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Perinatal HIV Treatment in the Context of Financial and Psychological Intimate Partner Violence in Urban South Africa

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Objective: Intimate partner violence (IPV) is associated with worsened perinatal antiretroviral therapy (ART) adherence. While physical and sexual forms of IPV have been focused on, psychological and financial IPV have received less attention. We explored how perinatal women's experiences with psychological and financial IPV influenced their well-being, mental health, and HIV treatment. ***Method:*** We conducted 45 in-depth qualitative interviews with perinatal women living with HIV and exposure to past-year IPV in Johannesburg, South Africa. Interviews were conducted in English, isiZulu, or Sesotho in two phases (2014–2015 and 2019–2020), transcribed verbatim, translated into English as necessary, and thematically double-coded. ***Results:*** Pregnant and postpartum women described experiencing physical, sexual, psychological, and financial IPV. In addition to traditional acts of psychological violence, women described infidelity, abandonment, ignoring, and blame. Several women described psychological abuse as the "worst type" of violence because of the long-lasting, debilitating effects on mental health. Dealing with the repetition of psychological abuse heightened depressive symptoms for some women, which in turn made ART adherence harder. Most participants were financially dependent on their partners and described their partners as having exclusive control over money and access to household food. Financial violence such as withholding food or refusing to give money for essentials seemed to indirectly reduce women's ability to take ART. ***Conclusions:*** Psychological and financial IPV have a pronounced influence on how women navigate the perinatal phase and HIV treatment. Addressing IPV during the perinatal phase may help to improve HIV outcomes and women's and children's health.

Public Significance Statement
This study found psychological and financial intimate partner violence (IPV) influence HIV treatment adherence for pregnant and postpartum patients. Findings from a relatively large qualitative sample suggest future research, policy, and programs may benefit from including psychological and financial forms of partner violence in their definition of IPV.

Keywords: HIV, intimate partner violence, pregnancy, psychological violence, financial violence

Antiretroviral therapy (ART) adherence during pregnancy and breastfeeding remains difficult for some women despite tremendous progress in the prevention of vertical transmission of HIV. A cross-sectional analysis of nationally representative data from nine sub-Saharan African countries (2015–2018) showed the prevalence of suboptimal ART adherence among pregnant and breastfeeding women was 20.1% (95% CI [15.7%, 24.5%]; Schrubbe et al., 2023). Barriers to optimal ART adherence during pregnancy include young age (Colombini et al., 2014), low education (Biomndo et al., 2021; Colombini et al., 2014), and depression (Hatcher et al., 2016; Nachega et al., 2012). Key relationship barriers to adherence include partner nondisclosure (Adeniyi et al., 2018; Hampanda et al., 2020; Hatcher et al., 2016; Omonaiye et al., 2018), unequal power and control (Hampanda et al., 2020; Hatcher et al., 2016), and intimate partner violence (IPV; Hampanda, 2016; Hatcher et al., 2015; Kuchukhidze et al., 2023; Lin et al., 2023; Schrubbe et al., 2023).

Perinatal IPV can occur in physical, sexual, psychological, financial, or controlling behavior forms, with evidence suggesting women living with HIV (WLH) are at higher risk than women without HIV (Campbell et al., 2008). In South Africa, prevalence

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rates of perinatal physical, sexual, or psychological IPV range from 33% among perinatal WLH from Cape Town (measured from pregnancy through 12 months postpartum; Hatcher et al., 2021) to 42% among HIV-negative perinatal women from Durban (measured from pregnancy through 9 months postpartum; Groves et al., 2015) and to 53% among pregnant WLH from Johannesburg (measured during pregnancy as past-year exposure; Hatcher et al., 2022). Perinatal IPV can have harmful maternal, perinatal, and neonatal health effects, including maternal depression, miscarriage, low birth weight babies, and preterm birth (Alhusen et al., 2015; World Health Organization [WHO], n.d.). Women are most likely to be in touch with health services during the perinatal period for their antenatal and postnatal care (Alhusen et al., 2015; Devries et al., 2010). This window provides an opportune time for health care providers to identify and respond to IPV with care, support, and referrals (Alhusen et al., 2015; Devries et al., 2010). Resilience, defined by Ungar as "the capacity of individuals to navigate their way to the psychological, social, cultural, and physical resources that sustain their wellbeing" (Ungar et al., 2013, p. 248), may be particularly focused on the mother–child relationship and strength in the identity as a woman and/or mother during the perinatal period (Hatcher et al., 2016; Rollero & Speranza, 2020).

There is a growing body of quantitative evidence linking IPV exposure in the perinatal period to suboptimal engagement with HIV care and treatment (Hatcher et al., 2021, 2022; Lin et al., 2023; Matseke et al., 2021; Schrubbe et al., 2023), with potential impacts not only for maternal health during and after pregnancy but also for babies who may face increased risk of HIV acquisition or missed infant testing and treatment. For example, a cross-sectional analysis of nationally representative data from nine sub-Saharan African countries found pregnant and breastfeeding women with a history of sexual violence had four times the odds of suboptimal ART adherence compared to pregnant and breastfeeding women without a history of violence (Schrubbe et al., 2023). In South Africa, longitudinal prospective cohort data among perinatal women showed physical, sexual, or psychological IPV was associated with halved odds of postpartum viral suppression (Hatcher et al., 2021), as well as halved odds of optimal perinatal ART adherence (Hatcher et al., 2022). Additionally, longitudinal data from a clinic-randomized controlled trial in South Africa found physical IPV was associated with halved odds of ART adherence among pregnant WLH (Matseke et al., 2021). In this article, we examined how and why certain types of IPV, namely, psychological and financial IPV, influence well-being, mental health, and HIV care among pregnant and postpartum women.

Research on violence against women, including IPV, often focuses on measuring and reporting physical and/or sexual violence (Garcia-Moreno et al., 2006). However, psychological IPV, which traditionally includes acts such as insults, belittling, humiliation, scaring, intimidation, and threatening, is an understudied type of violence that may have important adverse impacts, especially around the time of pregnancy (Heise et al., 2019; Jewkes, 2010). Cross-sectional data from women attending antenatal care in South Africa suggests one in five women experienced psychological IPV during pregnancy (Groves et al., 2012). Qualitative data from Ethiopia found perinatal women experienced psychological IPV before, during, and after pregnancy, and perinatal IPV had effects on their physical and mental health (Abota et al., 2021). A prospective pregnancy cohort study from Australia found psychological IPV during the first-year postpartum was associated with poor mental and physical health during the first-year postpartum (FitzPatrick et al., 2022).

Similarly, there is limited research on financial IPV, though emerging data from sub-Saharan Africa suggests financial IPV is common. Prevalence estimates from cross-sectional data vary from 27% among pregnant women attending antenatal care in Ethiopia (Lencha et al., 2019) to 44% among young women in South Africa (Gibbs et al., 2018) and to 67% among WLH in Ghana (Tenkorang et al., 2023). Baseline data from a prospective cohort study among pregnant women in Kenya found women were more likely to have experienced physical, psychological, or financial IPV before HIV testing in those who tested HIV-positive than those who tested HIV-negative, and WLH were more likely to experience IPV after disclosing the test results to their partners (Kiarie et al., 2006). Qualitative data from Kenya found pregnant women experienced financial IPV in the form of financial neglect by a partner, male control over money, and forced exile from the home (Hatcher et al., 2013).

Psychological and financial IPV may alter women's physical and mental health, particularly among pregnant and postpartum WLH in sub-Saharan Africa. However, psychological and financial IPV are scarcely measured, and there is a knowledge gap on how they impact women's health, particularly among perinatal WLH. This analysis therefore aimed to qualitatively examine:

1. What types of psychological and financial IPV do pregnant and postpartum WLH experience?
2. How and why do psychological and financial IPV influence well-being, mental health, and HIV care among pregnant and postpartum women?

Materials and Method

Study Design

We conducted 45 qualitative in-depth interviews with pregnant and postpartum WLH and past-year IPV in Johannesburg, South Africa. Data were collected in two phases: (a) the first phase from 2014 to 2015 was a qualitative substudy of women at baseline, nested within a randomized controlled trial testing an intervention for IPV in pregnancy (Hatcher et al., 2016; Pallitto et al., 2016); (b) the second phase from 2019 to 2020 was formative research to inform the development of an intervention. Women in Phase 1 were pregnant or early postpartum (up to 6 months postpartum) and women in Phase 2 were pregnant or later postpartum (up to 18 months postpartum). In this analysis, 30 women from 2014 to 2015 and 15 women from 2019 to 2020 were included in the sample.

Theoretical Framework

This research was informed by the socioecological framework which illustrates how individual, relationship, and structural (social or community) factors shape health outcomes (Hatcher et al., 2016; WHO & London School of Hygiene and Tropical Medicine, 2010). Behaviors and outcomes are influenced by these nested layers and can take multiple pathways. Using this framework to understand barriers to ART adherence, and pathways between IPV and HIV, has been used in the literature previously and illustrates that numerous factors are at play (Busza et al., 2012; Hatcher et al., 2016; Onono et al., 2015).

Though there is a lack of consensus on definitions of psychological and financial IPV, previous research has conceptualized psychological IPV as including behaviors such as insults, belittling, humiliation, scaring, intimidation, and/or threatening (Johnson et al., 2022; Serpa Pimentel et al., 2021). Financial IPV has been characterized as behaviors around economic control over a partner's wages, economic exploitation by taking earnings, employment sabotage, and refusal to contribute to the household even when money is available for other uses (or "male economic irresponsibility"; Gibbs et al., 2018; Heise et al., 2019). Others have conceptualized financial IPV more broadly as one aspect of coercive control which includes restriction of access to financial resources and threat of economic security and independence (Lohmann et al., 2024).

We adopted a constructivist epistemological approach, acknowledging that knowledge is subjective and socially constructed, and we aimed to understand how participants experience and interpret their reality (Levers, 2013). This framing is appropriate for research around survivor experience of IPV because it invites participants themselves to craft their own stories of violence alongside a highly trained researcher (Williamson, 2010). Interviewers utilize techniques like validating the participant experience and voicing moments of resistance and safety to support how survivors create meaning (Allen, 2011). Rather than assuming interviewers or the research is "neutral," this approach acknowledges that the research process draws on the skill and predisposition of the researchers themselves (Charmaz, 2008).

Sampling and Recruitment

Participants were purposively selected to participate and recruited from six antenatal clinics in one urban region of Johannesburg. The 45 participants recruited across both phases were living with HIV confirmed via medical record, self-reported past-year experience of physical or sexual IPV (additionally psychological or financial IPV for phase two), aged 18 years or older, and spoke English, isiZulu, or Sesotho. Women were purposively recruited so that approximately half were pregnant and half were postpartum. Sample sizes were chosen based on a reasonable expectation of reaching thematic saturation.

Data Collection

In-depth interviews were led by trained researchers who conducted face-to-face interviews in a private room at an antenatal clinic during routine clinic visits. Using a semistructured interview guide, interviews covered topics related to pregnancy, ART use and adherence, mental health, and intimate relationships. Researchers were a Black, multilingual South African nurse and a White, English-speaking American sociologist. Both researchers were trained on using a participant-led, inquisitive approach to interviews and the ethos that participants were the "experts" and researchers were the "learners" (Hatcher et al., 2016). While this positionality could not completely eliminate the uneven power dynamic between researchers and participants, the rich stories shared by most participants suggest some comfort in the process.

Interviews were conducted in one of three South African languages (English, Sesotho, or isiZulu) and recorded digitally. Interviews were transcribed verbatim and manually translated into English, if needed, by the researcher that conducted the interviews. All study materials were kept confidential and in a locked file cabinet or password-protected on an encrypted server. At the point of transcription, participants were assigned pseudonyms for analysis, which are used in this article along with quotes.

Data Analysis

A team approach to data analysis allowed for coding discussion meetings, double-coding, and presenting initial findings to groups of colleagues. Researchers reviewed full transcripts and created detailed summaries to highlight initial impressions of the data. The team initially used a deductive approach and developed an initial coding framework based on preliminary ideas around the data and semi-structured interview guides (Bowen, 2006). Utilizing this coding framework of "broad codes," data were double-coded in Dedoose using thematic coding to identify chunks of text related to each code (Miles & Huberman, 1994). Thematic codes comprised topics, or "thematic baskets," such as types of IPV experienced, HIV-related and other triggers for IPV, HIV diagnosis and treatment, HIV status disclosure, and mental health and coping. Importance was placed upon observing the patterns and themes arising from the data. After initial coding and discussion among researchers, an inductive approach to fine coding was used to allow new themes to emerge. Drawing from participants' views and experiences, fine codes on psychological IPV were developed to build meaning around this theme. Fine codes were independently applied to transcripts by two researchers. Researchers then met to discuss results and build consensus around the fine coding.

Ethical Considerations

All participants provided written informed consent. The parent trial for the first phase received ethical approval from the University of the Witwatersrand Human Research Ethics Committee (M121179) and WHO Ethics Research Committee (RPC471). The qualitative substudy received additional secondary analysis approval from the University of the Witwatersrand (M140451). The study for Phase 2 received ethical approval from the University of the Witwatersrand (M190715) and the University of North Carolina at Chapel Hill (19-1565).

Adherence to WHO ethical guidance on IPV research was followed (WHO, 2001). Researchers were trained in qualitative research and therapeutic methods of conducting interviews. Any distress relating to recounting a life event was managed through a distress protocol and referral process. Interviewers were trained to minimize distress to participants, recognize signs of distress, and make appropriate referrals to community-based services for participants who wanted additional support, as needed. The distress protocol included a calm, nonjudgmental approach to inquiry; watching for signals of discomfort when inquiring about IPV to avoid retraumatization; slowing, halting, or postponing the interview in instances of participant discomfort; offering tissues for moments of emotional overwhelm; and offering a break from the interview. Interviewers were also trained to invite participants to stop the interview in cases of severe distress and engage in continuous consent throughout interviews. Additionally, researchers had weekly team reflection sessions, one-on-one debriefings with a trauma-informed social worker, and individual supervision sessions with a clinical psychologist.

Results

Sample Characteristics

Of the 45 participants, 20 (44%) were pregnant, 24 (53%) were postpartum, and one (2%) woman had an abortion. The median age was 30 years in Phase 1 (range = 21–38) and 31 years in Phase 2 (range = 20–40).

Types of IPV Experienced

Women reported physical, sexual, psychological, and financial IPV in pregnancy as well as controlling behaviors from male partners. The majority of participants reported psychological IPV—making this the most common type of IPV experienced. Sexual IPV was the least reported type of IPV in pregnancy/postpartum. Women commonly reported experiencing multiple types of IPV from their partners.

In the following sections, we present findings on four subtypes of psychological IPV, infidelity, abandonment, ignoring, and blame, then describe financial IPV, how psychological IPV impacts mental health, and resiliency of women.

Perinatal Psychological IPV—Infidelity, Abandonment, Ignoring, and Blame

In addition to the traditional acts of psychological IPV such as insults and belittling, we found that women described other types of psychological IPV such as infidelity, abandonment, ignoring, and blame. Sometimes, this abuse was felt by women to be related to their HIV status or occurred after HIV disclosure. Participants described how these recurring behaviors from partners felt abusive and hurt them emotionally. Being pregnant, women felt particularly vulnerable since they often relied on their partners for financial and other support.

Women described how *infidelity* was used by some male partners as a threat or power play. Many women described a pattern of their partner threatening to cheat on them, or actually being unfaithful, when women could not conceive or when they declined sex during or after pregnancy. One woman's infertility resulted in an unspoken agreement that because she had not met her prescribed gender role expectations, her partner had license to find new sexual partners:

> Before I was pregnant, I thought I was barren. He would bring women and tell me he wanted a second wife so they could conceive. … I thought I had no choice because I could not conceive. I wanted him to do whatever he wanted so he could be happy. … He would bring them around the house and introduce them to me. He would say "this is my second wife." They would leave without me chasing them out. It would happen often. (Amahle, pregnant woman, age 31)

Another woman described how her partner threatened infidelity when she declined sex. This threat was closely tied to sexual IPV.

Participant (P): Another thing that makes me not want to sleep with him is that my pelvic bone is always sore. He is very rough in bed so I cannot cope with that.

Interviewer (I): What does he say when you deny him sex?

P: He sometimes tells me that it is okay—he will not die because I do not want to sleep with him. He has girls that can assist him. … At that time I would be thinking that he is saying all those things because I refused to sleep with him. Besides the pain, I am doing this for the baby. (Lesedi, pregnant woman, age 32)

Sometimes, male partner infidelity was thought by women to be related to their HIV status, often after disclosure, and be a punishment from their partners.

P: … the guy is staying with another girl now.

I: After hearing about your HIV status?

P: Yes. He said the girl is not big like me … [she] is small, very sexy. They are staying and kissing each other, drinking. I did not shout. I did not say anything to them. I looked away and I left.

I: Were they doing those things in front of you?

P: Yes, in front of me, in town. (Sonja, pregnant woman, age 23)

Overall, multiple participants described how men would flaunt the fact that they could always go find another woman to have sex with. This threat was used by men to exert their dominance and power over women. This was often related to punishment for perceived "wrongs" on the part of the woman related to HIV acquisition or infertility and could be closely tied to reproductive coercion and control.

Brief or long-term *physical abandonment* by male partners was described by many women. Sometimes it was more fleeting, such as their partner leaving the house for the night or a few days.

I: What [did] he used to do when he was violent towards you …?

P: [He] used to sleep elsewhere, to come in the morning. (Dintle, postpartum woman, age 30)

In the context of HIV, some women described abandonment from their partners directly related to HIV disclosure:

P: I told him that they found out that I am HIV-positive. He said I am lying [and asked] how could that be possible? I then showed him the pills I had. … He did not come home for 2 days and there was a lady from work who spoke to him. When he came back, he told me that he had accepted the situation.

I: When he told you to pack your things and leave you still stayed?

P: Yes. I did not leave. I did not eat. I was stressed. (Thabisa, pregnant woman, age 28)

Sometimes male partners would leave and sometimes they would insist the woman leave the home. This "punishment" could include threats of or actual abandonment and be temporary or long-term. In the context of financial dependency, abandonment and men's control over women's housing was a way for men to exert power.

For example, Iminathi described how her partner paid other people to force her out of her home when he learned about his paternity:

> [He] told one of the boys that they should kick me out. I think he was embarrassed that this child was his. … [He] promised to pay them if they throw me out there, so I had to go back home (*back to her grandmother's house*). (Iminathi, postpartum woman, age 37)

Another woman described how when her partner moved out during her pregnancy, she was then forced to move out because he was the one who was paying for the housing:

> We were staying here in the flat and I literally begged him, please do not move out, what am I going to do with three kids, the rent, I am pregnant, I am not working, what am I—I begged him, but he just took his stuff, and he moved out and he left me in the flat. I had to move out because I did not have the money to pay for the building. (Dova, pregnant woman, age 32)

During this highly vulnerable time of pregnancy, forced relocation was particularly challenging as pregnancy brings specific challenges and needs.

Some women described *emotional abandonment* as more long-term such as their partner not being there for them during pregnancy.

> To be honest, during my pregnancy he was not there at all. (Farai, postpartum woman, age 32)

One woman described how men distancing themselves from women during pregnancy is a cultural and gendered tradition, reinforcing that pregnancy is a "woman's business." In other words, it is viewed as appropriate, even desirable, for a man to offer emotional or physical space:

> In a way, in our culture, they used to say when you are pregnant … your boyfriend sometimes distances himself from a woman. So, I think that thing, it is happening to us right now. So, it is kind of hurting me. In a way, it does hurt me. (Mpefe, pregnant woman, age 25)

Even though this distancing was widely regarded as "normal" during pregnancy, it was hurtful to her.

Women reported men *ignoring* them in a variety of discussions—from everyday conversations to more important ones. Many women described how male partners would ignore their concerns, their health, and ignore them in general.

> He did not care whether I went to the clinic, how I went to the clinic, what I was going to eat … he never cares about anything. (Zama, pregnant woman, age 25)

Some women described how their partners' ignoring of them was related to gender role expectations and how men were not expected to be accountable to women:

> He does not know how to communicate. We may be sitting together and he would just bathe and leave without telling me where he is going and come back whenever he feels like it … it is like I am living with an uncontrollable person. If I ask him where he is coming from, he tells me that I am not his mother. Even my mother can never survive in this life I am living. … He tells me that I cannot just talk to him any way. If he is wrong, I should let him sleep. (Lesedi, postpartum woman, age 32)

Women reported men ignoring them in conversations around HIV disclosure and male partner HIV testing. This made discussions around HIV very difficult in the relationship, so they were often avoided:

> He did not say anything. … I did tell him that I was [HIV-]positive, but he just ignored it. … Like nothing had happened, like I said nothing. (Farai, postpartum woman, age 32)

An arrogance was displayed when men would not show respect to their partners to even respond to them in conversations. This disrespect experienced by women came off as a sense of "I do not care about you enough to even discuss this." As a result, women often felt silenced in their relationships.

In this study, the lines between psychological IPV and controlling behavior often blurred together. For example, *blame* was often used as a way to control and cause psychological harm. One woman described how her partner's unfounded blame and anger made her fear for her life:

> Yes, he would get angry. I remember an incident one time when we were having sex and the condom burst. … In the morning when he woke up, he was blaming me. I was like jeez man, how can you blame me? I do not know what happened, you do not know what happened either … the condom just burst. But he was so furious with me, he nearly. … I was so scared, I thought like tonight I will be dead. (Lulama, pregnant woman, age 30)

In the context of HIV, many women described male partners blaming them for HIV in the relationship. This could be combined with intimidation and/or other types of IPV. This manipulative blame was used by partners to control women and make them feel intense guilt. One woman described how her partner blamed her for bringing HIV into the relationship and how this also led to physical IPV:

> You see I do not have my teeth, he took them out. And the only problem that we have … is that when I found I'm HIV positive, he did not want to accept that. He said it is my fault, why did it happen, I'm the one that got sick. (Thuto, postpartum woman, age 24)

In some cases, men psychologically weaponized women's HIV status by humiliating them and displaying the ART bottle for others to see as a form of unwanted HIV status disclosure.

> What he does sometimes is take them (*ART*) and put them on top of the fridge where they are visible and says, "I want everyone who comes in to see them." I would tell him I do not care. They will end up laughing at you, not me. Then he would take them and put them away. … He started getting upset and would make remarks like, "Things are being brought inside the house to kill us in the morning." (Imka, postpartum woman, age 30)

Capitalizing on the stigma associated with HIV, men abused the confidence of women's disclosure to humiliate them and assert their power in the relationship. This woman described how she was initially afraid to disclose her HIV status to her partner due to IPV but that he also might tell other people her status without her consent. Lack of partner disclosure was a prominent barrier to ART adherence in this sample. As some women described, hiding ART from their partners resulted in them either forgetting to take it or having to delay taking their medication and made the process more challenging.

> I would hide the pills, put them in a plastic bag and drink them when I needed to, then hide them away. … Eventually I just took them out because we were living together full time and sometimes, I would forget and skip them. So, I just eventually stopped hiding them and took them in plain sight. That is when he started asking me, "What are these pills that you keep taking that look like they are for cows?" (Imka, postpartum woman, age 30)

Financial IPV

The majority of women interviewed were concerned with a lack of economic opportunity and perceived financial dependency on male partners. While they wanted to become financially independent to support themselves and their children, most had difficulty finding a job. A few women described how their partners did not want them to work due to jealousy and control. Without financial independence, women felt they were unable to leave their violent partners.

Financial IPV was a source of threats and control in multiple relationships. Partners would remind women that they were not working and contributing to the household financially and sometimes get angry that they had to provide money—especially if there were other children in the home from women's previous relationships. The financial threats could also tie in with threats of abandonment.

> He just says "This is my home. I can take my deposit for the flat and go. I will leave you without rent." … That's why I'm trying to get a job. At least if he goes, then I can pay rent and for other things for the children. (Maria, postpartum woman, age 33)

Recognizing the power imbalance in the relationship and their financial dependency on their partners, women often expressed the desire to get a job so they could financially provide for themselves and their children. This was especially important when their partners threatened abandonment.

Financial dependency in the context of food insecurity was particularly distressing for women as they often did not know where their next meal was coming from and sometimes would go all day without eating. Many women described how this dynamic around food access was abusive and controlling. Men would hold exclusive control over money and purposefully withhold cash for necessities or money needed for food:

P: I just send him a message to alert him that we have no meat. He will come back with it.

I: Oh, you can't leave?

P: Yes, because I do not always have money. He hardly gives me money. Even if I want to go to the store, what will I buy those items with? I have to tell him.

I: So he does not leave anything for you?

P: No, he leaves me with nothing. (Amahle, pregnant woman, age 31)

Some women described how their partners would buy food for themselves while out and not provide enough food for women or their children when they came home. Withholding financially, particularly withholding food or items for children, was common when men denied paternity of the child and this denying of paternity was commonly reported.

> He said it was not his child. The worst part is that he was busy stopping people (*telling people that the child was not his*). He said I had many [partners]. When he called me, he wanted to sleep with me (*distraught, as though she was crying*). One lady … said "Do not make the child pay for the mother's sins - buy the child clothes." (Lerato, postpartum woman, age 30)

Withholding food during pregnancy felt doubly troublesome for women, as they needed it for their developing fetuses. In the context of HIV treatment, male control over money and food added another layer of complexity, particularly for pregnant women. One woman described how her HIV and pregnancy status complicated her thought process on whether to leave her violent partner or not:

> I haven't made any decisions about me and him being separated for good. … I was really stressing when I was in the house … he would not provide food [or] anything, and you know as a pregnant woman and at the same time I have to take my [HIV] medication … [I] can not take them on an empty stomach. … So that is when I was like, you know what for now let me go. … I will figure out everything after I have given birth. (Zama, pregnant woman, age 25)

There were some links between financial IPV and ART adherence. One woman described how her partner's financial control prevented her from going to the clinic to get ART after she gave birth:

> When my partner and I started arguing, I went home (*parents' house*) and that is where I was first given the pills [*ART*]. I was told I needed to get a transfer [*letter*] because I had an argument with my partner, and he needed to start paying for the lobola [*bride price*]. As I was home (*parents' house*), he thought of paying so I could come back. … I waited and he still did not show up. My child was about 1 year 6 months when he came. … He went to pay. When I went home, I wanted to open a new file, but they said I could not because their system showed that I drank pills in [another clinic]. How could I stay without drinking my pills? … Yes, after I gave birth, I stopped taking them. … He had to give me money so I could take a taxi and come here [*to the clinic*]. (Amahle, pregnant woman, age 31)

Psychological IPV Impacts Women's Mental Health

We found women perceived a strong relationship between psychological IPV and mental health. Often women experienced multiple types of psychological IPV. Several women described psychological IPV as feeling like the worst type of IPV. Dealing with the repetition of psychological abuse led to women experiencing depressive symptoms including worthlessness and suicidal thoughts.

> He would come to my place, and he would just say these things about me, call me a slut, saying all these things. You know to be honest with you right now, my self-esteem is very, very low. … I am really, really tired and I do not have the strength to fight anymore. I have got suicidal thoughts because I do not have anyone. The only people I have are my kids. … You know sometimes I feel like physical is much better than emotional. Because when someone says stuff to you, you sort of, words do not just go away, you sit and think about these things. (Dova, pregnant woman, age 32)

One woman described how the psychological abuse she endured from her partner was so harsh and repetitive that she started believing the negative things he said about her. She described psychological IPV as more damaging than physical IPV due to the long-term consequences:

> He put me through a lot. He would say hateful things like "I do not know where I got you, I do not know why I am so in love with you, I wish I could just leave you". … He would hurt me emotionally; it is better to hurt somebody physically because at least you punch me and then I get better, but emotionally it becomes too damaging, it is not good at all. It gets inside your head, and I think it is very easy to start believing the things that somebody is saying to you. (Lulama, pregnant woman, age 30)

Many women described how their partner's infidelity, or threats of infidelity, was extremely hurtful to them. This psychological abuse negatively affected their mental health—some to the point of suicidal thoughts.

> I once thought of committing suicide. When he wanted to bring another woman in the house, I wanted to overdose on pills. (Lesedi, pregnant woman, age 32)

A few women explained how their partners would sometimes make them feel worthless around issues related to finances and employment. Partners would be disrespectful of women's work or make them feel useless or worthless for not being able to get a job. One 35-year-old postpartum woman, Annika, described how her partner would tell her that it was as if she "did not have a brain" and would belittle her by saying that her "job is nothing." Over time, these insults affected women's perceptions of themselves and their mental health.

Resilience of Women

Despite enduring IPV, most women expressed dedication to taking ART. Protective factors like women's resilience and perseverance for their children allowed them to navigate HIV treatment. In cases with fear of partner disclosure, women found ways to take ART by hiding it from their partners. The majority of women expressed they were able to maintain adherence to ART. Something they could control in an often chaotic situation, women wanted to take care of their health and their children's future by maintaining their ART adherence.

I: Do you ever forget to take medication?

P: No, I take my medication every day. I do it for my baby. (Lesedi, pregnant woman, age 32)

Several women described strategies they used to save money on their own, such as from child support grants, and hide it from their partners in order to take care of their families:

P: I budget money for the child.

I: Where do you get the money from? I thought he did not leave you any money.

P: My child gets grant money. … With that money, I can buy whatever is needed. … I can go to the clinic. I make sure there is money for emergencies for the child. … I know how to hide things. He does not know my account nor my pin. … So when I receive money, I go to the bank and save it. (Amahle, pregnant woman, age 31)

Several women described how they leaned on a family member or close friend for social support while experiencing IPV.

I: And who did you lean on for support for the violence? Do your friends help you or did you have family to go to?

P: I always tell my friends. (Limpho, postpartum woman, age 27)

A couple of participants cited the strength of women and expressed a desire for women to unite in solidarity over violent men. One participant described the strength of women in their resolve to make decisions on whether to stay in their relationships:

> I persevere because I want to see my children grow. … I have decided to stay here because it is still habitable for now. Everything I do, I do for my children … women are said to be rocks, that means we are strong. … I can see that there is no perfect marriage or perfect relationship, but you have to decide for yourself that you want to stay, or you want to leave. What I can say is that women should be tough and strong. We should be mothers and unite. We should not allow men to use us. We should learn to stand for ourselves. (Lindiwe, pregnant woman, age 36)

Through all the violence that women suffered from their intimate partners, many were able to find the strength within themselves to persevere in the face of adversity. Despite hardship, strength and dedication to their children allowed them to continue with their HIV treatment.

Discussion

Utilizing in-depth qualitative interview data from perinatal WLH, this study highlighted the particularly harmful impact of psychological and financial IPV during pregnancy and postpartum. Participants perceived psychological and financial IPV had consequences for their well-being and mental health, adding to perinatal IPV literature that has explored these links among those exposed to physical and sexual abuse. The repetition of psychological abuse, often combined with other types of IPV, resulted in low self-esteem, social isolation, and in some cases, suicidality. In addition, women described how psychological and financial IPV made ART adherence more challenging. Despite IPV exposure and mental health sequelae, most women expressed dedication to taking ART. Women's resilience and perseverance for their children helped some to navigate HIV treatment.

These findings can improve how we conceive of IPV in the perinatal phase. Most women in this qualitative study reported psychological IPV as well as controlling behavior from their partners. In addition to the traditional acts of psychological IPV such as insults and belittling, women described infidelity, emotional or physical abandonment, ignoring, and blame. These findings echo qualitative data results from South Africa and Rwanda where silencing or ignoring, control of mobility, and access to housing were described by women and the authors conceptualized these as psychological IPV or "other" form of IPV (Stern et al., 2019; Turan et al., 2016). Underpinned by gender inequality and traditional gender norms, these behaviors were used as a way for men to assert power and control over women. A common theme that emerged from our study was that women often felt men imposed these types of psychological IPV on them as a punishment for perceived wrongs related to infertility, declining sex, or failing to meet other traditional gender role expectations. These findings align with other qualitative IPV research from sub-Saharan African settings noting the perceived failure to meet gender norm expectations as a trigger for IPV among perinatal women (Hampanda et al., 2020; Hatcher et al., 2013).

Notably, our study found that the majority of women experienced psychological IPV and several women described this as the type that had the biggest impact on them. Living with HIV was already a burden for many women; having to endure psychological IPV from

partners made the experience of taking ART even more difficult. These findings are supported by qualitative research from Zambia which found low decision-making power, oppressive gender norms, and psychological abuse hindered perinatal women's ability to adhere to HIV care and treatment for the prevention of vertical transmission (Hampanda et al., 2020). Though not among perinatal WLH, cross-sectional data from Kenya among adolescent girls and young women found psychological IPV increased the odds for poor ART adherence twofold (Altamirano et al., 2023).

A majority of women were concerned with the lack of economic opportunity, and many women described experiencing financial IPV, including partner control over money and food for themselves and their children in the home. These findings align with qualitative research from Tanzania which found women's accounts of financial IPV included partner control over money such as denying access to necessities and sabotage of employment such as partners prohibiting women from working (Serpa Pimentel et al., 2021). A 2022 scoping review found definitions of financial IPV varied among 35 included studies but included constructs such as economic control, employment sabotage, and economic exploitation which threaten women's economic security and economic self-sufficiency (Johnson et al., 2022). However, this review did not focus on perinatal women or WLH and included studies globally, of which only four were from sub-Saharan Africa. This review also found financial IPV was associated with mental health problems including depression, poor physical health, and decreased quality of life (Johnson et al., 2022). A cross-sectional descriptive analysis among young women in South Africa found a high prevalence of psychological and financial IPV, and these were associated with both depression and suicidal ideation in descriptive analyses (Gibbs et al., 2018).

We found direct links described between financial IPV and ART adherence. In the context of HIV treatment, male control over money and food added another layer of complexity, particularly for pregnant women. Being pregnant, women felt particularly vulnerable since they often relied on their partners for financial and other support. During this stage, regular health care, financial stability, stable housing, and food security are all important for maternal and fetal health, making IPV during pregnancy particularly concerning. These findings align with qualitative research from Kenya which found participants described pregnancy as a vulnerable stage due to economic dependency on husbands, and women experienced financial IPV through withholding of food, financial neglect, and forced exile from the home (Hatcher et al., 2013). In this context, the fear of potentially greater financial consequences from leaving a partner can lead women to normalizing and rationalizing violence (van Eck et al., 2016).

Results from this study build upon existing qualitative and quantitative evidence suggesting the mediating role of poor mental health in the association between IPV and poor ART adherence among pregnant and postpartum women (Hampanda et al., 2020; Hatcher et al., 2014, 2016, 2022). Studies from South Africa and Zambia found IPV worsened HIV-related health through leading to poor mental health such as depression and anxiety (Hampanda et al., 2020; Hatcher et al., 2014, 2016, 2022). Other literature suggests lifetime exposure to traumatic events, including IPV and/or childhood abuse, may predispose women to perinatal mental disorders (Onoye et al., 2013; Seng et al., 2010; Vignato et al., 2017). In addition, the mental health effects of IPV may be intensified due to the hormonal changes associated with pregnancy and postpartum (Fan et al., 2009; Seth et al., 2016) and poor mental health can make ART adherence harder (Hatcher et al., 2014).

In this study, women described how men perpetrated psychological IPV in response to women's HIV status (particularly after HIV disclosure), committed unwanted HIV status disclosure to others, and blamed women for bringing HIV "into the relationship." This aligns with qualitative research from Zambia which found men belittled women, accused them of promiscuity, and "weaponized" women's HIV status against them—all of which made adherence to vertical transmission measures harder (Hampanda et al., 2020; Harrison et al., 2021). Our study also builds on evidence suggesting partner nondisclosure is a potential mechanism linking IPV with poor ART adherence (Hampanda et al., 2020; Leddy et al., 2019). Nondisclosure can lead to challenges in women's HIV care due to fear of partner's reaction, including IPV, lack of partner support such as medication reminders, and making it harder for women to adhere to ART due to having to hide it. However, HIV status disclosure in intimate relationships should be considered with caution as disclosure can also be a trigger for IPV (Hampanda et al., 2020).

Within women's experiences, we often saw blurred lines between types of IPV, including psychological, financial, and controlling behavior. These findings align with qualitative research from South Africa and Rwanda which illustrated the fluid and complex lines between psychological IPV, controlling behaviors, and financial IPV (Stern et al., 2019) and a systematic review which noted measures of coercive control and psychological IPV can be difficult to distinguish between (Lohmann et al., 2024). In our study, some women's experiences of psychological IPV bled into sexual IPV or physical IPV. More often, we found women's experiences of IPV would incorporate elements of psychological IPV and controlling behavior or financial IPV in one occurrence. For example, men would have sole financial control in the relationship (financial IPV) which would result in control over women's housing—tying in threats of abandonment, jealousy, and control (psychological IPV and controlling behavior).

Limitations

Strengths include the richness of the data suggesting women felt comfortable sharing their experiences and the collection of perceptions taken over time in two phases. The results of this study should be considered in light of some limitations. Participants were sampled from clinics and thus the study did not include women who do not seek health care. There may have been unequal dynamics between interviewers and participants in terms of race, language, class, and education, though we aimed to reduce this limitation through constructivist interview approaches and ongoing interviewer supervision. More than half of the interviews were conducted by a nurse researcher fluent in the local language who grew up near study communities. A limitation to analytical rigor was this was a secondary analysis led by the first author, who is a White, English-speaking, U.S. researcher, who was not involved in the initial data collection. This was overcome by working closely with local researchers through team-based input at key moments of thematic codebook development, analytical report, presentation of findings, and final write-up. Additionally, the analysis was conducted using the translated English versions of the interviews, and this could have affected the interpretation during the analysis process.

Future Research Directions

This qualitative research further emphasizes multiple research gaps for perinatal IPV. Greater conceptual clarity is needed to distinguish between types of IPV. Mixed methods research is needed around how types of IPV blend (perhaps synergistically or perhaps cumulatively) and whether these different forms and co-occurrences have a differential impact on health outcomes. Special consideration should be given to how these types of perinatal IPV may be conceptualized differently across cultures and contexts and when moments of commonality arise at this moment in the life course. For example, financial dependency or gendered expectations of pregnancy may resonate beyond the urban South African context.

Policy Implications

The blurring of types of IPV is complicated by the lack of consistency in definitions by leading health authorities. There is a strong need for consistent definitions of psychological IPV and financial IPV, gold standard measurement tools, and consensus on how to measure these constructs. Notably, unlike other types of violence, there is no gold standard for measuring financial violence. Both the WHO and Centers for Disease Control and Prevention state that psychological violence needs further methodological work (Breiding et al., 2015; WHO, 2021) and the U.S. National Institute of Justice states that financial abuse requires more methodological work (National Institute of Justice, 2021). Others have called for more recognition of psychological and financial violence in policy and research as it can have negative consequences for women's health but receives little attention (Fawole, 2008; Gibbs et al., 2018; Johnson et al., 2022; Postmus et al., 2020). The results of this study support this call to measure psychological and financial IPV in quantitative research.

Conclusions

Women exposed to perinatal IPV describe how a wide range of psychological and financial IPV behaviors affect their ability to stay adherent to HIV treatment and contribute to poor mental health. Bolstering protective factors like women's perseverance for children may attenuate the impact of IPV on HIV treatment and women's health. For future research, we suggest psychological and financial IPV are as important to measure as physical and sexual IPV in prevalence and interventional work around the time of pregnancy. We also suggest adding infidelity, abandonment, ignoring, and blame to the definition of psychological IPV, and highlight the need for more methodological work in defining, conceptualizing, and measuring psychological and financial IPV. Based on the experience of women and its potential impact on health and well-being, psychological and financial forms of violence deserve urgent attention.

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