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Expanding the relationship context for couple-based HIV prevention: Elucidating women's perspectives on non-traditional sexual partnerships

T.L. Crankshaw*,1,2, A. Voce1, L.M. Butler3, and L. Darbes4

¹Public Health Medicine, School of Nursing and Public Health, University of KwaZulu-Natal 236 George Campbell Building, Howard College Campus, King George V Avenue, Durban, 4041, South Africa

²Health Economics and HIV and Aids Research Division (HEARD), University of KwaZulu-Natal, Westville Campus, Private Bag X54001, Durban, 4000, South Africa

³Institute for Collaboration on Health, Intervention, and Policy, University of Connecticut, 2006 Hillside Road, Unit 1248, Storrs, CT 06269-1248

⁴Department of Health Behavior and Biological Sciences, University of Michigan School of Nursing, 400 N. Ingalls, Ann Arbor, MI 48109 US

Abstract

Introduction—HIV prevention interventions targeting couples are efficacious, cost-effective and a key strategy for preventing HIV transmission. Awareness of the full spectrum of relationship types and underlying complexities, as well as available support mechanisms in a given context, are critical to the design of effective couple-based interventions.

Objective—This paper is based on a sub-analysis of a qualitative research study investigating HIV disclosure dynamics amongst pregnant women living with HIV in Durban, South Africa. The sub-analysis explored the nature of participants' social and relationship contexts and consequences of these dynamics on women's feelings of trust towards partners and perceptions of partner commitment.

Methods—Between June and August 2008, we conducted in-depth interviews with 62 pregnant women living with HIV and accessing Prevention of Mother-to-Child Transmission (PMTCT) services in Durban, South Africa. Transcripts were coded for emergent themes and categories using a grounded theoretical approach.

Results—The median age of participants was 26 years (interquartile range: 22 to 29 years). Three major themes with accompanying sub themes were identified: 1) relationship types (sub themes included unmarried status, minimal cohabitation with partners, presence of concurrent

^{*}corresponding author: Health Economics and HIV and Aids Research Division (HEARD), University of KwaZulu-Natal, Westville Campus, Private Bag X54001, Durban, 4000, Tel: + 2731-260-7460.

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relationships), 2) relationship quality/functioning (sub themes included low trust and expectation of partner commitment, relationship turbulence, and lack of communication/ability to negotiate protective behaviours), and 3) factors underlying the relationship functioning (sub themes included dynamics of concurrent relationships coinciding with concurrent pregnancies, gender roles and unequal relationship power, intimate partner violence or threat thereof, and lack of social support).

Conclusions—Our research findings indicate a lack of many of the dyadic relationship elements underlying couple-counselling frameworks for successful risk reduction coordination. Understanding sexual behaviour and the accompanying relationship dynamics within different types of partnerships is crucial for the optimal design of couple-based HIV prevention interventions.

Keywords

dyads; couple-based; pregnant women; Prevention of Mother-to-Child Transmission; HIV disclosure

Introduction

Couple-counselling frameworks and interventions typically embrace an idealized notion of couples by assuming some version of a monogamous, cohabiting pair, in which sexual partners consider themselves a unit and where a degree of trust and mutual respect is present. The increasing number of couple-based approaches to HIV prevention continue to forge this narrative despite the fact that the assumed relationship context is not the reality of many women around the world. While couple-based interventions show promise broadly as an HIV prevention approach (Baeten et al., 2012; Burton et al., 2010; Cohen et al., 2011; Crepaz et al., 2015; Curran et al., 2012; L. Darbes, Crepaz, Lyles, Kennedy, & Rutherford, 2008; El-Bassel & Weschberg, 2012), insufficient attention is paid to key couple-level considerations. These include how a 'couple' is defined, the limitations of existing theoretical and methodological approaches for targeting non-traditional couples and the type of analytical models that are best suited to measuring couple-level data (El-Bassell & Weschberg, 2012; Preciado, Krull, Hicks, & Gipson, 2016).

Specifically, intervention study designs tend towards a bias where a 'couple' is narrowly defined as a stable dyad who are either married or cohabiting. This inclusion criterion ignores the complexity of the relationship context and quality and type of relationship (El-Bassell & Weschberg, 2012). Additionally, couple-based HIV prevention and risk reduction strategies have historically been guided by social-cognitive theory, aimed at educating individuals within a couple on shared responsibility for HIV prevention, and promoting communication, negotiation, and problem-solving skills related to sexual risk behaviour (El-Bassel et al., 2010; El-Bassel & Weschberg, 2012). The underlying assumption of these couple-based strategies is that individuals within a sexual partnership will be equally motivated to take protective action. However, this view again overlooks relationship and dyadic-level factors such as intimacy, trust and commitment, as well as differing relationship permutations arising from differing social contexts (L. A. Darbes et al., 2014; El-Bassel & Weschberg, 2012). Improved knowledge of the socio-behavioural and relational dynamics between couples in specific country and clinical contexts is needed to better understand how

these dynamics affect a couple's ability to manage HIV risk effectively (L. A. Darbes et al., 2014; Painter, 2001).

Dyadic frameworks shift the theoretical focus of interest from individualistic and cognitively-based models of behaviour to relationship-orientated models that acknowledge interpersonal interactions and the effect of the interactions on each member of the dyad and on the couple (Albarracín, Rothman, Di Clemente, & del Rio, 2010; Albarracín, Tannenbaum, Glasman, & Rothman, 2010; Karney et al., 2010; Lewis et al., 2006). For example, Lewis et al. (2006) offer an integrative model that explicitly considers dyadic processes as determinants of couple behaviour and Karney et al. (2010) propose a theoretical framework that considers dyadic capacity for implementing protective behaviours, allowing for a spectrum of dyadic permutations, from casual or once-off partners to long-term relationships. In dyadic models such as these and others, the quality and nature of the relationship within a couple is viewed as critically important, since risk reduction is seen as a coordinated effort and influenced by the type of relationship and by each partner (Johnson et al., 2010; Karney et al., 2010; Lewis et al., 2006).

Relationship functioning is a key concept to consider when working with dyads because it equips couples to accommodate each other's needs (Lewis et al., 2006). Essential elements for effective relationship functioning include trust, relationship commitment, intimacy, good communication, relationship satisfaction, and working with power differentials (Karney et al., 2010; Lewis et al., 2006). Trust, in particular, is a key underlying principle to many dyadic models of behaviour (Albarracín, Tannenbaum et al., 2010). Intimacy and relationship commitment, for example, cannot exist in the absence of trust.

This paper presents a sub-analysis of a qualitative study investigating HIV disclosure dynamics amongst pregnant women living with HIV accessing PMTCT services in an urban setting in Durban, KwaZulu-Natal, South Africa. Within the context of the primary study, published elsewhere (Crankshaw et al., 2013), female participants described intimate partner relationship dynamics which did not conform to the 'stable and cohabiting' relationship context assumptions underpinning many couple-based intervention designs. We conducted a sub-analysis of the data with a view to determining the nature of the social and relationship contexts and consequences of these dynamics on perceived partner trust and commitment in a sample of pregnant women living with HIV in Durban, South Africa. We also highlight the implications of these findings on the design of couple-based strategies for HIV prevention and risk reduction.

Methods

Study Design

This paper is based on a sub-analysis of our primary dataset. The task of the primary study was to develop substantive theory around how pregnant women living with HIV negotiate HIV disclosure, with the aim of developing a theoretical framework conceptualising the process. Given the aim of concept development with a view to developing substantive theory, this study drew on the most recent version of grounded theory to guide the analysis (Corbin & Strauss, 2008). Grounded theory allows for an emic understanding of the world

where the concepts arise from the data and where theory is developed inductively from the data as a whole. In addition, grounded theory is an "action-orientated model" (Strauss & Corbin, 1990:123) which allows the researcher to systematically examine the iterative character of events. Charmaz (1990) provides a social constructionist version of grounded theory which responds to the positivist thread that runs through the earlier work on grounded theory. Here, Charmaz moves away from the idea of using theoretical categories to shape the data while in the field, preferring to develop conceptual ideas to drive the fieldwork process.

In conducting the primary data analysis, results emerged revealing relationship dynamics from the perspective of pregnant women living with HIV, which required further analytic attention in light of the promotion of couple-based strategies for HIV prevention. A sub-analysis of the data was implemented, guided by the following questions: 1) what relationship types are being described, 2) to what extent are the key elements to effective relationship functioning present in these women's relationships and what are the possibilities for risk reduction coordination, and 3) what other factors shape relationship quality and functioning.

Setting

The study was conducted in Durban, KwaZulu-Natal, South Africa. Pregnant women living with HIV were recruited from two purposively sampled antenatal clinics to gain access to women from differing socio-economic contexts. The first antenatal clinic was located within a public sector community health centre, with 39% antenatal HIV prevalence (data obtained from facility-based routine, anonymized and aggregated monitoring and evaluation data), offering antenatal care and PMTCT services at no cost and as per the South African Department of Health PMTCT Policy and Guidelines (South African Department of Health, 2008). The second antenatal clinic was located within a state-subsidized district hospital, with 16% antenatal HIV prevalence (data obtained from facility-based routine, anonymized and aggregated monitoring and evaluation data), offering care at a fee-for-service of 35USD per antenatal consultation, inclusive of PMTCT. The second site followed global guidelines for implementation of PMTCT prophylaxis. Both sites served populations who are primarily Black African and living in urban and peri-urban areas of Durban. Ethics approval to conduct the study was granted by the Biomedical Research Ethics Committee, University of KwaZulu-Natal.

Data Generation

For the primary study, women who were 18 years and older, pregnant, living with HIV and accessing antenatal and PMTCT services at either site were recruited and interviewed upon obtaining informed consent. Interviews were conducted in isiZulu, aided by an in-depth interview guide, consisting of open-ended questions, exploring the effect of HIV diagnosis on women's lives, relationships and pregnancies, and exploring women's decisions, experiences and outcomes pertaining to the HIV disclosure process. Interviews were audio-recorded, transcribed, and translated into English.

Data Analysis

Narrative data were transcribed and translated into English from isiZulu and, through thematic analysis by the first author (TC), collated and coded for themes and sub-themes. Data analysis was an ongoing and dynamic process throughout the data collection phase, so that the analysis guided and optimized the quality of information as it was being collected. According to Charmaz (1990), writing and rewriting are also crucial phases of the analytical process. Observations were analysed as a composite and through a comparison of responses between each Facility described above.

Themes and sub-themes were inductively derived through a coding process as laid out by Corbin and Strauss (2008). The codes and categories helped disaggregate the data and allowed questions to be framed around it (Charmaz, 1990). In this way, the codes and categories move from mere description to building up an analysis (Charmaz, 1990). The main study findings were prepared for presentation as a set of interrelated concepts encapsulated with an overall unifying conceptual model describing the processes involved in HIV disclosure in a PMTCT context. For the purposes of this paper, we present a sub analysis of the main findings.

Iterative readings of the data in the analysis stage were carried out as well as constant comparisons of emerging concepts and categories. Negative cases were also sought to help refine the analysis process. Reflexivity was applied to both the interviewer and the analyst: their shared sympathies and attributes were explicitly stated and reflected upon during the analysis stage. The interviewer was a black female aged 58 years who had extensive qualitative research experience; the interviewer spoke isiZulu and English fluently.

A process of open, axial and selective coding was followed (Strauss & Corbin, 1990). Open coding permitted the inductive emergence of codes, which were organized into themes. A random selection of transcripts were independently analysed by the second author (AV). A discussion ensued to compare emergent codes and themes, and consensus reached on categorization and organisation of data. Axial coding allowed for the articulation of major categories and selective coding allowed for a picture to emerge of the relationship dynamics requiring consideration in couple-based strategies for HIV prevention and risk reduction within antenatal and PMTCT setting in Durban, KZN, SA. Relevant quotations were included in the memos to retain participants' own words and illustrative quotations were identified to support the propositions. Guba's four criteria for trustworthiness (credibility, transferability, dependability, confirmability) were addressed to ensure trustworthiness of the findings (Guba, 1981). Techniques for establishing these four criteria during data analysis included prolonged engagement, methodological and investigator triangulation, peer debriefing, negative case analysis, thick description and reflexivity, external audits and ensuring an audit trail.

Results

Between June and November 2008, 63 women were approached and invited to participate in the primary study. One woman refused, with 62 (98%) consenting to participate (31 from each of the two sites) (median age = 26 years, inter-quartile range = 22 to 29 years). Table 1

presents participant characteristics presenting at each facility. The majority (*n*=39, 63%) of participants were unemployed and unmarried at the time of interview. All women were pregnant at the time of their interviews.

Three major themes with accompanying sub themes were identified in the sub analysis: 1) the types of relationships/relationship permutations (sub themes included unmarried status, minimal cohabitation with partners, and the presence of concurrent relationships), 2) the relationship quality/functioning (sub themes included low trust and expectation of partner commitment, relationship turbulence, and lack of communication or ability to negotiate protective behaviours), and 3) factors underlying the relationship functioning (sub themes included dynamics of concurrent relationships marked by simultaneous pregnancies, gender roles and unequal relationship power, especially with older male partners, previous experience with intimate partner violence or implicit threat of violence, and lack of social support, particularly the absence of familial support).

Types of Relationships

Very few participants reported being married and cohabiting with their sexual partners. Most participants were unmarried (n=56; 90%) and, of these, 71% (n=40) did not live with their partner on a regular basis. Table 1 provides description of participant status of cohabitation with sexual partners.

Seven (13%) of the unmarried women reported they were currently separated and no longer in a relationship with the father of their child. A 24-year-old unemployed woman tried to explain why she believed she was no longer in a relationship with her partner.

"I can't just say he left me because I told him I was HIV-positive. There are many other reasons. For instance he has got a child from another woman and apparently he went back to her. ... I cannot say what happened, because we didn't quarrel. So we didn't stop the relationship as such. He just vanished." (24 years old, single)

Another woman was no longer in a relationship with the father of her unborn child because he was pursuing a concurrent relationship.

"...we don't see each other anymore. When I phone him, he would say I am disturbing him. He is spending time with his child's mother." (21 years old, single)

Presence of concurrent sexual relationships—As introduced above, many participants reported that their partners were engaged in concurrent sexual relationships. Some women had become involved with partners whom they knew had other current relationships at the outset. A 20-year-old woman was aware that her partner was involved with another woman when she first met him, but had pursued the relationship anyway. A 23-year-old student knew her partner had a girlfriend who was five months pregnant at the time that she met him. A 26-year-old unemployed woman had given birth to two children by a man she already knew was married. Others, however, had only become recently aware that their partners were engaged in concurrent relationships:

"I never thought he would have another relationship while I was with him. I only discovered that very late. I noticed that he likes women." (31 years old, single)

One woman indicated that she had subsequently become aware that her partner was married and that he had another long-term girlfriend in addition to herself. However, she told us that it was enough that her partner had continued to support her through her HIV diagnosis and pregnancy and that he was intending on finding a house for her to stay.

Concurrent relationship permutations were also a reality for married participants. As one married women recounts:

"I had ups and downs with my husband. He wasn't faithful to me and even before I became pregnant, I had already suspected I might be [HIV] positive because my husband had other relationships." (29 years old, married)

Relationship Functioning and Quality

Participants described a number of relationship elements that contributed to the overall quality of their relationships and relationship functioning.

Distrust and low relationship expectations—Distrust over partners' relationship intentions was a prominent theme, as was the low expectation of partner commitment to the relationship. Many participants presented the gendered construct of a 'man' whose promises were to be viewed with deep suspicion and who was characterized as someone who, despite assurances to the contrary, could change his position at any time without prior warning.

"When he deceives me he says he wishes one day we get married but I don't believe that because men always say that." (23 years old, single)

Prior bad relationships provided for cautiousness in current ones. A 26-year-old employed woman had been involved with her partner for over a year. She stated that she would not reveal her HIV status to him even if she were to become engaged him:

"I don't trust him. My first child's father disappointed me a lot. So I am not prepared to trust any man that I come across. I was careless even to get pregnant. ... I am afraid. I don't know how he will react. I don't trust him at the moment and I am not sure how much he loves me. Maybe I don't know him very well." (26 years old, single)

The issue of trust, however, was a complex one. One 28-year-old woman did not trust her partner's intentions but told us that she was "hoping to continue with [her] partner as long as he loves [her]". She was HIV-negative during her first two pregnancies (one of which was linked to the above partner) and had only tested positive in her third pregnancy. Her partner later revealed that he knew he was HIV-positive but hadn't told her. Yet she still saw a future with him, should he wish it. She had a Grade 10 education, was unemployed and thus entirely reliant on others for material support.

Relationship dissatisfaction and relationship turbulence—Many participants revealed a deep dissatisfaction with their sexual partner relationships but attempts to address this was cause for much interpersonal strife, usually resulting in the relationship being terminated or the issue being dropped in the interests of relationship status quo. A 26-year-

old unemployed woman had been in a four year relationship with her 42-year-old partner but continued to find it difficult to address the issue of concurrent relationships:

"Once I start talking about his relationships he loses his temper and says I don't want us to live peacefully in the house. I end up not saying anything." (26 years old, single)

A 28-year-old employed woman broke off her relationship with her younger partner because of his numerous affairs with other women. She told us she "could not stand it". Another woman had left her partner but subsequently allowed him to return to the relationship once she discovered she was pregnant.

"I was deeply hurt. In fact I dumped him. I wasn't aware that I was already pregnant I told him [that I was pregnant] and then he started visiting me again and the relationship continued because I wanted his support." (21 years old, single)

One participant, aged 24 years, no longer wished to compete with the other women in her partner's life nor with the constant unknown as to where her partner's affections may lie at a given point.

"I have come to a stage where I am too tired to keep talking to him [about the many women in his life]. I have asked him to leave me. ... my future with him is very bleak. I don't want to phone him in future and find that he does not answer my calls." (24 years old, single)

Being diagnosed with HIV was also cause for much relationship conflict and, in some cases, relationship breakdown. The following participant believed that her disclosure of HIV status had tipped her relationship balance with the effect that her partner no longer 'found' time to be with her.

"Since I told him I was positive he started dragging his feet. He doesn't see me anymore. ... There is nothing that we discuss about our future and I don't think he is interested in spending his future with me... he is not interested in me anymore." (29 years old, single)

Lack of communication and ability to negotiate protective behaviours—Many women reported difficulties in communicating with their partners about HIV testing and negotiating other protective behaviours such as condom use. Some participants reported partner unwillingness to engage with the prospect of an HIV test, despite being made aware of their partner's status.

"I told him I tested positive. I asked him to also go for a test because it was obvious he also had the virus. I am telling you he kept quiet. He didn't say a word. ... When I ask him to go for a test, he would just say, 'mmm' and that would be all. He won't go." (24 years old, single)

The following participant attempted to communicate with her partner and to suggest a shared approach to HIV testing. She indicated that after his initial reaction, she would not risk further displeasing her partner by pushing the issue.

"...I asked him to come with me so that we can have a blood test together. He then became violent and started shouting at me. He said I must stop pestering him." (31 years old, single)

Most participants revealed that they had previously not used condoms consistently within their sexual relationships, if at all. Prevailing constructions of masculinity and gendered norms clearly factored into this dynamic. One woman explained how her partner refused to use condoms and that since he was "a man", she felt unable to force him to do so, and had to "give in to his demands" (36 years old, single). Others reported that they did not insist on condoms because they wanted to avoid unwanted conflict with their partners and thereby risk ending the relationship.

"When my child's father passed away, whenever I had a relationship I had this fear that I was going to lose him again. I had a problem knowing what men expected of me. I wanted to keep the relationship. That is why I gave in when he said he didn't have any condoms. I thought if I refused he would lose interest in me." (29 years old, single)

Interestingly, perceived feelings of trust also posed a barrier to negotiating condom use.

"Early in the relationship we used to use it [a condom] but as time went on, we began to trust each other, as we lived together." (31 years old, single)

Factors Underlying Relationship Functioning

We identified a number of dynamics or contributing factors underlying participant reports of their relationship functioning.

Dynamics of concurrent sexual partnerships—The reality of sharing one's partner with another woman had a large role to play in relationship distrust dynamics. Relationships were often hotly contested and in a climate of pervasive feelings of distrust, demonstrating ones 'trust' in one's partner acquired heightened importance. However, establishing 'trusting behaviour' also compromised women's agency to insist on safer sex.

"When we started our relationship, I asked him if he knew his status because it would be a big risk to have sex without a condom. He then said it meant I didn't trust him." (34 years old, single)

Some women had no direct evidence that their partners were involved with other women but felt that it was an inevitable reality, especially if they lived some distance from their respective partners and only saw them infrequently.

"Though I am not sure, but I always tell myself he has got another girlfriend. We are too far apart for him not to have another relationship." (25 years old, single)

This dynamic fed into low expectations of partner commitment.

"He does talk about that [marriage] but I can't rely on that because men are not trustworthy. He can say it now just because I am pregnant. He might find another woman at any time." (18 years old, single)

Several participants were pregnant at the same time as their partner's concurrent girlfriend/spouse. Some women had only become aware that their partner was involved in a simultaneous relationship when the second woman became pregnant or had her child.

"I didn't know [my partner had another woman in his life]. I only knew when she came to see him with a new-born baby. I was also pregnant at that time." (23 years old, single)

Discovery of a partner's concurrent relationship through a simultaneous pregnancy greatly disrupted feelings of trust for women.

Gender roles and unequal relationship power—Participants who reported inconsistent or no condom use revealed that decision-making around condom use rested strongly on men's willingness to use them. This was an especially fraught issue for participants who were in relationships with older men. Asked to reflect back on past high risk behaviour, some women believed that they had not had control over the situation and often were at a loss as to why they had not used condoms. Prevailing constructions of masculinity and gender roles factored into this dynamic.

"Sometimes men are what they are, and at times they end up like they are controlling a person. This is what I feel when it comes to using condoms, especially when a person is much older than you... At times I felt I was not in control of the situation..." (27 years old, single)

"I am hoping to continue with my partner as long as he loves me. At the same time I cannot be sure of my future because men change all the time. They are not trustworthy." (28 years old, single)

Experiences of violence and fears of violence—Previous sexual and physical violence shaped women's experiences and constrained women's autonomy. One woman recounts a past relationship:

"He used to assault me and he was also an alcoholic. When he came home he would just start being violent." (29 years old, single)

Another participant believed she had very little bargaining power within the relationship and would not risk displeasing her partner for fear of violence.

"...He also has this attitude that he is a man and cannot be controlled by a woman. He can shout for the whole week. In any case, I try to be calm because he supports me. ... The problem is that I am afraid of him. He knows I come from a broken family. He knows I don't have a father and all that. That is why I am saying it would be easy for him to do anything he feels like doing to me..." (31 years old, single)

Lack of social support—Participants revealed high reliance on their partners for social and material support. In searching the data for other forms of social support, it was apparent that one or both parents were either unknown or absent from participants' lives and some single maternal parents looked to participants for material support. The absence of parents, but in particular fathers, was identified by some participants as a gap in their lives. As the

above quote illustrates, some participants indicated that the absence of a paternal authority figure had negative impact on intimate partner relationship dynamics where it was perceived that partners could behave without fear of paternal reprisals. Additionally, parental substance abuse created emotional distance even when a parent was present.

"My mother is like a dead person because she spends most of her time drinking alcohol." (31 years old, single)

Participants indicated high levels of morbidity and mortality within their family structures. At the time of the interview, the following participant was supporting her younger sibling and an adolescent relative following the disappearance of her own mother and deaths of her father and cousin:

"I was living with my mother while she was employed. When she stopped working she left me with my father's family and disappeared. Later her cousin decided to take me. ... [When my father passed away] it was in 1999. I was still living with his family. I only came to live with my mother's cousin in 2006 because I had finished my Matric [Grade 12] in 2005. This year, my mother's cousin passed away in July. ...She was HIV-positive. So I am now left with her daughter who is thirteen years old." (21 years old, single)

With low levels of parental support and high levels of morbidity and mortality within the family, many participants had been compelled to shoulder the primary burden of responsibility for their family's welfare. For this reason, many participants had found it difficult to disclose their HIV status to family and to seek their support.

"Ey, she felt extremely bad because as it is we don't have parents and I am the only breadwinner at home. Right now I am in the process of building our home. So they have high hopes since I am now employed. It was a blow to them to find that I am now HIV-positive." (29 years old, single)

In addition, many participants had already had immediate experience with HIV and had previously experienced HIV-related deaths in the family. This reality placed an extra burden on some participants because they assumed responsibility for shielding family members from the knowledge that another member was similarly infected.

"Almost all my sisters were positive. Some have passed away. Those who passed away had also told us they were positive. My other sister is still alive. ... You know, I always feel [my mother] cannot take the pain of looking at all of us living with this virus. She watched my other sisters dying with HIV. I don't think she can be strong enough to watch me living with this disease. I just feel for her." (25 years old, single)

Discussion

Our research findings indicate a marked lack of many of the necessary dyadic relationship elements underlying couple-counselling frameworks aimed towards successful risk reduction coordination in couples who represent less stable dyads. Being unmarried and not cohabiting with partners is a common experience in South Africa (Hosegood, 2009) and

challenges assumptions about the notion of the 'stable dyad' as the target for HIV prevention activities. Each type of relationship pattern (e.g., living with partner versus living on own/ with family) will invariably play a role in subsequent relationship dynamics. A key study finding was the high level of distrust participants voiced over their partner's perceived relationship intentions for a variety of reasons: relationship infidelity, shared time of pregnancy with partner girlfriend/s, lack of social support, unequal gender norms with the possible threat of violence. Women revealed low expectations with regard to the long-term future of their relationships with the commonly presented view that the relationship longevity was at the discretion of the 'man'. Women were therefore unlikely to challenge male authority or broach uncomfortable topics, such as HIV, that may be seen to question male partner honesty or fidelity. Mutual attitudes of distrust and suspicion were found in another South African study amongst men who voiced denigrating and negative attitudes towards women as sexual partners (Ragnarsson, Townsend, Ektrom, Chopra, & Thorson, 2010). Low trust amongst sexual partners may also be a sign of low levels of social capital (Meyer-Weitz, 2005). Certainly, the divided attentions of the male partner due to simultaneous sexual relationships and simultaneous partner pregnancy would strongly undermine feelings of trust. Given that their partners had concurrently established other similarly 'committed' relationships, women were perhaps unlikely to presume a high level of partner commitment within their own relationships. While our results did not support it, we acknowledge the possibility that women may have also been engaged in their own concurrent relationships. These findings indicate that counselling models need to help to establish and to be responsive to relationship and social contexts where there is low partner commitment, and especially in the context of high levels of unemployment and household resources insecurity (El-Bassel & Weschberg, 2012). It is crucial for counsellors to first assess partner type and key elements in relationship functioning, particularly levels of trust between partners, in order to identify how best to proceed. Couple interventions that promote gender equality and aim to strengthen communication and conflict resolution between couples could be a valuable addition to counselling services.

The findings highlighted women's difficulties in negotiating condoms and the reportedly limited use of condoms within their sexual relationships. For women operating within hegemonic heterosexual partnerships within a concurrent relationship context, prevention of HIV is only one part of the relationship picture. Other considerations include the strong possibility that condoms can threaten an already established patterning of sexual behaviour and thus the stability of the relationship (Wingood & DiClemente, 1998). In addition, the use of condoms can be seen to directly undermine expressions of love, trust and faithfulness between couples (Hirsch et al., 2007; Parker, Makhubele, Ntlabati, & Connolly, 2007). Certainly, against the concurrent partnership dynamic, preserving the 'fiction of fidelity' (Hirsch et al., 2007) may be prioritized over the need for safer sex. In avoiding using condoms, women potentially deflect any insinuation of infidelity involving themselves and/or their partner (Hirsch et al., 2007; Wingood & DiClemente, 1998). In addition, in a resource constrained context and where partnerships are highly competitive, women are highly unlikely to insist on condom use.

In an attempt to move towards a deeper understanding of the relationship and risk behaviour dynamics within the context of concurrent partnerships, it is useful to draw on Thornton's

(2009) theoretical framework for concurrent sexual networks. Thornton (2009) frames sexual networks as social structures which are actively fostered in an attempt to maximize social capital. For those who have very little social (especially family) support, increasing one's social capital will be priority (Thornton, 2009). There often exists good reason for individuals to practice high risk sexual behaviour, especially if it brings tangible benefit to an individual's life (Thornton, 2009). At a very basic level this could be a roof over one's head or food for the household. Intimate partner violence or the threat thereof is another example of an enabling context for high risk behaviours.

South Africa has one of the highest rates of violence in the world and perpetrators of violence are most often spouses or intimate partners (Gass, Stein, Williams, & Seedat, 2010; Gupta et al., 2008; Joyner & Mash, 2012; Seedat, Van Niekerk, Jewkes, Suffla, & Ratele, 2009; WHO, 2013). A study conducted in South Africa revealed that between 10-20% of women had experienced coerced first sexual intercourse (Dunkle et al., 2004); women who have coerced first sex are also more likely to exhibit increased sexual risk behaviour (Maharaj & Munthree, 2007). In addition, in a context of economic insecurity, women who need to maintain or increase their social status will likely adhere to prevailing social norms, even if those norms perpetuate gender inequalities (Jewkes & Morrell, 2010). Risk of HIV infection is not, in these instances, the key consideration. Rather the risk to their social and sexual relationships and, by extension, their overall wellbeing is of paramount concern (Desgrees-du-Lou et al., 2009; Thornton, 2009). In a patriarchal context with high rates of poverty and intimate partner violence, not having a biological paternal figure may also negatively impact social support networks and perhaps effect greater reliance on sexual partnerships. Parental absence has been found to undermine social support and affect sexual debut (Defo & Dimbuene, 2012) and was a factor significantly associated with perpetration of rape amongst a South African cohort of men (Jewkes, Sikweyiya, Morrell, & Dunkle, 2009).

A recent HIV disclosure-related study, conducted in a developed country setting, found that perceived relationship quality within an intimate partner context strongly influenced the disclosure process and was a significant predictor of positive or negative disclosure outcomes (Smith, Cook, & Rohleder, 2016). In particular, three relationship-orientated factors were found to be significant: the extent of 1) unequal power relations, 2) relationship turbulence, and 3) emotional abuse (Smith et al., 2016). Perceived trust within the relationship and perceived relationship commitment were also significantly associated with length of time until disclosure occurred. In particular, the level of relationship turbulence or instability was identified as having the most impact on the disclosure process across all 5 factors assessing quality of the relationship (Smith et al., 2016). Our findings, in a developing country context, echo the above key factors linked to relationship functioning and lend further evidence to the argument that public health researchers should consider the full complexity of the relationship context, including partner type and quality of relationship when designing and developing couple-based interventions.

For example, rather than excluding certain types of relationships, research efforts need to be more inclusive. Currently less is known about the range and quality of relationship dynamics of couples with concurrent partnerships, as the focus has been primarily on sexual behaviour

and/or treatment while neglecting the emotional experiences of the partners themselves. Additional research to further illuminate this issue is imperative as the current study only included perspectives from female partners. Exploration of male partners' experiences as well as quality dyadic research will inform future efforts with the goal of being able to adapt interventions to meet the needs of diverse types of couples (including those engaged in concurrent partnerships) who may have different needs with regard to HIV prevention and/or treatment.

Limitations

There were several limitations to the study. Although the findings challenge existing assumptions about relationship dynamics in the traditional couple-counselling framework, only female partners and not their male counterparts were interviewed, which means there will be inherent bias in perspectives. Interviewing both partners and better understanding each individual's perspective over the relationship is critical. Nonetheless, the perspectives provided by the women provide insight into their experiences in relationships that, while common in this context, are lacking representation in the literature. Additionally, a limitation in conducting a sub-analysis of an existing dataset meant that our analysis was confined to a static dataset and did not allow us the opportunity for iterative data collection and analysis. Investigating women's own engagement in relationships with more than one partner concurrently would have also provided valuable insight into relationship functioning.

Conclusions

An awareness of the full spectrum of relationship and partner types and underlying complexities, as well as the available support mechanisms in a given context, are critical to the design of effective couple-based interventions. When targeting couples for intervention work, differing relationship types between partners must be considered (Tijou Traore et al., 2009). For instance, targeting couples where both partners identify each other as their primary partner and to whom they state they are committed to above all others, are more likely to have a relationship dynamic where trust is a core underlying element. With this relationship element, it is likely that the more traditionally, positive aspects of relationships may be leveraged by the intervention design (L. A. Darbes et al., 2014). In complex unstable relationships on the other end of the spectrum, as evidenced by the current study findings, interventions should perhaps not rely on the concept of trust to leverage behaviour change but focus on communication and conflict resolution between partners as well as adopt a gender transformative approach (El-Bassel & Weschberg, 2012). In either case, if tailored appropriately couple-based interventions have the potential to effect significant and positive impacts on HIV prevention strategies.

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•	Couple-counselling frameworks can overlook relationship and dyadic-
	level complexities

- Concurrent sexual relationships negatively impact relationship functioning
- Provides recommendations for design of couple-based interventions
- Need to understand the relationship context in couple-based HIV prevention
- Prevention of HIV is only one part of the relationship picture
- Challenges assumptions in traditional couple-counselling frameworks

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Table 1
Characteristics of respondents at each clinic facility.

Characteristics	Facility 1 (n=31)	Facility 2 (n=31)	All (N=62)	
Age, years (median)	25	27	26 (<i>IQR</i> =22-29)	
Employment status, n (%)				
Employed	14 (45)	19 (61)	23 (37.1)	
Marital status, n (%)				
Married	0 (0)	6 (19)	6 (9.7)	
Single	30 (97)	25 (81)	55 (88.7)	
Widowed	1 (3)	0 (0)	1 (1.6)	
Status of cohabitation, n (%)				
Living with partner	3 (9.7)	15 (48.4)	18 (27.4)	
Living with partner sometimes	2 (6.5)	1 (3.2)	3 (6.5)	
Solitary/separated from partner	25 (80.6)	15 (48.4)	40 (62.9)	
Missing	1 (3.2)	0 (0)	1 (3.2)	