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Men's hopes, fears and challenges in engagement in perinatal health and the prevention of mother-to-child transmission of HIV in rural Kenya

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Abstract

Male involvement in antenatal care has been shown to improve health outcomes for women and infants. However, little is known about how best to encourage male partners to support essential perinatal health activities. We explored men's perceptions of facilitators and barriers to involvement in antenatal care and HIV prevention including fears, hopes and challenges. Forty in-depth interviews were conducted with the male partners of HIV-positive and HIV-negative pregnant women in southwest Kenya. Most male partners believed engaging in pregnancy health-related activities was beneficial for keeping families healthy. However, thematic analysis revealed several obstacles that hindered participation. Poor couple relationship dynamics seemed to negatively influence male engagement. Some men were apprehensive that clinic staff might force them to HIV test and disclose; if HIV-positive, men feared being labelled as "victimisers" in situations of serodiscordancy, and described fears of abandonment by their wives. Some men avoided accompanying their wives, citing local culture as rationale for avoiding the 'effeminate' act of antenatal care attendance. Amidst these obstacles, some men chose to use their partners' HIV status as proxy for their own. Findings suggest that improving male engagement in essential maternal and child health-related activities will require addressing both structural and interpersonal barriers.

Keywords

Kenya; men's role; prevention of mother-to-child transmission; barriers; facilitators

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Introduction

Despite advances in reducing HIV incidence globally, Eastern and Southern Africa continue to bear the greatest burden of new HIV infections. Approximately 44% of pregnant women in low- and middle-income countries received HIV testing and counselling in 2013, albeit an improvement from 26% in 2009 (UNAIDS 2014). This gap in pregnant women accessing HIV prevention, treatment and care could hinder further progress in eliminating maternal and paediatric HIV infections (UNAIDS 2014).

Kenya adopted the Global Plan Towards the Elimination of New HIV Infections among Children and Keeping Their Mothers Alive in 2012, in addition to introducing the WHO guidelines for providing life-long antiretroviral therapy for all HIV-infected pregnant and breastfeeding women (National AIDS and STI Control Program 2015). The impact of this scale-up of prevention of mother-to-child transmission services within antenatal care settings in Kenya was investigated using a national population-based cross-sectional household survey, and investigators found that while HIV testing among pregnant women significantly improved, only 53% of women received the most effective regimens to reduce vertical transmission of HIV (Sirengo et al. 2014). Furthermore, among Kenyan women accessing prevention of mother-to-child transmission of HIV services, rates of retention in care have remained lower than desired at 71% (Nduati et al. 2015).

Lack of male involvement could be one crucial factor driving suboptimal prevention of mother-to-child transmission of HIV uptake and adherence (Haas et al. 2016; Tenthani et al. 2014), and there is some evidence that improving male involvement may result in important benefits for women and children's health. Aluisio and colleagues (2011) examined the relationship between male attendance at prevention of mother-to-child transmission and antenatal care services and infant HIV acquisition and mortality; they found that infant HIV acquisition and mortality were lower in the group with male attendance (Aluisio et al. 2011). Similarly, a meta-analysis of the use of prevention of mother-to-child transmission of HIV services in sub-Saharan Africa indicated that uptake improved if male partners were involved in care (Wettstein et al. 2012). Consequently, male partner engagement has been endorsed as a promising strategy for improving maternal, new-born and child health (UNAIDS 2011; World Health Organization 2015).

However, many prevention of mother-to-child transmission-related interventions have focused on empowering women, at times alienating male partners and inadvertently identifying them as obstacles instead of possible agents of change (Katz et al. 2009; Shand et al. 2014; van den Berg et al. 2015). This has had marked effects on the health of women, infants, and men themselves. For example, pregnant women who lacked support from their male partners were less likely to accept HIV testing (Turan et al. 2011), initiate antiretroviral therapy (Farquhar et al. 2004), deliver in a health facility (Turan et al. 2012), or adhere to recommended care (Jefferys et al. 2015). Additionally, facility-based strategies such as using letter invitations to invite men to attend antenatal care and prevention of mother-to-child transmission services, have had modest effects (Jefferys et al. 2015; Brusamento et al. 2012).

The global health field therefore urgently needs to gain a better understanding of how men view engagement in perinatal health, and to explore the influence of individual, interpersonal, and structural factors on male engagement in different cultural contexts (Montgomery, van der Straten and Torjesen 2011). In this study, we explored men's views on the time surrounding pregnancy and birth, and male involvement in antenatal care and prevention of mother-to-child transmission services. Additionally, we explored facilitators and barriers to men's involvement in rural Kenya, including their personal hopes, fears, and challenges. Guided by the definitions provided by Maman, Moodley and Groves (2011), we defined male involvement as attending antenatal care/maternal and child health services, providing emotional and instrumental support related to accessing these services, engaging in couple HIV testing and couple communication related to prevention of mother-to-child transmission and antenatal care activities (Maman, Moodley and Groves 2011).

Methods

Setting

Data were collected between August to September 2014 in southwestern Kenya in communities near Lake Victoria where the primary means of livelihood are fishing, agriculture, and mining. As of 2015, HIV prevalence at the study sites was estimated to be up to four times higher than the national average (5.9%), with rates ranging from 14.3% (Migori County) to 26.0% (Homa Bay County) (The National AIDS Control Council of Kenya 2016). Male partner involvement became encouraged in many facilities during the study period, as national antenatal care registers adopted partner HIV testing and counselling as a reportable outcome. Analogous to strategies employed in similar settings in sub-Saharan Africa, interventions to increase male partner attendance with pregnant women included sending invitation letters through their partners (Jefferys et al. 2015), and offering incentives such as t-shirts (Rogers et al. 2016), although neither of these specific interventions was ongoing at the time of this study.

Study design

As part of a larger intervention development pilot study, we conducted in-depth interviews with 40 pregnant and postpartum women (half HIV-positive and half HIV-negative) and 40 male partners of such women in rural southwestern Kenya from antenatal care clinics. If a woman attending antenatal care gave her permission for her male partner to be contacted for potential study participation, research staff directly contacted male partners, gave them further information, and invited them to participate in an informed consent process and in-depth interview. Male partners who were 18 years or older and aware of their female partners' HIV status were invited for interview. The inclusion of HIV-negative participants enabled the design of the intervention, which was intended for all pregnant women and their male partners (both HIV-positive and HIV-negative) and aimed to provide feasible and acceptable home-based services for pregnant couples of different HIV status combinations. The current analysis utilises data from the 40 male partner interviews.

Data collection

A purposive sampling technique--that is, inviting male partners currently in the pregnancy period who were willing to provide insights surrounding pregnancy, birth, antenatal care and HIV testing--was used to allow for the in-depth exploration of perspectives on issues that could potentially impact many individuals. Participants were interviewed individually by a gender-matched interviewer in a private room within the health facility or a place of their choosing. Interviews were conducted after obtaining informed consent, lasted for about one hour, and were digitally recorded with permission from participants. The semi-structured qualitative interview guide for men was developed based on literature to explore several dimensions of male engagement in antenatal care and prevention of mother-to-child transmission of HIV services (Table 1). Following the interview, participants were reimbursed 400 Kenyan shillings (roughly equivalent to US \$5) for travel expenses and their time. Professional transcriptionists transcribed the digital interview recordings verbatim from the local language (Kiswahili or Dholuo) and translated them into English. Transcripts were checked for translation accuracy by the study coordinator and qualitative interviewers.

Data analysis

A team of five researchers (PLM, AJR, LA, EW, AMH) preliminarily coded and analysed the transcripts in Dedoose (SocioCultural Research Consultants, LLC; Los Angeles, California) using a thematic analysis approach, with each transcript being coded by two researchers (Corbin and Strauss 2014). Initial broad codes were developed using the interview guide (Table 1) and literature; the codes were agreed upon by the whole team and subsequent meetings were conducted to review the coding scheme and reliability of assigning codes. In a subsequent round of coding conducted by two researchers (PLM, AJR) following study team consensus, fine codes were identified using participant language to inductively assign meaning to each sub-theme (Attride-Stirling 2001). Quotes presented here have been given pseudonyms. Ethical approval for the study was given by the University of Alabama at Birmingham and the Kenya Medical Research Institute Institutional Review Boards, and all participants provided signed informed consent.

Results

Socio-demographic characteristics

The characteristics of the 40 male partners are presented in Table 2. Ages ranged from 18–70 years with a median of 34.5 years. Most of the participants had some primary education and worked in either manual labour (e.g. miner, casual labourer) or agriculture. The proportion of men practicing marital monogamy in our sample (70%) was somewhat lower but similar to the overall rate in the study region, where around 80% of relationships were reported to be single partner marriages in 2014 (Kenya National Bureau of Statistics et al. 2015).

Qualitative findings

For many men in this sample, perceptions about attending antenatal care and participating in prevention of mother-to-child transmission activities were positive, illustrating a willingness

to support pregnancy-related health. Despite their readiness to participate, men described several barriers to their involvement.

Men's desire to be involved in antenatal period—Some men recognised the importance of participating in antenatal care as well as in prevention of mother-to-child transmission of HIV. Many perceived it was important to be involved beyond simply providing financial support – a typical level of engagement in this setting. Engaging in antenatal care activities and learning how to keep their wives and their infants healthy was of interest to many male participants. For example, an older husband explained how couple attendance at the antenatal care clinic was encouraged by health providers and recognised how learning about the pregnancy could help him manage pregnancy-related crises:

This is because the healthcare providers want the male partners to accompany their female partners to the clinic so that they may both know the status of the foetus to be able to get the necessary assistance in case of any problems concerning the pregnancy. (James, 50 years)

One participant further highlighted that the value of attending antenatal care extended beyond keeping a pregnancy healthy. He emphasised that male partners also had the opportunity to seek care for health concerns other than HIV:

There are some services he should visit the clinic to receive, for example, he can get some injections, drugs, and others that the doctors may feel necessary to give because there are so many diseases apart from HIV so when he goes to the clinic then he can get the treatment. (Omondi, 21 years)

The idea that the responsibility of maintaining the health of the family was “women's work” was dispelled by some male partners. They viewed the pregnancy as an equal investment and interest and thought that the responsibility of the child should be shared. This man expressed that staying educated enabled him to remain supportive:

I went with her based on some of the lessons that people normally get there. There are some lessons that are given to couples. Some will touch on men while others will touch on women. As you know, sometimes people do forget. Since people do forget, it is better if you get the information as a couple. This means you will easily encourage one another as you remind those who tend to forget what they were taught. (Moses, 45 years)

Living with HIV presented unique challenges to male partners in ensuring their partners and infants remained healthy. For instance, one young father-to-be explained that by attending antenatal care visits, he would also learn how to ensure his wife remained healthy during the pregnancy while living with HIV, and more importantly how to ensure his child did not become infected:

One of those things that made me think of accompanying her was because we know that we are living with HIV virus, we feel that if she is not well taken care of then she can pass the disease to the child, that is why I thought that we should go together so that she can be given proper medical treatment so that she gives birth to

a child who is not HIV positive another one is that we were given a medicine to give the baby immediately the baby is born. (John, 39 years)

Influences on male participation in antenatal care—Men also identified a variety of challenges to participating in pregnancy-related health. Perceived barriers to male involvement ranged from poor couple relationship dynamics to fears around HIV testing and disclosure. Men also mentioned clinic characteristics as limiting their participation in antenatal care.

Couple Relationship Dynamics and Male Engagement.—Some male partners did not believe they had a significant role to play in prevention of mother-to-child transmission of HIV or maintaining a healthy pregnancy, and this seemed to be in part due to the lack of communication between couples. In some instances, some male partners expressed that their partners rarely shared information about their antenatal care experiences. Further, this male partner believed an invitation was needed from his spouse or doctor in order for him to engage:

She hasn't invited me yet... I have the time. She is the one who has never asked me to accompany her... My wife has told me nothing about it... I will come if she accepts or the doctor invites me. (Isaiah, 41 years)

Lack of communication between couples was compounded by negative community attitudes toward male participation in antenatal care activities. Some male partners accepted traditional values and gender norms; the paternalistic nature of the local culture reinforced such attitudes. Antenatal care activities were regarded as “women’s work”, and to be seen participating in such activities would bring ridicule and loss of perceived masculinity among community members. Additionally, pregnant partners who requested their partners to accompany them to antenatal care clinic visits might have appeared dominating, or less feminine. A male partner articulated how traditional gender norms hindered male partners’ willingness to participate in antenatal care clinic visits:

People feel embarrassed when they are seen taking their wives to the clinic. A Luo man will feel that he will be laughed at and told that his wife is controlling him... (Odhiambo, 48 years)

The strength of intimacy between couples also seemed to dictate the willingness of a male partner to engage in antenatal care-related activities. For instance, the intimacy that this male partner shared with his wife made it easy for him to attend antenatal clinic visits:

What has made it easy is the fact that we love each other, and it can be made easier by her reminding me the visit dates because I always do so many things and am likely to forget, so if she reminds me even two days prior then I can organise myself and go with her. (Omondi, 21 years)

On the other hand, according to this male partner, men without close relationships with their wives did little to support them during pregnancy:

...Some men tend to ignore pregnant women and send a relative to them in case they have a message to communicate to them. They avoid the women when

pregnant. However, there are some men who still love their wives that when they are to leave, the women feel like they are going to be very lonely. [These] are the two groups that we have: One that hates each other during pregnancy and the other that loves each other during pregnancy. (Anthony, 52 years)

Proxy Testing.: Some men in the community believed the HIV status of their pregnant partners or wives reflected their own HIV status and saw no reason to test for HIV. This view was further compounded by the assumption that being in a monogamous partnership equated to fidelity and trust among couples. Some men who believed to be in trusting relationships talked about becoming less compliant with safe sex practices, due to their belief that their partners would not engage in extra-marital affairs. In the following example, a male partner saw little use in HIV testing, believing that since both he and his wife were faithful, there was little risk of acquiring HIV. He described how he believed they both shared similar HIV status.

I don't get involved into extra marital affairs. I trust myself that I am clean.... Let me just say that I trust myself... That is another reason preventing me from going for the test. There is no need of going [for HIV testing] when my wife doesn't have it. (Brian, 35 years)

In other cases, men believed that being found HIV-positive was a sign of weakness. Participating in couples' HIV testing and counselling was, therefore, not an option; they instead gauged their own HIV status through their spouses'. As this young male participant expressed, some men feared the idea of HIV testing and the consequences of disclosing an HIV-positive result:

I have to confess that men are always fearful concerning the issue of HIV. They would rather not let their wives know that they are infected because of perceived exposure of weakness. Sometimes they fear of other things. Many men would rather find out their HIV status through their wives. (Ochieng, 24 years)

Fear of Forcible HIV Testing and Disclosure.: Several men believed that male partners refuse to accompany their wives to antenatal care clinic visits for fear of being forcibly tested for HIV as a couple. Refusal to participate brought speculation of possible infidelity and consequently, relationship turmoil; to test and be found serodiscordant would confirm their infidelity. One participant reasoned that some men in his community avoided antenatal care clinic visits to hide indiscretions:

Why do you think that men don't go with their wives? ... They fear that the partner will be there to receive the results with them. This means they know what they have been doing in the dark... (Otieno, 35 years)

A few male partners feared rejection and abandonment by their partners or wives especially if disclosure revealed discordance. They feared being seen as undesirable and losing status as a patriarch. Such fears discouraged them from participating in couple HIV testing and counselling, as shared by this male partner:

...If we are tested together and I might be found positive and my wife negative this makes me feel that our marriage can come to an end. She can run away from me if I have the virus and she doesn't have... (John, 39 years)

Further, this quote underscores the pervasiveness of HIV-related stigma in the study community. Similar to studies among women, who often report fear of abandonment following a positive HIV test (Falnes et al. 2011; Walcott et al. 2013; Maman, Moodley, and Groves 2011), it is notable that men expressed similar fears.

Clinic Logistical Challenges

Male partners also cited logistical constraints as barriers to engaging in antenatal care clinic visits. For some participants, the inability to afford transport costs hindered them from accompanying their wives to clinic visits. As this older individual lamented:

Yeah, Lack of money is another reason! It could have also prevented me from coming because for you to get to the clinic, it will cost you 300 [Kenyan Shillings] on a motorcycle. (Stephen, 58 years)

Lack of time to participate in clinic visits was cited as another major constraint. Although many male partners desired to be involved, time spent at the clinic and away from income-generating activities interfered with their responsibilities as providers. As this male partner articulated, it was not for lack of care that he felt for his wife; conflicting work and antenatal care clinic visit schedules made it impossible for him to attend clinic visits with his partner:

I am very busy. It is not that I am avoiding her because I took my time to bring her all the way to stay with me... (Fred, 38 years)

Another factor deterring men from accompanying their wives or partners to antenatal care clinics was perceived disapproval of male presence by clinic staff.

... In some cases, the doctor may make you avoid visiting the clinic. Some of them do not welcome us. (Paul, 43 years)

On the other hand, being the only man at his wife's antenatal care clinic did little to discourage this young male partner from participating in clinic visits, with the understanding that the knowledge gained would make him a better husband and father:

... We came to the clinic and I never saw any guy there. They were all women. I was all alone... We waited for some time and she was called inside. I was also called, and we met the doctor together... We went to the clinic and were taught how to take care of our marriage. We were also taught how to take care of our health. I, therefore, believe it is something important because we were educated. I learnt that a pregnant woman must have someone available to assist her... It was good because everything that we learnt impacted positively in my life. It, therefore, had a positive result in our life as a couple. (Otieno 35 years)

The above quote illustrates the pride and empowerment that some men in our sample felt after being engaged in antenatal care. It also highlights the potential effects on couple relationship dynamics, suggesting that male involvement in antenatal care may positively impact couple relationships in addition to positive health outcomes.

Discussion

Most men in this study recognised the importance of attending antenatal care clinic visits and participating in the prevention of mother-to-child transmission of HIV with their pregnant partners. Many felt that pregnancy was an equally vested interest of both partners and that staying well-informed about the health of the pregnancy was imperative. Additionally, some male partners understood that the opportunities antenatal care services offer, including prevention of mother-to-child transmission of HIV services, would enable them to keep their families healthy. Indeed, male partners' positive sentiments about such maternal and child health services have been revealed in other African settings, such as Uganda and Tanzania (Matovu et al. 2014; Falnes et al. 2011; Theuring et al. 2009).

Despite these positive opinions, it is evident that gaps still exist in achieving significant male partner involvement in antenatal care and prevention of mother-to-child transmission of HIV-related activities (Morfaw et al. 2013; Mills et al. 2012). Moreover, even though viewpoints about male engagement did not appear different for HIV-positive versus HIV-negative men in our sample, it was evident that concerns around HIV status continued to influence male engagement in prevention of mother-to-child transmission of HIV. We found men's fears of forced couple HIV testing and couple conflict arising from unwanted HIV status disclosure. Others expressed fear of mockery and possible abandonment if HIV results were positive and serodiscordant. Similar male fears have been reported in other studies (Matovu et al. 2014; Katz et al. 2009; Byamugisha et al. 2010). Furthermore, the occurrence of "by proxy" testing appears to indicate that men who would benefit from HIV testing for their own health may not be accessing this service. Therefore, assisting couples together through couple HIV testing and disclosure may help male partners improve their knowledge about the role they play in prevention of mother-to-child transmission of HIV, as well as help those apprehensive of couple HIV testing and counselling acknowledge and cope with their fears. Working with men who fear couple HIV testing in small male-only groups may also be a good strategy for creating safe spaces for examining fears associated with HIV and partner commitment.

The perceptions and opinions voiced by male partners illustrate that the barriers surrounding male engagement in pregnancy health-related activities are many, and are impacted by circumstances beyond the individual (Alio et al. 2013). To help address facility-level barriers, such as conflicting work schedules with antenatal care clinic hours and the lack of a "male-friendly" environment, antenatal care programs have instituted various strategies, such as providing shorter waiting times for couples presenting at clinic and using letter invitations to invite male partners to the clinic, albeit with modest success (Ditekemena et al. 2012; Sharma, Barnabas and Celum 2017; Morfaw et al. 2013; Ditekemena et al. 2011). Added strategies such as patient tracing where patients who are non-adherent to clinic visit appointments are physically traced, have been employed to improve male engagement in prevention of mother-to-child transmission of HIV-related activities with better success (Osoti et al. 2014; Rosenberg et al. 2015; Thomson, Cheti and Reid 2011). Furthermore, home-based couple HIV testing interventions have shown some promise in improving male engagement in prevention of mother-to-child transmission of HIV-related activities and may

provide a feasible option to overcoming constraints associated with access and use of maternal and child health-related services (Krakowiak et al. 2016; Walcott et al. 2013).

Within our study communities, results also indicated that predominant social norms deterred men from engaging in activities that were perceived as effeminate, and to do so would be perceived as aberrant, as has also been found in other settings (Montgomery et al. 2006; Morfaw et al. 2013). In recognizing the negative impact of traditional masculinity on men's health as well as on engagement in antenatal care and prevention of mother-to-child transmission of HIV, community-based education programmes that involve educating male partners about the benefits of male engagement in prevention of mother-to-child transmission of HIV, address issues surrounding stigma, and challenge gender norms have had some success in increasing HIV testing among male partners. In a community mobilisation intervention centred around promoting gender equity and intimate partner violence prevention, participants in communities randomised to receive the intervention had better HIV prevention behaviours and described improved communication about prevention of mother-to-child transmission of HIV, although there were some challenges experienced by men (Kyegombe et al. 2014). Community-level interventions could improve male engagement and couple relationships dynamics which in turn could be used to model redefined masculine expectations and help address negative influences of traditional gender roles in the context of maternal and child health.

However, to effectively address challenges in male involvement, understanding the mechanisms by which male partners engage in antenatal care and HIV prevention during pregnancy is essential. Alio and colleagues (2013) posited that couple relationships influence the degree to which male partners become involved with their wives during pregnancy (Alio et al. 2013). Indeed, one of the most important contributions of our study was the finding that couple relationship factors played an integral part in male partner involvement in maternal and child health-related activities. A closeness between spouses where effective communication about HIV and maternal and child health matters was encouraged appeared to positively impact male involvement. Couples in our study who described poor or weak couple communication experienced less male partner involvement, especially if female partners also subscribed to traditional gender roles and saw little need for male partner involvement in antenatal care. In such instances, open dialogue between couples relating to pregnancy-related topics including HIV prevention during pregnancy, would be difficult to initiate and maintain. However, we recognise that couple relationship dynamics are one factor among many that influences male engagement in antenatal care and prevention of mother-to-child transmission of HIV in this and similar settings. Nonetheless, it is important, as it is a factor that is amenable to interventions that can strengthen couple communication and relationship skills (Conroy et al. 2017; Darbes et al. 2016).

Limitations

The findings from this study should be viewed in the light of several limitations. The focus of analysis was on male views of male engagement in perinatal health and the influence of couple relationship factors, which gives unique voice to a population less often heard and supported around these issues (i.e., men) (Mills et al. 2012; Comrie-Thomson et al. 2015).

That said, future research could usefully access the views of women and perhaps use dyadic in-depth interview approaches to understand viewpoints from both members of a couple.

Engaging a few male partners in lengthy in-depth interviews that required time and extensive discussion about their perceptions and experiences remained a challenge; this was due to men's engagement in occupations requiring long working hours away from home such as mining and limited time to participate. Due to time constraints, eliciting deep and rich stories from a few these men was challenging; however, most interviews with male partners yielded rich and informative results.

Because the study recruited pregnant women visiting antenatal care clinics and their male partners, these men's perceptions may differ from those of participants not engaged in health services. Additionally, since we only contacted men whose female partners gave consent for recruitment, male partners interviewed for this study may be more supportive on the topics of HIV and prevention of mother-to-child transmission of HIV-related activities in addition to being in more positive couple relationships than men in the general population.

Finally, because recruitment occurred at the health facilities, perceptions shared about male engagement may have been more favourably presented if participants were reluctant to express negative views to a researcher who seemed linked to the clinic (Nederhof 1985). To foster a safe environment in which participants were encouraged to share views candidly and without apprehension, professional qualitative interviewers who were not affiliated with the health facilities were employed to conduct the in-depth interviews at a place of the participants' choosing.

Conclusion

To actualise the Global Plan initiative, a multipronged approach is needed to successfully engage male partners in maternal and child health services. Beyond addressing improved access and knowledge among male partners, culturally appropriate community-based interventions that attend to redefining gender roles and couple relationship dynamics are essential. In this explorative study, male partners' perceptions of their relationships to their spouses did appear to impact male engagement, and understanding key mechanisms within couple relationships that enable male partners' support and engaging in pregnancy health is pertinent to refining interventions for better success.

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Table 1.**In-depth interview discussion topics for male partners**

Theme	Sub-theme	Example questions
<i>Health care utilization</i>	Antenatal care clinic male attendance	Have you accompanied her to any antenatal care visits?
	Antenatal HIV testing	
<i>Barriers and facilitators for utilisation of health care services</i>	Perceptions about use of antenatal care services and facility-based child delivery	What about the father of the child? Does he need to visit the health facility for services? What type of services?
	Role of the father during visits	
<i>Couple relationships</i>	Perceptions of quality of relationships	How long have you been in your relationship with your wife/female partner who is currently pregnant?
	Couple communication	What role does communication play in your relationship?
	Decision-making	Who usually makes decisions your family?
<i>HIV testing</i>	HIV testing experience	Can you tell me about your experience(s) with HIV testing?
<i>Disclosure</i>	Experiences with disclosure	Can you tell me why you decided/decided not to share your HIV testing and HIV test result with your wife/female partner?
<i>Home visit</i>	Perceptions of home vs. clinic visits	What would you think if someone from the health facility came to your home for a visit?
	Perceptions of home-based Couple HIV Testing and Counselling	Can you tell me your thoughts about offering couple counselling and testing for HIV in such home visits?

Table 2.

Characteristics of male interview participants

Characteristics	N (%)
<i>Currently living with spouse</i>	37 (93)
<i>Participant age</i>	
18–24	8 (20)
25–34	12 (30)
35–44	10 (25)
45	10 (25)
<i>Self-reported HIV Status</i>	
HIV-positive	15 (38)
HIV-negative	20 (50)
Unknown	5 (13)
<i>Participant education</i>	
Did not complete primary	12 (30)
Completed primary	13 (33)
Did not complete secondary	5 (12)
Completed secondary	8 (20)
Any college	2 (5)
<i>Marital status</i>	
Monogamous marriage	28 (70)
Polygamous marriage	12 (30)
Unmarried	0 (0)
<i>Number of living children</i>	
0	6 (15)
1	2 (5)
2	8 (20)
3 or more	24 (60)
<i>Occupation</i>	
Agriculture	19 (47)
Small business/sales	3 (8)
Skilled or semi-skilled worker	18 (45)