

Exploring the influence of male partners on perinatal mental health among Kenyan women at risk for and living with HIV

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Abstract

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Mental health conditions are a major global health concern, especially in Sub-Saharan Africa (SSA), where women are disproportionately affected by perinatal mental distress. This issue is particularly severe among women living with HIV (WLHIV), who face a heightened risk of depression and anxiety. Despite the crucial role male partners play in the health of women and children, their impact on perinatal mental health is not well understood. To explore this, we conducted semi-structured qualitative interviews and focus group discussions with women who were either at risk of HIV or living with HIV. Through thematic analysis, we identified that women commonly reported symptoms of depression and anxiety, such as poor sleep quality, physical pain, reduced appetite, unclear thinking, and apathy. Some women even expressed a diminished will to live and suicidal thoughts. Frequent sources of stress included pregnancy-related changes, fear of transmitting HIV to their babies, and fear of acquiring HIV among those on PrEP and their male partners. Male partners emerged as the most significant source of stress for postpartum women, often due to relationship instability, inadequate financial support, and in some cases, verbal or physical abuse. Additionally, women noticed signs of mental health challenges in their male partners, such as anger and chronic stress, and observed that these men often lacked support to address these issues. To cope with perinatal mental health challenges, women employed various strategies, including praying, singing, listening to music, taking walks, social interaction, and participating in church or community-based support groups. Recognizing the significant influence men have on women's mental health and the impact of men's stressors on women's mental well-being, family-oriented mental health programs could be instrumental in improving perinatal mental health.

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Introduction

Globally, mental health conditions are the second leading cause of mortality, accounting for 17% of deaths, with depressive disorders accounting for 40% of all mental illnesses[1,2]. Women in Sub-Saharan Africa (SSA) are disproportionately affected by perinatal mental distress with an estimated prevalence of depression from 8.3 to 41 % in pregnancy, and from 3.5 to 34.7 % in the first year postpartum[3,4]. Despite this burden, up to 85% do not have access to mental health interventions[5]. Perinatal mental health conditions put mother-child pairs at higher risk for a range of adverse health outcomes, including preterm birth, low birthweight, child developmental delay, and maternal death by suicide.

Risk factors for developing common mental disorders during the perinatal period range from psychological, and biological to social and experiential factors, all of which must be understood in terms of culture and context such as the family and community[6]. Some of the known risk factors for poor perinatal mental health include poor socioeconomic conditions, multiparity, low education, lack of spousal support in marital relations, intimate partner violence (IPV), stigma and HIV [7]. Untreated mood disorders in pregnancy and postpartum (such as anxiety and depression) result in negative health outcomes for mother-infant pairs such as maternal suicide, low birth weight, preterm birth, and infant mortality[8]. Among pregnant women living with HIV (WLHIV), the risk of depression or anxiety is 50% higher[9,10] compared to those not living with HIV, likely due to stress about vertical transmission, HIV-related stigma, and the compounding psychosocial impacts of concurrent HIV-infection and motherhood[6,10].

Culturally, male partners have a strong influence over family's financial resources and decision-making, both of which impact the health of women and children[11,12]. In spite of this impact on women's psychosocial and physical health, little research exists characterizing the influence of male partners on perinatal women's mental health [13]. For example, one study conducted in western Kenya reported WLHIV mentioning that lack of support from their male partners contributed to poor mental health, but this theme was not explored in detail[14]. Addressing this gap is essential for improving maternal health outcomes, reducing perinatal distress, and enhancing the quality of life for both mothers and their families. Furthermore, understanding the role of partner support could inform the development of more comprehensive and effective mental health interventions, ultimately reducing the burden on healthcare systems

The overall goal of this qualitative study was to expand our understanding of the male partner related influence on the mental health of perinatal women living with HIV or at risk of HIV. We explored the perinatal mental health challenges of Kenyan women who are either at risk of acquiring HIV (currently on pre-exposure prophylaxis) or living with HIV, and how these experiences may be influenced by their male partners, through in-depth interviews (IDIs) and focus group discussions (FGDs)

Specific aims

1. To explore the impact of male partners on women's mental health among women living with HIV and at risk of HIV experiencing perinatal and post-partum mental health challenges.

Hypothesis: Among women living with HIV (WLHIV) and those at risk of HIV experiencing perinatal mental health challenges, we hypothesize that mental health challenges will be influenced by the level of support and engagement from their male partners.

2. To describe lived experiences with psychological symptoms and coping approaches among Kenyan perinatal and post-partum women living with HIV or at risk of HIV

Hypothesis: We hypothesize that among perinatal WLHIV or at risk of HIV, their experiences with psychological symptoms will vary based on individual factors such as HIV status or risk, interpersonal factors such as relationship instability and community factors such as social support networks, and level of HIV-related stigma. Additionally, we anticipate that the coping approaches employed by these women will reflect a combination of individual resilience, cultural influences, and available resources.

Methods

Study site and population

This study included participants who had screened positive for anxiety, depression, or both, from two ongoing longitudinal studies involving Kenyan perinatal women. The PrEP Implementation for Mothers in Antenatal Care extension (PrIMA-X) study in western Kenya enrolled HIV-negative women in pregnancy and followed them up to 9 months post-partum to evaluate the impact of PrEP exposure on infant outcomes. The HOPE study described elsewhere[16] enrolled women living with HIV and those not living with HIV at 4-10 weeks postpartum in maternal and child health clinics in Nairobi and Western Kenya to compare growth and neurodevelopmental outcomes among HIV exposed and unexposed infants/children.

Women were drawn from 5 sites involved in the parent studies (Mathare North Health center & Riruta in Nairobi, Homabay County Referral Hospital, Rachuonyo County Hospital and Yala subcounty Hospital in Western Kenya). Women were eligible to participate in the study if they had screened positive for either anxiety, depression, or both and were either living with HIV or at risk of HIV and on pre-exposure prophylaxis exposure (PrEP). Mental health support was offered using routine referral pathways, either to a clinic within the facility or to a nearby community organization or other health facility. In the PrIMA-X study, women were referred for depression if they scored 10 or higher on the Center for Epidemiologic Studies Depression Scale (CESD-10)[17] and referred for anxiety if they scored 10 or higher on the Generalized Anxiety Disorder Scale (GAD-7).[18] In the HOPE study, women were referred for likely depression if they scored 10 or higher on the Patient Health Questionnaire (PHQ-9)[19] or 20 or higher on the Kessler psychological distress (K-10) scale. [20]

Data collection

We conducted in-depth interviews and focus group discussions (FGDs) with eligible participants. We purposively sampled women for in-depth interviews for an even distribution by location, by HIV status, and a mixture of experiences attending or not attending the mental health referral. The IDI guide aimed to capture women's descriptions of mental stress symptoms, identify sources of mental stress, and explore coping strategies. The FGDs were conducted in two rounds. The first round focused on women's strategies for managing mental distress, their preferences for mental health support characteristics, and suggestions for ideal mental health support services. The second centered on a prioritization exercise of acceptable elements of hypothetical future perinatal mental health services.

Interviews were conducted February to March 2023 and FGDs between July to August 2023. The IDIs and FGDs were facilitated by two female qualitative researchers with expertise in working with similar populations. Interviews lasted 30-60 minutes while FGDs were 100-150 minutes. Both IDIs and FGDs were conducted in the participants' preferred language, which included English, Swahili, or Dholuo, and were audio recorded. At the end of each IDI or FGD, women were offered a debriefing session, and if it was assessed that they needed psychosocial support, they were referred to a psychologist who was part of the study team. During the FGDs, a study team member documented significant non-verbal nuances observed from the participants. For the IDIs, the interviewers took detailed notes to record non-verbal cues. Audio recordings from the IDIs and FGDs were transcribed verbatim and translated into English.

Data analysis

A five-member coding team employed both inductive and deductive approaches to develop a codebook; deductive codes were based on the structure and thematic exploration within the interview guide. The team refined the codebook by testing a subset of transcripts and revised codes and their definitions as necessary. Subsequently, a coding pair sequentially coded each transcript, while engaging in an ongoing review process during which a third member of the team resolved discrepancies. The coding team remained reflexive throughout the process, carefully considering personal biases when interpreting the data.

Ethical considerations

This study was reviewed and approved by the Institutional Review Board (IRB) at the University of Washington and the Kenyatta National Hospital/University of Nairobi (KNH/UON) Ethics and Research Committee (ERC).

Results

Participant characteristics

We conducted 21 IDIs among perinatal women at high risk for and living with HIV. A quarter of in-depth interviews participants were purposively sampled to be women living with HIV. Among IDI

participants, median age was 30 years (range: 22-44), a quarter were living with HIV, half were 22-24 months postpartum, and 90% of respondents had attended their mental health referral

We conducted 6 FGDs (two sessions with three groups of women) which included 28 women. Two sets of FGDs were conducted in Nairobi and one set in western Kenya. We purposively sampled women living with HIV for one set of FGD in Nairobi.

Among FGD participants, median age was 30 years (range: 27-34), one FGD was with women were living with HIV, half (50%) were late postpartum, and 70% of respondents had attended mental health referral. Following thematic analysis, we arrived at the following results to describe the experiences of perinatal mental distress and the influence of male partners.

Diverse symptoms of mental distress among women

Women described mental stress as leading to physical pain, lower quality sleep, reduced appetite, unclear thinking, and apathy. Some women reported reduced will to live and suicidal ideation.

“At the time I had a headache, even if I take drugs, it does not stop. I felt my heart is paining it was pumping fast.” (IDI participant, Homabay)

“When I was pregnant with this baby, I became sick..... My mother-in-law told her son that he is too young to take care of someone like me and that he should leave me. The man left me while I was sick and helpless and went back home to his mother. I have another six-year-old daughter, I sat and told myself that it would be better to die, I wanted to kill my daughter and myself....” (FGD participant, Nairobi)

Pregnancy related physiologic changes trigger mental distress

Some women attributed mental distress to physiologic changes brought about by pregnancy.

“When pregnant we usually go through a lot of challenges ... When I was pregnant with my second child, I was going through so much and I was going crazy, I don’t want to overshare.” (FGD participant, Nairobi)

“When pregnant, you can feel very stressed, and when you deliver, it can get quite overwhelming ... the mood swings, stress at home, heightens during pregnancy. (IDI participant, Nairobi)

Fear of transmission of HIV to children and overall health triggered stress

Some women feared HIV acquisition, while others felt substantial distress after becoming aware of their HIV-positive status during pregnancy. Women who already knew they were living with HIV were stressed by the prospect of HIV infection progressing to disease.

“My health is not really good and since I found out about my ... when I was 3 months pregnant with my son. On top of it, I found out that I was not only pregnant, but I had also been infected with HIV. So, I was very stressed and was not able to share with anyone. At the time I was staying with my grandma, who noted that something was wrong. She advised me to terminate the pregnancy. After knowing of my positive status, I was enrolled with the NGO-Dream Girl. I felt

sorry for myself, I was confused, depressed and traumatized. ... My parents were also pressuring me to terminate the pregnancy.” (IDI participant, Nairobi)

“I was very stressed; life was not going to be the same again [following the HIV diagnosis]. I was stressed wondering how I would go through that state, whether it would affect my children, it really bothered me. At times I would sit, and my mind would drift off” (IDI participant, Nairobi)

Male partners were frequently identified as contributing to mental distress

Women often identified their male partners as a primary source of stress during pregnancy and the postpartum period, a time when they were especially vulnerable and needed support. Men contributed to this stress in various ways.

Women reported experiencing mental distress when their male partners failed to provide financial support. This lack of support was particularly challenging during pregnancy and the early postpartum period, forcing women to fend for themselves. Additionally, women felt that their partners treated them poorly if they lacked an income, further contributing to their stress.

“Maybe at home you have stress from your partner, and you don’t want anybody to know about it. So, when you come here (to the health facility) and share with them about it, they advise you on what to do ... My husband doesn’t leave money for food mostly, he sometimes leaves 50 shillings which is not enough to cater for the 3 children and myself. (IDI participant, Nairobi)

In addition to lacking financial support, women were stressed because they did not receive other forms of support around the home from their male partners in the initial postpartum days, such as helping with care for the newborn or household chores.

“I can say that we go through a lot as women, when I delivered, I wasn’t well. You find that the baby is not feeling well, and you have no one to help you around, their father leaves the house and even the times he is there, he does not support you as it is required.” (FGD participant, Nairobi)

Women shared challenges relating to partner abandonment or infidelity and gave detailed accounts of how these actions contributed to significant mental distress.

“Women go through a lot. My personal experience was that I got my babies one after the other.... Their father left and I remained with the children. I got so stressed, and I had to go fend for the children when the baby was still young” (FGD participant, Nairobi)

“I was married, and I stayed in that marriage for seven years where the Lord blessed me with a daughter. On the seventh year, my husband started changing a bit, that was during the time we had COVID. At times he would tell me that he was caught up in traffic or with the curfew and had gotten somewhere to sleep. In January 2021, he picked up his stuff and left. When he left, I didn’t even know that I was pregnant with the son I now have ... I tested and found out I was pregnant. I thought of killing myself and threw myself into a well, but God helped us, and we were rescued alive” (FGD participant, Nairobi)

Several women reported being beaten, threatened, or subjected to unkind words by their husbands. This abuse was quite distressing, leaving some women in need of emotional support or requiring them to move away from home for their safety.

“When I was pregnant my husband used to beat and torture me, I completely lost weight. He would sell things in the house to buy drugs. By the time I was almost giving birth, he had sold the blanket. I got high blood pressure when I was almost delivering, and I was taken to Kenyatta (National) hospital to have a CS [Caesarean section] done ... I separated from my husband and now live with my three children.” (FGD participant, Nairobi)

“I just left, because he was demeaning me. He beats me and even threatens me with a machete” (IDI participant, Homabay)

Both among living with HIV or at risk of HIV, the experiences surrounding HIV disclosure by male partners was often distressing. Women reported finding out about their male partner’s HIV status which prompted them to seek HIV testing and eventually start HIV prevention therapy or finding out about their own HIV status and realizing their partners may have been infected but never disclosed.

[my husband said] *“you have been sickly ever since you conceived, have you gone to the hospital?” and I told him, “No I have never gone.” “Why haven’t you gone? Do you want to die? I am tired of burying women!” and I said, “Why?” “You know I am HIV-positive, and I have taken ARVs for twenty years.” (FGD participant, Homabay)*

“I did not know that I was positive until I got pregnant with this one and went to the clinic at three months. I didn’t know how to break the news to my husband. They told me not to tell him that I was positive but to leave them his number and they would call him and see how to convince him to come and get tested. They called him but he refused to go. So, we started having issues in the house and separated at three months of pregnancy. (FGD participant, Nairobi)

Women acknowledged men are hurting too

Women reported that their male partners also faced mental health challenges, which they believed could stem from chronic stress, anger, substance use, and personal frustrations. These men were likely to project their resulting stress onto the women. While women were eager for mental health support, they strongly recommended that their male partners also receive such support, fearing that without it, the men would continue to cause them distress.

“... men are different. There are those who drink and those who stay sober, who do not even go clubbing. Now you can find that yours does not drink but when he leaves in the morning for work, upon coming back just at the doorstep anything that comes his way he beats up. Meaning that he has stress and cannot tell anyone ... with us women we normally have a habit of studying the behaviors of our men. Sometimes something has hurt him at work and now when he comes back home you just know that today the ‘weather’ has changed. Now after studying him and realizing that the ‘weather’ is not okay, you also just keep silent, because sometimes you can talk, and the

stress ends up being released on you. So many of them like staying silent.” (FGD participant, Nairobi)

“When a man is stressed, it replicates in the house. You will find out that he knocks down everything, beats the children and the wife, quarrels with the wife. Everything that is happening in the house is not as he wants and that there is nothing good you are doing to him, that is when he has a problem.” (FGD participant, Homabay)

Women believe male partner support positively impacts women’s mental health

Participants suggested that male partner support during the perinatal period is likely to positively impact mental wellness. Although they did not have personal experiences to share, they had observed how positive male partner support benefited other women in their community. They were positive that women who were supported by their male partners during pregnancy were happier and unlikely to experience mental stress.

“I have also seen someone like that, we used to work with her and she delivered about three months ago. While she was pregnant, she was very okay and was working very well and she was very happy. Her delivery experience was also very good, with her husband by her side. We went to visit her and found that she's doing well and she's still happy and has even added some bit of weight” (FGD participant, Nairobi)

“... But I think that, she has peace in the house, whatever she wants she gets, that man has even her peace at heart, she does not have thoughts of what is going to happen today or in what mood is so and so going to come back in ... Now it makes her not have stress. And then also, she is pregnant, and she knows very well that she will get everything the baby wants at whichever time she needs them and in which quantity. her child will get everything be it food, she will get. Now this makes that woman to be happy and peaceful all the time.” (FGD participant, Homabay)

The women seemed optimistic that if the counseling can be provided not only to them but also to their partners, it can be impactful.

“I’m really wondering how they could be brought on board so that all of us, the couples, may have a single talk. This one share...pours the heart, the other one also pours the heart at least they are being counseled together. And if that one can be done, I think things can really mean to change.” (IDI participant, Homabay)

“But the challenge may be the men, how will they be brought [on] board, so that they may be at a position that we learn together? You see how I wish that the services that I was being given, the counselor ... we could be together in the talk, at least somebody to share their minds and the feelings when people are together rather than one. Okay, I’m relieved yes, but back home there, maybe you’re still experiencing the same. At times it’s very hard to cope with the situation.” (IDI participant, Homabay)

Women’s common mental health coping strategies

In the absence of support from their male partners, women adopted various strategies to cope with perinatal mental health challenges, including praying, singing, listening to music, and taking walks outside the home.

“For me when I feel overwhelmed, I finish with prayers ... it helps a lot because sometimes when I am overwhelmed and I pray, I feel relieved immediately after praying. For me it helps better than going to tell someone who is only going to spread it and probably twist the story. So, it is better to just finish with a prayer; I just ask God to give me courage to go through my temptations.” (IDI participant, Homabay)

“There are times I wake up and if I feel like I have moods, I will go to the park or go look at cars. Just like that. Or I would go to the flyover and look at cars and relax my mind. Sometimes I would go sit under tree where we live and feel the fresh air and feel relaxed ... That at least helps me keep off from thinking a lot.” (IDI participant, Nairobi)

Women also reported that distractions from their mental health concerns was helpful, such as playing with children or socializing either through visits or phone calls to others.

“I even call some of my friends to the house and tell them to come visit. I would cook for them, I put on some music, and we could dance, and I feel happy and she would go back to her place” (IDI participant, Nairobi)

“There are times when I see I’m so stressed, I get a ball and my kids, and I go the field to play with the ball. If it’s playing around, jumping I would do so and after I’m happy the kids at least make me laugh and I turn out to be okay. That helps me to be relaxed and okay.” (IDI participant, Nairobi)

Women living with HIV also noted that once they had come to terms with the HIV diagnosis, it becomes easier for them to cope.

“The struggle was more during pregnancy because after the breakup, it was when I got tested and found out that I was positive. So, I was struggling with accepting myself throughout the pregnancy. Acceptance is the most important thing, once you accept yourself, things become easier” (IDI participant, Nairobi)

Women often talked to a pastor or community leader for advice or confided in trustworthy friends and family members. Others also sought counseling services at a health facility.

“With stress, one needs to cool down first. You have to know where you are going, whom you are going to talk to. When I am stressed, I call my mother, and I feel I am ok. But first I ask her where she is and who she is with, if she is free so we can talk. And whenever she hears that, she makes herself available so that we can talk. So, you have to know the timing.” (IDI participant, Nairobi)

“Yes, I had already delivered, and I had a very bad experience caused by the father of my baby. I opted to go for counseling because I thought if I share with a friend, they may misunderstand me and so it was better telling the doctor who wouldn’t...” (FGD participant, Nairobi)

Other approaches to coping with mental distress included going to church or women’s groups that were connected to church or HIV care peer support groups.

“It could even be fellowship members that you’re familiar with and you’re within the church, he/she will support you and tell you what to do as you share what you go through. If you tell them you don’t have food they will tell you they will help with what they have. By the way we have a women’s fellowship in church. We usually tell each other to walk with at least 50 shillings or 100 shillings so that when one of us is down we ask them to say how they really are. If they’re not okay, we ask what they don’t have. If it’s food, we contribute 50 shillings each and she goes home helped”
(FGD participant, Nairobi)

Discussion

Women reported that mental health challenges often manifested as physical pain, disrupted sleep, lack of appetite, diminished social connections, and unclear thinking. Key sources of stress included the risk of HIV, financial worries, pregnancy concerns or hormonal changes, postpartum-related challenges and strained relationships with male partners. In fact, women frequently identified male partners as a source of stress during the perinatal period, citing abandonment, infidelity, insufficient financial support, and abuse. Women receiving a recent HIV diagnosis or finding out about their partner's HIV status faced increased relationship tension. Additionally, women noted that their male partners exhibited signs of mental health challenges, such as anger and chronic stress, and did not have proper avenues for addressing these issues. To cope, women relied on social networks and psychosocial support by attending church, playing with their children, listening to music, going outside, and making social visits or phone calls.

Our findings on stressors during the perinatal period align with another study among women living with HIV in Western Kenya which highlighted relationship stress, financial insecurity, pregnancy and postpartum demands, and lack of support from male partners as leading causes of mental distress[14]. Additionally, a recent systematic review found that inadequate partner support was linked to perinatal distress.[21] Other studies have also found that depressive and anxiety symptoms are linked to limited partner support or relationship tension.[22,23]

Mental health during pregnancy and postpartum is crucial for both maternal and child outcomes, such as term delivery and infant birth weight[24]. Despite the importance of mental health screening and care during the perinatal period, these services are not regularly included in the antenatal and well-child services in most sub-Saharan African countries, including Kenya[25]. Our participants benefited from mental health screening available as part of study procedures. Mental health support is also not routinely included for WLHIV and access to intimate partner violence (IPV) care support are limited[26,27]. As a result, many women with potential depression and anxiety are overlooked and do not receive the necessary support for the health and well-being of both mother and child. Previous studies in similar settings have recommended integrating mental health services for WLHIV[27,28].

Some strategies that helped women cope with mental distress, such as finding new sources of financial support like finding work or receiving social support from family and friends, are consistent with findings from other studies. These studies have reported that socioculturally adapted interventions such as the Friendship Bench which utilized lay health workers to offer psychosocial support for women[29,30] and economic empowerment programs[31] can help reduce mental distress among women living with HIV. Unfortunately, WLHIV who are most affected by depression or anxiety may not have the motivation to practice these strategies without additional dedicated support[26,30].

Women in our study recognized that male partners were also facing mental health challenges, and their reactions to these struggles negatively impacted both their relationships and individual well-being of the women. Previous studies have also suggested that interventions for couples could be beneficial for supporting mental health during pregnancy and postpartum[32]. Providing this support could reduce the mental distress burden on women, and male partners could

potentially be confidants for women facing mental health challenges. For example, a study conducted in Portugal reported that women experiencing mental distress were likely to seek help from their male partners and that male partners play a crucial role in encouraging women to seek professional support for mental health support.[15]. Interestingly, a study in the UK found that men whose female partners were experiencing perinatal mental health challenges were likely to experience mental distress themselves. These men were not only keen on receiving support for their own mental health but also information on how to support their partners in seeking mental health services.[33]

Our study had some limitations. We were not able to interview male partners; all the views regarding male partners are from the women. The perspective of male partners is important as we seek to understand how to support them in supporting the women facing perinatal mental distress.

Overall, Kenyan women attending maternal child health and HIV care services reported that mental health challenges were common during the perinatal period. Therefore, it is important to integrate maternal mental health screening and care in primary care settings. Perinatal mental health services designed for Kenyan women could address prominent sources of stress with interventions tailored for couples, and content on financial empowerment, dispelling pregnancy concerns, and HIV messaging about prevention and disclosure. These services could incorporate existing coping strategies used by Kenyan women, such as involving church or community leaders, forming peer support groups, and including mental health services for men to improve family dynamics.

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