organized using the socioecological model. Coders identified text indicating perceived feasibility and acceptance of testing methods from the responses of participants, and then used these results to generate a hypothesis regarding variation in partner notification responses. Codes were then used to identify organizing themes (relating to the influence of sociocultural factors on male HIV disclosure) and further refined and reduced to four global themes (19). The four global themes depict the key findings (see Table I). To be considered a global theme, codes had to appear in all three patient groups and be relevant to male HIV testing and referral. To maximize inter-coder reliability, three authors created and revised the analytic codebook through discussion and consensus. Sufficient inter-coder reliability was considered achieved once pairs of coders reached 70% agreement in coding decisions over an entire transcript. After this, the remainder of transcripts were coded by one author.

## **RESULTS**

The key themes identified in the focus group discussions are depicted in Table I. The findings reveal that stigma from the community, self-image, the spousal relationship, and delayed care seeking were pivotal in influencing referral to HIV testing for heterosexual males in Haiti on varying levels of the socioecological model.

**Table I. Key themes identified in focus group discussions**

<u>Codes</u>	<u>Organizing Themes</u>	<u>Global Themes</u>
<i>Community Challenge</i>	<i>1a). Discriminatory behavior from surrounding community members due to HIV status.</i>	<i>Stigma in Community</i>
<i>Violence</i>	<i>1b). Men threatening or committing violence towards those who threaten to or reveal HIV status to surrounding community due to fear of stigmatization.</i>	
<i>Fear</i>	<i>1c). People won't go to get tested in fear of being stigmatized</i>	
<i>Social Challenge</i>	<i>2a). Partners threatening to leave each other if they are revealed to be HIV positive.</i>	<i>Spousal Relationship</i>
<i>Social Strength</i>	<i>2b). Partners vowing to stay loyal and be with spouse, no matter the HIV status.</i>	
	<i>2c). Focusing on the children helps convince men to get tested at hospitals</i>	
<i>Conceal</i>	<i>3a). Lack of faith and trust between partners: lying about their status.</i>	<i>Self-Image</i>
	<i>3b). Men unwilling to go to the hospital because others may see and circulate the message.</i>	
<i>Structural Challenge</i>	<i>3d) Reports of insincerity among Haitians who are likely to keep information away from each other.</i>	
<i>Conceal</i>	<i>3c). Couples give the wrong address/numbers when health workers come to visit because nurses looking for the couple may reveal too much about the couple's status.</i>	
<i>Health Systems Challenge</i> <i>Machismo</i>	<i>4a). Women waiting through illness until near death to seek health care.</i>	<i>Delayed Care Seeking</i>
	<i>4b). Men like to wait until they must seek care.</i>	
	<i>4c). Mistrust in Health System</i>	

### ***Stigma in the Community (Community Level)***

Stigma refers to public perceptions about persons with an undesirable health condition (20) or social identity (21), resulting in stereotypes, prejudice, and discrimination. Stigma is a major component to HIV and has caused negative beliefs, feelings and attitudes towards people living with HIV, their families and people who work with them (22). In fact, a survey report produced by Haiti's Ministry of Public and Population Health (MSPP) and National Program Against AIDS (PNLS) in April 2017 identifies stigma as a major inhibitor to preventing the spread of HIV/AIDS, and adds that the disproportionate extent of stigmatization and discrimination experienced by people living with HIV is the most important factor preventing access to HIV care (23). The report, which shares attitudes from the Haitian population regarding HIV positive individuals, cites that over half of Haitians in their survey would not hire, share a toilet with, or share a cooking utensil with an HIV positive individual (23)

These social inequalities often are created from the knowledge that a disease caused by HIV infection, whose acquisition is prominently associated with sexual and drug-using behaviors, are capable of provoking intense, value-laden reactions used to label individuals (24). This lays the groundwork for subsequent disqualification of membership from a group in which a person is originally included (21).

Stigma can be enacted, through overt discriminatory behaviors of others, or internalized by incorporating negative stereotypes into one's sense of self (25). Both forms of stigma have demonstrated negative implications for ART adherence, engagement in care, and poor health outcomes for individuals living with HIV (26). Focus group participants noted that fear of stigma prevented people from disclosing their status and getting tested.

HIV stigma was identified as a significant issue for men at risk for HIV infection in Haiti. Descriptions of experiences with stigma were extensive and diverse, with stigma in the community appearing as a predominant theme which was cited as an inhibitor to HIV testing in all three participant groups. Participants shared personal experiences of being shamed, threatened, or shunned from the community.

*“I was told not to leave my house because everyone in the village knew my status...” - Female*

*“The priest wouldn’t marry us... [because of my wife’s HIV status]...” – Male*

Community stigma refers to stigmas held by members of a similar geographic region, such as church leaders, extended family members, and peers in neighboring homes.

Extended family members (cousins, aunts, and grandparents) were often associated with increasing the risk of fear and enacted stigma in the community. Many focus group participants reported extended family members not living in the household revealing their status, and it causing future harm. Specifically, this fear from unauthorized disclosure by an extended family member to those in the community prompted the social reaction and reinforced the aversion to getting tested and the aversion to disclosing status.

*“[My cousin] told everyone not to interact with me anymore because I was infected. Since I live outside the village... I was surprised that everyone knew my status, even my church. One day on my way to the village... three men cornered me with machetes in hand and threatened to kill me for bringing the virus, and said it was me who killed my husband.” – Female*

*“I was despised and stigmatized for being sick [at home]. I went from one hospital to another. I think my cousin told everyone.” – Female*

Participants also reported fear of enacted stigma from their peers, who may circulate a false message of one’s status based on their relationship or willingness to get tested.

Stigma is distinctive in the Haitian context because it not only encompasses fear, but is often associated with violence as well. Focus group discussions reveal shooting, physical threats, and interpersonal violence caused from a perception of stigma, further reinforcing the fear and violence: there is a fear that the people around you will reveal your status, which causes high risk from the reaction to this particular stigma.

### ***Self-Image (Social Level)***

In many parts of Haiti, people live within very close quarters, with very little personal space (27). In 2015, it was reported that Port-au-Prince's population density was over 70,000 people per square mile; New York City has a population density of 27,000 per square mile (27)(28). This leads to a difficulty in maintaining personal information as it is more susceptible to be heard or seen from those nearby. Because personal information can be difficult to maintain, participants report the importance of having private information of their own.

*"I wanted to keep my status a secret. It's only between me and god."* – Female

"Coquin", is a term in Haiti which can translate to mischievous, risqué, and/or secretive behavior, and according to focus group participants, is ingrained in the culture. While some women acknowledged that they were inclined to extramarital relationships, it was generally believed that men were more promiscuous and therefore they tended to avoid discussing their sexuality with their wives.

*"My husband does not want to hear about [HIV testing]... especially since he is living an active sex life with different women"* – Female

More importantly, "coquin" ties in closely with HIV testing in that it is an inhibitor to referring men to care they need. The following excerpt was shared in the focus groups regarding the term "coquin":

*"Since Haitians are very mischievous [coquin], [HIV testing] may potentially strengthen this aspect among Haitians, that is to say they will keep [their] status secret and can decide to transmit the virus to many other people..." - Male*

*"Haitians aren't very sincere in that they are likely to keep information away from each other..." – Male*

Concealing one's status, whether from a healthcare worker, a family member, or a spouse is often cited in the data and was considered a reaction to the potential of enacted stigma. This reaction is a means to maintain one's self image, and prevent negative connotations being spread within the community. In many cases, men conceal their status for survival, and go to great lengths to do so. For example, a man mentioned not coming to a health facility because they would be laughed at or ridiculed by their peers. Unfortunately, concealing one's HIV status has been reported to inhibit the ability for men to seek HIV testing, decrease adherence to treatment, and limit prevention of new infections (29). Such efforts at secrecy were not only isolating, but also humiliating.

*"I told the father of my child when I found out my status, he told my sister that day. I was very angry. The nurse told my mother, and everyone ended up finding out. I was stigmatized/humiliated and very upset, all because I told my husband. " – Female*

### ***Spousal Relationship (Social/Structural Level)***

Many focus group participants commented on the HIV testing process being dependent on the spousal relationship, which is either a facilitator or an inhibitor to male HIV testing.

*"I tell other men who may be HIV positive to get tested to protect their wives, and to please God."*  
– Male

*“My partner said she would leave me if she found out I was HIV positive. She is positive and I didn’t want to leave her. I wanted to make sure our child was safe.” – Male*

Previous research supports this theme, in which spousal knowledge of one’s status can be conducive or detrimental to the willingness to reveal one’s status depending on the relationship (30). More importantly, healthcare workers reported being fearful of interpersonal violence among seropositive couples due to fear and stigma. If a partner is supportive, it will be easier to seek testing. Some female group participants mentioned their male partners were in disbelief when made aware of their HIV status, and refused to seek testing because they did not believe they were susceptible to the virus.

*“He refused to believe me... [and] refused to go, even though I know he is seeing other women.” – Female*

In some instances, men believed it was their significant other who was to blame for their risk of infection, and chose to cast them aside. Although it is often assumed that men tend to have more and riskier sexual relationships compared to women, men tend to underestimate their risk of HIV infection compared to women (31). Fear of an HIV positive test and worries about disclosure and blame for bringing HIV into the family also inhibit men from testing (32)(33).

Many accounts suggested that men were quick to silence them if female partners attempted to discuss, or believed that their partner might be at risk of HIV. This underscored the structural-level unequal power relations between partners mentioned in our study in which discussing sexual risk and HIV was believed to be inappropriate and threatening to one’s masculine authority.

### ***Delayed Care Seeking (Health Systems Level)***

There were multiple reports of men refraining from seeking care, often times without explanation.

*“My husband is confident he isn’t sick, he does not want to come to the hospital with me.” - Female*

*“He waited for months, couldn’t eat, could barely sleep, and he still did not want to go to the hospital.” – Female*

This delay could be caused by a deterrence from the health systems and structures which provide HIV care. When the participants discussed the structure of the hospital, they referred to the service organization, and those working within the system. For example, participants were discouraged to seek care if the health facilities were not well organized, had long wait times, or did not provide a welcoming environment.

*“...often it is the structure of the hospital which discourages people from coming, you can spend a whole day without speaking to anyone.” - Male*

Healthcare workers reaffirm this notion and report a lack of time for quality care, where nurses make little effort to speak to patients. Additionally, some patients mentioned deterrence by the lack of professionalism from the healthcare workers who are a part of the health system.

*“I don’t care much for healthcare workers, especially those that do not have any professionalism... one time, a healthcare worker [who came to our village] nearly revealed my status in the area. My wife and I provide the wrong address now if they ever want to come visit” - Male*

Prior research also attests to a delay in using healthcare facilities as a consequence of the male identity; being the sole provider in a machismo culture may have detrimental effects on males seeking HIV care (31). Men can feel “pressured” from their paternal roles, where their family is dependent on their income.

## Referral Methods

Table II Referral methods discussed in focus groups

Referral Method	How it addresses Stigma from community	How it addresses concealing culture	How it addresses spousal relationship	How it addresses delayed care seeking	Support Quotes	Against Quotes
Referral by Client	Keeps information within spousal relationship, dependent on partner incentives.	It is contingent on how willing the partners are able to keep this a secret.	This could create difficulties within the relationship.	Brings the testing information to the partner.	N/A	<i>"This is very contingent of the spousal relationship, it may incite violence"</i> <i>"This is very difficult, especially with polygamous relationships in Haiti"</i>
Referral by Provider	A provider may be revealing of status, especially within a close-knit community.	Reaching out to partners directly can make it difficult to conceal HIV status.	This places more burden on the provider.	Brings the testing information to the partner.	<i>"I think it's a good strategy that could work"</i>	<i>"Our presence may stigmatize the patient, especially in their own space"</i>
Referral by Contract	Having a relationship with provider mitigates stigma in healthcare setting, but exposes client to risk that provider will not maintain confidentiality.	The contract is an agreement solely between the healthcare worker and the patient.	Puts pressure on the partner, an ultimatum can never be enforced.	Brings the testing information to the partner.	<i>"[This] gives the wife time to divulge her status on her own, and find a time that works best for her partner"</i>	<i>"There could be 'overflow' – too many people choose not to reveal their status so the provider takes over"</i>
Use of Self Testing Kits	A self-testing kit can be cumbersome and fairly identifying.	Self-testing can be done in the privacy of one's home.	This puts a lot of pressure on the woman to administer the test and return results.	There may be loss to follow up.	<i>"It is feasible, and I like the saliva testing kit"</i>	<i>"Relatives in the home may complicate the issue"</i> <i>"Ensuring patients return test results to hospital will be difficult"</i>
Open Invitation	Everyone receiving letters shows equal treatment of a group, reducing suspicion on a particular individual.	Having a letter sent home can be easier to hide from the community, but difficult within the home.	It forces a conversation with the spouse if both receive letters.	Consistent messaging can influence men to get tested: especially if the focus is on the family.	<i>"I think it's a good idea..."</i>	<i>"[Letters] should be sent to everyone, not just the patient..."</i>
Couples Counseling	Discussing issues and fears with a healthcare provider can address barriers to testing, including stigma from members of the community/family.	Testing done in a hospital can be private, but difficult to ascertain.	Being together in a neutral setting reduces the risk of violence.	Placing couples in the healthcare setting pushes males to get tested out of convenience.	<i>"[It] can build stronger relationships in supporting one another."</i> <i>"Teamwork helps battle stigma."</i>	<i>"It is difficult to get men to come to the healthcare facility"</i> <i>"One person may already know their status and are lying about it to their spouse... there is a lack of faith"</i>
<b>Reference to Socioecological Model</b>	<b>Community Level</b>	<b>Social Level</b>	<b>Social/Structural Level</b>	<b>Health Systems Level</b>		

### ***Referral by Client***

The benefit of the referral by partner method is that it brings the pressure to get tested to the male partner from someone they hopefully trust, but like many other referral methods, there is immense pressure on the female. Women expressed hesitation with disclosing their status to male partners because of the risks to a negative reaction: some couples are afraid of partner violence due to stigma and fear and blaming of others for the cause of their HIV status. This method was not well received because of the variance in character traits and attitudes among spousal relationships.

### ***Referral by Provider***

Referral by provider received criticism based on the idea of a provider interacting directly with a male partner: there is so much fear of stigma that participants are often hesitant to reveal their address to healthcare workers who may require it to reach out to partners. This was reinforced with by a mistrust with unprofessional healthcare workers as stated by patients and partners.

### ***Referral by Contract***

Similarly, referral by contract had mixed appeal. Healthcare workers commented on its potential to lead to overflow, in that patients may more often choose to have the provider reach out to their male spouse rather than on their own, which would overburden the provider. Healthcare workers were also weary of the enforcement of the contract; patients could not be forced to commit to this agreement. Moreover, females felt that the referral method put too much pressure on them.

### ***Self-Testing Kits***

Use of self-testing kits had mixed responses from the participants. Although convenient for the healthcare workers, results from the testing kits were mentioned to be difficult to interpret. Healthcare workers feared a loss to follow up as well, and feared there was a risk of revealing

one's HIV status with use of a kit in the home. Since the living environments can often be crowded, concealing a testing kit would be difficult. Most importantly, healthcare workers were weary of violence between the couples.

### ***Open Invitation***

The open letter invitation method counteracts barriers to HIV testing by remaining convenient, and maintaining secrecy for families in need. Letters sent to not only spouses or partners of HIV positive women but to everyone (whether in the home or in the community) helps prevent stigma in the community because everyone is being treated equal: no one person is being identified. This method is also able to provide several reminders, which may be more welcoming for patients who report not feeling welcome to the health facility setting. This also puts less pressure on female partners, and may reduce the potential for violence between couples. Additionally, being officially called by health authorities is seen to carry weight, in that men are more likely to comply when being called by someone in a position of authority, such as a Healthcare worker, rather than a spouse or a partner.

However, the open letter invitation was met with criticism from focus group participants. This included a recommendation to have nurses refrain coming to the home to invite couples if they did not respond to letters. Additional limitations to this referral method include the potential for family members to be suspicious of these letters and accusatory to one another, which could incite interpersonal violence. Furthermore, the success of written invitations is dependent on whether or not the target audience can read, which not every group can.

### ***Couples HIV Testing and Counseling***

Based on the transcripts, we believe that the most acceptable and effective referral method which addresses the key themes which impact facilitators and inhibitors to male testing was the use of CHTC. Nearly all healthcare workers in the focus groups cited it as the most effective way to get

men tested for HIV. The CHTC method counteracts inhibitors to HIV testing by providing spousal support in a neutral setting that can offset the potential for violence to erupt, and maintain the privacy that Haitians are so often seeking in their home. Even while considering the fear of being seen with a spouse, healthcare workers emphasized the importance of getting men in the hospital so that they are mediated by the presence of a professional who can be explicit in interpreting their status. Limitations to this referral method include the constant delayed healthcare seeking reported in the discussion groups and the undermining of masculinity which may threaten male authority in the spousal relationship.

## **DISCUSSION**

There are relatively few studies that focus on linking men to HIV testing in Haiti and explore the reasons why men may be deterred from seeking testing. While previous research suggests that use of APS and CHTC are beneficial in that it facilitates access to and adherence to ART Therapy, particularly for a context with medium level HIV prevalence such as in Haiti (34), in the Haitian context, the HIV testing experiences of men cannot be separated from a history of stigma and a need to maintain personal information which shape health behaviors throughout the country.

In this article, data from focus group discussions with Option B+ patients, their male partners, and healthcare workers were gathered to learn more about the sociocultural factors that influence attitudes towards HIV testing for men. Using the socioecological model as our theoretical framework, results from our focus group discussions revealed that perceptions surrounding stigma and healthy systems in Haitian contexts, culture and variance in the spousal relationship, may help to understand the facilitators and inhibitors to male HIV testing and support the idea that using CHTC may be the most accepted method of referral.

For example, stigma is an overarching theme found in several studies relating to HIV testing and disclosure (37)(38)(39). It can lead to negative self-judgement resulting in shame, worthlessness and blame (40). What was especially unique about stigma from our findings was that these

negative feelings were divided by gender. Men reported a fear of rejection from the community and their male peers, and in turn some reacted with violence and intimidation when their partner mentioned wanting to share their HIV status with others. Men were aggressive in the face of stigma, where fear was a reaction to potentially being ostracized by the community. When made aware of their HIV positivity, rather than reacting violently in most cases a majority of women related to the concept of internalized stigma. They reported feelings of self-blame, shame, and guilt. They contemplated suicide and reported feeling hopeless. The fear was of their death. Because of fears of discrimination and lack of confidentiality, participants were reluctant to speak honestly with healthcare workers and even return to clinic appointments (whether for medication or for simple follow up).

There is growing evidence that promoting positive models of manhood and changing harmful gender norms through community outreach not only addresses structural inhibitors to men's health behaviors, but that it also can improve the health of their partners and reduce this aggression (41) (42). When successful, such interventions can lead to more equitable domestic relationships, reduce intimate partner violence and prevent the spread of HIV (43)

Furthermore, focus group discussions revealed this particular stigma which we explored was only reinforced by the "coquin" concealing culture, which inhibited men's willingness to share their increased risk of HIV to multiple partners and to test in Haiti, and influenced female partners to refrain from sharing their status with men as well. These fearful behaviors likely have an impact on how men interpret HIV testing within the community.

Similar to previous literature (31), many participants noted that disclosing to extended family members lead to a fear of enacted stigma, due to their revealed status to the community from that family member. A study conducted by Keosha et al noted that HIV stigma associated with fear was identified as a major barrier to HIV testing (44). Additionally, one study among African-

Americans in the United States found that stigma was among the most common reasons for avoiding HIV testing (45).

Many studies have found success in targeting the same themes which are found in our research. A study published in the *Journal of Adolescent Health* in 2017 found that family planning clinics in San Diego successfully increased the screening of young men for sexually transmitted diseases by actively addressing issues that had been undermining men's sexual health, including the sense that sexual health is a women's issue, concerns over wait times, and stigma (35). This study also reported that community engagement was key to overcoming the fear that many men have of the stigma that may result from being seen at a clinic (36).

Perhaps the most important insights generated from this study is the notion that all referral methods were perceived to be more successful if implemented alongside an awareness campaign or community-based testing, which nearly all healthcare workers note in their discussion. A systematic review and meta-analysis of community and facility-based HIV testing conducted in Sub-Saharan Africa found that campaign based testing, a subset of community-based testing, achieves higher proportion of people tested than facility based testing, confirming a clear preference for this community-based testing approaches (46). Additional insight which arose regarding referral methods to HIV testing was focusing on children of seropositive couples, as a means to convince men to consider the importance of family and seek testing. This finding is also found in previous literature in which a sense of responsibility to families was seen as a facilitator to HIV testing for men (47).

There are a few limitations to this study worth noting. First, the number of male partners who participated in our focus group discussions was small relative to our other participant groups, but sufficient for a qualitative study. This limits the generalization of our findings to other men who are at risk of contracting HIV in other geographical locations. To offset this limitation, we used discussion group data from Option B+ (pregnant mothers and partners of men) and healthcare

workers whose expertise have served as a major guide in program modeling for HIV programs in resource-limited countries (48) to add additional context and perspective to our findings. All three informant groups were limited to participants from two locations in Haiti. Future research might consider using a larger sample of men, women, and healthcare workers from varying locations to obtain a complete understanding of all the socioecological factors that influence the facilitators and inhibitors to male HIV testing. We also encourage future research to consider purposefully sampling additional men with unknown HIV status and with wives or partners of unknown HIV status to mitigate the lack of variance within the male cohort so that the group is not limited to partners in long term relationships.

Second, although our method of inter-coder reliability was sufficient for our study, it failed to take into account a proportion of coding agreement that could occur by chance. This was counteracted by having three coders in agreement on the final global themes and the coding manual used to inform this study. Future research might consider an index which takes into account chance agreement in the coding process.

Our focus group discussions allowed participants to freely discuss and express their opinions about some of the issues and challenges they experience with disclosure of status, ability to access HIV testing, and experiences within the setting. Our findings also raise important insights for the design of interventions aimed at encouraging men to seek HIV testing. Rather than solely focusing on the inhibitors to testing, it is equally important to find facilitators, such as a healthy spousal relationship, and a belief that getting tested will benefit children in the family.

## **CONCLUSION**

Using personal narrative rather than statistical methodology to contextualize the issue surrounding ART adherence in an underserved community will provide more insight to the systematic implementation of APS and CHTC. Information from this study will help policy makers

interested in identifying factors affecting case-findings to prioritize how patients should receive partner interventions in Haiti. Specifically, findings of this study suggest that there are many challenges which show how APS could be of limited effectiveness specifically for women in antenatal care and their partners. Our study gives reason to believe that a comprehensive approach of outreach to men and making CHTC widely available and accessible could be vital to actually reach male partners of pregnant women with testing. This requires that HIV interventions take stigma, self-image, the spousal relationship, and delayed healthcare seeking into consideration as they highlight some of the reasons why men may be deterred from seeking HIV testing. Furthermore, the unique context in which the Haitian population experiences stigma necessitates a comprehensive approach to understanding how it influences health behavior. Paying attention to the socioecological factors that influence male decisions may subsequently lead to higher rates of testing among men who are at risk of contracting HIV/AIDS.

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