

Role of boyfriends and intimate sexual partners in the initiation and maintenance of injecting drug use among women in coastal Kenya.

Gitau Mburu¹, Mark Limmer¹, Paula Holland¹

¹Division of Health Research, University of Lancaster, United Kingdom.

GM: g.mburu@lancs.ac.uk

ML: m.limmer@lancaster.ac.uk

PH: p.j.holland@lancaster.ac.uk

Corresponding author: Gitau Mburu, Division of Health Research, University of Lancaster,
LA1 4YW, United Kingdom. Email: g.mburu@lancs.ac.uk

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Abstract

Introduction: Gender dynamics and interpersonal relations within intimate partnerships are known to determine health behaviors, including substance use, within couples. In addition, influence from intimate partners may occur in the context of wider social ecological determinants of health behavior. The aim of this study was to document the role of intimate partners in influencing injecting drug use among women in Kenya, where injecting drug use is on the rise.

Methods: We performed secondary data analysis of an existing dataset from a 2015 qualitative study involving 45 women who inject drugs and 5 key stakeholders in coastal Kenya. Primary data had been collected via a combination of in-depth interviews and focus group discussions exploring sexual, reproductive, drug use, and other social contexts of women who inject drugs. The process by which intimate partners influenced women's initiation of drug use, transition to injecting practices, and maintenance of injecting drug use were identified using thematic analysis.

Results: Boyfriends and intimate either facilitated or restrained women's drug-injecting. On the one hand, young women's entry into drug use was prompted by relationship problems or a need to acquiesce with their drug-using boyfriends. Once women started injecting, intimate partners facilitated ongoing drug-injecting by financing the acquisition of drugs, peddling drugs to their women, or sharing their drugs with their women. The social capital that peddlers held insulated women from police arrests, and encouraged women to seek and sustain intimate relations with well-connected peddlers. Men's influences over women were driven by an underlying patriarchal drug acquisition and economic power. On the other hand, boyfriends and intimate partners who were non-injectors or non-drug users sought to moderate women's injecting drug use by encouraging them to inject less, to smoke or snort instead of injecting, or to enroll into rehabilitation. These moderating influences were most prominent when couples were pregnant. Despite men being a source of practical and emotional support, women were frequently unable limit or alter their injecting drug use, due to its addictive nature. Men's disagreement with women's ongoing injecting strained relationships, and occasionally led to separation.

Conclusions: Some boyfriends facilitated women's injecting drug use, while others moderated it, supporting assertions that intimate relationships can both be a site of injecting risks or protection. At the micro-level, these findings highlight an opportunity for couple-based interventions, leveraging on non-drug injecting males as a resource to support women adopt safer injecting practices. At a macro level, incorporating livelihood interventions into harm reduction programs is required in order to mitigate economic-based influence of male intimate partners on women's injecting drug use. At both levels, gender transformative approaches are essential. To gain a comprehensive understanding of women's injecting drug use, future studies drug use should explore women's contexts beyond micro influences and consider their wider macro-structural determinants.

Key words: Gender, HIV, harm reduction, female injecting drug use, intimate partner, qualitative, Kenya, Africa.

Introduction

Women constitute a third of all people who use drugs and a fifth of the 16 million people who specifically inject drugs worldwide ([Mathers et al., 2008](#), [Degenhardt et al., 2013](#)).

Women who inject drugs face unique gender social and economic inequalities which affects their health and well-being ([Blankenship et al., 2015](#), [Eiroa-Orosa et al., 2010](#)). These gender inequalities are often produced by the intersection of women's drug use with gendered sexual, reproductive and domestic roles in the context of intimate relationships ([Simmons et al., 2012](#)). For example, power imbalances are evident in contexts where men more commonly acquire drugs for their female counterparts, often driven by underlying patriarchal gender norms within heterosexual relationships ([Bryant et al., 2010](#), [Simmons et al., 2012](#)). Apart from power imbalances within heterosexual domestic settings, gender norms operating within wider social, cultural and economic contexts are generally replicated among couples who inject drugs ([Choi et al., 2006](#)).

As a consequence, women's injecting practices are frequently influenced by their male counterparts and heterosexual intimate partners. Numerous studies have documented how women are often introduced to drug injecting by their male intimate partners ([Lazuardi et al., 2012](#), [MacRae and Aalto, 2000](#)), often in the context inequitable power dynamics ([Lazuardi et al., 2012](#)). In addition, culture and social factors, such as societal expectations and position of women has been shown to enhance male dominance of women's initiation of injecting, transition to injecting and long-term risky injecting practices ([Kirtadze et al., 2015](#), [Higgs et al., 2008](#), [Simmons et al., 2012](#)). In sum, there is increasing appreciation that gender relations and norms produce injecting patterns that ultimately have an impact on women's health and well-being.

Despite the general view that male sex partners have a significant influence on women's drug use, contradicting findings have been reported from several studies, where men do not play a prominent role. For instance [Doherty et al. \(2000\)](#) and [Tuchman \(2015\)](#) both reported that their samples of American women had been predominantly initiated or influenced to transition to injecting by their female peers. While relatively rare, such findings suggest that there could be context-specific factors that influence pathways of injecting drug use among women, limiting a generalized assumption that women's injecting drug use is universally linked to male influence. The highly contextual nature of women's injecting drug use is

highlighted by several other authors who have observed how social ecological contexts, ranging from micro-circumstances to societal cultures affect initiation and ongoing drug injecting among women ([Khuat et al., 2015](#), [Simmons et al., 2012](#), [Kirtadze et al., 2015](#)).

The need for context-based exploration of the role of male sex partners in women's drug use is particularly relevant in sub-Saharan Africa where limited data on women's drug use exists ([Larney et al., 2015](#)), despite injecting drug use being rapidly on the rise across the region ([Petersen et al., 2013](#)). Compared to high income settings where most research on injecting drug use has been conducted ([Larney et al., 2015](#)), relatively limited interventions for preventing exposure and progression of drug use exist in sub-Saharan Africa, for example residential rehabilitation and social welfare systems ([Appel et al., 2004](#)). Yet, such unique institutional, and other diverse micro and macro contexts could potentially affect women's drug use in sub-Saharan Africa. For example, [Beckerleg et al. \(2005\)](#) found strong gender segregation norms existed at the East African coast, which interfered with women's use of drugs with men.

In Kenya, women constitute a tenth of an estimated 18,000 injecting drug users nationally ([UNODC and ICHIRA, 2012](#), [NACC, 2014](#)). Although injecting drug use is increasingly being documented in Kenya, recent studies focus on acquisition of drugs, transition to injecting, evidence-based policy development, or general epidemiology among all injecting users, majority of whom are male ([Guise et al., 2015](#), [Rhodes et al., 2015](#), [Kurth et al., 2015](#), [Syvertsen et al., 2016](#), [Mital et al., 2016](#)). As such, there is limited exploration of the contexts of women who inject drugs ([Ayon et al., 2017](#)). However, [Guise et al. \(2015\)](#) assert that understanding vulnerability of Kenyan women and how gender norms affect their drug-related harms is needed to inform harm reduction and HIV prevention interventions nationally. This is a credible assertion given that harm reduction programs are currently being developed in Kenya and indeed, much of East Africa ([Rhodes et al., 2016](#)). To this end, this paper documents the role of intimate partners along the trajectory women's drug use in Kenya.

Methods

Primary study aims and setting

Findings reported in this paper were generated from a secondary analysis of a 2015

qualitative dataset from a primary study whose aim was to document the needs, barriers and determinants of sexual and reproductive health (SRH) in women who inject drugs in the coastal Kenyan towns of Mombasa and Kilifi. These two towns are among the most populous in the Coast Province, which has the longest history of injecting drug use in Kenya ([Beckerleg et al., 2005](#)). Indeed, nearly half (46%) of all 18,000 Kenyan injectors reside in the Coast province ([NAS COP, 2013](#)). Together with the capital city Nairobi, Coast Province accounts for majority of injecting drug users; only recently has injecting drug use been described in other Kenyan regions ([Syvertsen et al., 2015](#)).

In coastal Kenya, injecting drug use is deeply intertwined with tourism ([Peake, 1989](#), [Beckerleg and Hundt, 2004](#)). Despite tourism being an important source of income for the local hospitality industry, local residents have remained poor, partly due to its seasonality ([Akama and Kieti, 2007](#)). In 2015 when data for this study were collected, the cost of a sachet of heroin was 200 Kenya Shillings (KES), an equivalent of 2 US dollars, which was roughly equivalent to the international poverty threshold of 1.90 US dollars per day. As such, and in due course, addiction to heroin creates a significant financial burden on injecting drug users ([Mital et al., 2016](#)).

Gender relations at the coast align with traditional identities of men as breadwinners who control decision-making within families ([Sarna et al., 2009](#)). In addition to the differentiated gender responsibilities and roles, gender segregation during social activities is common, and is infused with Islamic and Swahili traditions ([Gower et al., 1996](#)). However, male and female drug users frequently consider these kinds of gender-segregating social norms an impediment, and frequently ignore them to inject together ([Beckerleg et al., 2005](#)). At the coast, drug injectors predominantly use white heroin, which is more soluble and amenable to intravenous use, as opposed to the (impure) brown heroin predominant in the 1990s ([Beckerleg, 1995](#), [Deveau et al., 2006](#)). Previous studies at the coast have reported that heroin is either injected by itself, inhaled, or smoked within rolls of cannabis or tobacco ([Beckerleg, 1995](#), [Beckerleg et al., 2005](#)). Drug users inject heroin into superficial veins in the arms, legs, groin or the neck ([Beckerleg, 1995](#)). Most commonly, drug injection takes place at injectors' houses, neighborhood alleys, or at public dens, called *maskani* ([Beckerleg, 1995](#)). At the time of this study, it was common for participants to inject drugs (predominantly heroin) twice or three times daily. This frequency of injecting is similar to that reported by 93% of injectors in a recent large study by [Kurth et al. \(2015\)](#) which involved participants from the

Coast and Nairobi.

During these drug injection sessions, sharing of needles is common which increases the risk of viral and other infections. At 20.5%, people who inject drugs at the coast have a prevalence which is 2.2% higher than the rate across all the 18,000 injecting drug users nationwide ([NACC, 2014](#), [Tun et al., 2015](#), [Kurth et al., 2015](#)). Similar to other parts of the country, women at the coast are particularly affected by HIV compared to men ([NASCOPI, 2014](#)), partly due to early sex debut ([Sia et al., 2014](#)) and sexual violence ([Sarna et al., 2009](#)).

Despite being relatively widespread at the coast, injecting drug use is stigmatized and criminalized locally ([Mburu et al., 2018a](#)) as it is nationally ([NASCOPI, 2013](#)). In the coastal context, stigma of drug use is often overlaid on HIV-related stigma, and is particularly exacerbated among women due to a societal disapproval of female injecting ([Mburu et al., 2018a](#)). As a result of this marginalization, injecting drug users often use corrupted form of Swahili language to communicate with each other, and avoid suspicion or arrest ([Beckerleg et al., 2005](#)). During the present study for example, participants used unfamiliar words such as *makete* ('sachet'), *kubwenga* ('to inject'), *arosto* ('drug withdrawal') or *teja* ('a drug user') to exclude outsiders from their conversations.

Primary study procedures

The primary study comprised of in-depth interviews (IDI), and focus group discussions (FGDs). Overall, 45 women who inject drugs took part: 24 participated in IDIs (12 in Mombasa and 12 in Kilifi), and 21 attended three FGDs (2 sessions in Mombasa and 1 session in Kilifi). IDIs and FGDs explored participants' drug use, SRH, HIV testing as well as their experiences accessing harm reduction services. In addition to the women, additional IDIs were conducted with five key stakeholders (of whom three were women) involved in providing services to injecting drug users. The IDIs and FGDs were conducted in either Swahili or English based on participants' preferences, were audio-recorded, and lasted 45–60 minutes. At the end of the IDIs and FGDs, a brief questionnaire was used to collect basic socio-demographic and drug use data from the participants.

Primary study sample

The characteristics of the study sample is summarized in Table 1, and is reported in more detail elsewhere ([Ayon et al., 2017](#), [Mburu et al., 2018b](#), [Ndimbii et al., 2018](#)). In brief, the

average age of the 45 women was 28.5 (range 19 -56) years (Mburu et al., 2018b). Over half (53%) were single, 27% had live-in partner, and 18% were married. The sample reported perceiving stigma associated with injecting drug use (Mburu et al., 2018a), had low utilization of contraceptives, high rates of unplanned pregnancies (Mburu et al., 2018b), and poor attendance to prenatal and post-natal care (Ndimbii et al., 2018). Overall, 85% of the sample reported using heroin alone or in combination with other substances, while cocaine was reported by 15%, alone or in combination with other substances (Mburu et al., 2018b). Nearly half of the women did not have a regular partner at the time of the study, however, 29% of the sample had drug-using partners who used drugs by way of injection (11%) or snorting/smoking (18%).

Table 1. Participant characteristics.

Characteristic	IDIs	FGDs	Total	%
Age (mean, years)	26.4	30.5	28.4	-
Number of children (mean)			1.6	-
Education				
None	4	4	8	18%
Primary	13	10	23	51%
Secondary	6	6	12	27%
Post-secondary	0	1	1	2%
Unknown	1	0	1	2%
Marital status				
Married	5	3	8	18%
Live in partner	7	5	12	27%
Single	11	13	24	53%
Unknown	1	0	1	2%
Income source				
Casual labor	2	5	7	16%
Food Kiosk/plaiting	3	2	5	11%
Sex work	9	4	13	29%
Peddling	1	2	3	7%
Peer educator	0	1	1	2%
Family or partner	3	1	4	9%
Begging, hustling	5	6	11	24%
Unknown	1	0	1	2%
Contraception				
Yes	11	3	14	31%
No	13	18	31	69%
Drug use				

Duration using drugs (years)	7.8	9.1	8.5	-
Duration injecting (years)	3.3	2.0	2.6	-
Main drugs used				
Heroin	11	1	12	27%
Heroin, and other drugs*	11	15	26	58%
Cocaine	1	3	4	9%
Cocaine and other drugs*	1	2	3	6%
Regular sexual partner's drug use				
Injecting	4	1	5	11%
Smoking	4	4	8	18%
None	6	3	9	20%
No regular partner	9	13	22	49%
Unknown	1	0	1	2%

*varied combination of substances including Rhohypnol, Khat, Cigarettes, Alcohol.
Abbreviations: FGD=Focus group discussion; IDI=In-depth interview.

Secondary data analysis

In light of the need for data related to female injecting drug use in Kenya ([Ayon et al., 2017](#), [Guise et al., 2015](#)), a secondary analysis of the existing dataset was conducted in the context of PhD studies. We adopted Heaton's (1998) definition of secondary analysis, as '*the utilization of existing data, collected for the purpose of a prior study in order to pursue a research interest which is distinct from that of the original work*'. The first author (GM) had been involved in the primary study, in which he participated in drafting the primary study protocol, developing research tools, conducting the primary analysis, and publication of primary findings. Following completion of the primary study, additional research questions were generated to be addressed through secondary data analysis. These secondary research questions focused on trajectories of drug use and associated HIV risks among the sample, and were therefore distinct from the SRH-focused primary research questions, in keeping with Heaton's (1998) definition. Secondary analysis was preferred to primary data collection on the basis of economic advantages ([Castle, 2003](#), [Szabo and Strang, 1997](#)), and the ethical obligation to reduce wastage of research data ([Corti and Thompson, 2006](#), [Corti and Thompson, 1998](#), [Seale, 2011](#)). As noted by other scholars, these advantages are amplified in studies involving rare populations ([Hofferth, 2005](#), [Long-Sutethall et al., 2011](#)) as was the case in this study: injecting drug users in Kenya are stigmatized, criminalized, and hard to find / '*hidden*' ([NAS COP, 2013](#)).

Secondary analytical approach

The entire dataset from the primary sample was utilised for secondary analysis. This comprised of 1) transcripts from 3 FGDs (n=21), 2) transcripts from 29 IDIs (24 from women and five from key stakeholders), and 3) self-administered questionnaires containing participants' socio-demographic and drug use data. Using this dataset, the influence of intimate partners and boyfriends was identified. A new theoretical framework was adopted to generate new interpretation and meaning from the dataset ([Torraco, 1997](#)) and thereby generate new knowledge related to secondary research questions ([Moore, 2005](#)). Transcripts were imported into Nvivo® (QSR International) ([Bazeley, 2007](#)), nodes created, and nodes populated with coded text segments relating to trajectories of participants' drug use and within those, the roles of their intimate partners ([Strauss and Corbin 1998](#)). The codes were cross-labelled based on the nature of influence from intimate partners, e.g. whether these influences enabled\facilitated or limited\moderated women's drug use across initiation, transition, and addicted phases of drug use. These emerging codes were refined through constant comparison, whereby data were continuously examined for nuances, similarities and differences, and thereafter categorized to identify overarching themes ([Silverman, 2001](#)).

Theoretical approach

Central to the secondary analysis was an assumption that social ecological approach is a useful way to gain a comprehensive understanding of determinants of women's drug use. Thus, it was envisaged that intimate partners inhabited or influenced certain micro-social environments of women. At the same time, it is important to note that a wider pool of theories exist through which drug use can be understood. Specifically, ways in which drug use progresses from initiation, transition to injection and long-term injecting has predominantly been elaborated via different neuroscientific, biological, psychiatric, psychological, and sociological hypotheses ([Altman et al., 1996](#), [Lettieri et al., 1980](#)).

From these potential options, this study promulgated a sociological approach, aligning with the secondary research aim of understanding how intimate partners' influences are perceived by women, as well as the qualitative nature of the primary dataset. Popular sociological theories, including the social influence theory, are primarily concerned with the way in which interpersonal attachments and social positions produce dominant influences ([Friedkin, 2006](#)). Specifically, the social influence theory, which predicts that drug use within couples is heavily influenced by social or gender norms that condone or shun specific gender roles and behaviors ([Lukoff, 1980](#), [Turner, 1991](#)), is a reasonable starting point for exploring ways in

which intimate partners influence women's drug use behavior. However, influences from intimate partners may not necessarily exist in isolation from other influences. To start with, definitions of gender norms essentially revolve around identities and expected social roles of women and men, as constructed within wider social and societal contexts ([Money, 1985](#), [Money, 1973](#)). In turn, these gender norms determine how economic, political, cultural and other resources are distributed, resulting in gendered inequalities within these macro-structures ([Connell, 1987](#)). Furthermore, the ensuing economic, cultural and political inequalities can themselves have *direct effects* on individual health behavior ([Sallis et al., 2008, emphasis in original](#)).

Thus, in this study, elaboration of intimate partners influence on women's drug-injecting experience was situated within a wider social ecological lens capturing women's wider social ecological context. Such an approach does not deny the importance of micro social influences; instead, it goes further by acknowledging the presence of community resources and societal-structural influences whose distribution is affected by among others, gender norms themselves, as illustrated by [Shahram et al. \(2017\)](#) in their study of Aboriginal Canadian female drug users. As a theoretical framework, the social ecological theory is useful for elaborating how individuals' interaction with their social and structural environments brings about or sustains drug use. In addition, it has known utility in facilitating identification of potential solutions to risky health behaviors ([Golden and Earp, 2012](#)).

Ethical approval

This secondary analysis was approved by the ethics committee of the Faculty of Health and Medicine at the University of Lancaster.

Results

Two key themes emerged from the analysis, depicting the facilitative and moderating roles of boyfriends and intimate partners on their female partners' drug use.

Boyfriends and intimate partners as facilitators of women's injecting drug use

Entry to drug use in pursuit of intimate partners

Our data suggested that some participants commenced injecting drug use because they were

prompted by their sex partners. In these cases, starting to use drugs was a means through which women assimilated their partner's lifestyles. To fulfil their perceived ideals of a close relationship with intimate sex partners, several participants acquiesced to their partner's drug-using lifestyle and commenced their use of drugs in the pursuit of intimacy. Describing her relationship with her boyfriend who was using drugs, a participant from Kilifi narrated how she started to use drugs in the hope that she would get along with him after she became pregnant. When asked why she started using drugs, she said it was "*because the person who impregnated me was selling [drugs].*" She went on to state that:

He impregnated me, and was staying right there at home, so I decided to use [drugs] with the hope that we could get along (Participant # 12, aged 23 years, Kilifi).

Although hers was not a unique situation, her narrative illustrated the primacy of her intimate relationship, particularly the ideal of staying together with her partner, played in her decision to start using heroin at a time when doing so might have been detrimental to the health of her unborn child. Although the precise situations differed from this participant, it was common for participants to refer directly to their boyfriends' role in their initiation or ongoing injecting drug use by stating that "*we use the drugs together*", often before having sex **(Participant #10, aged 30 years, Kilifi).**

An outreach worker suggested that females were influenced "*because the vulnerability of women is very high*" (Stakeholder # 1, outreach worker, Mombasa). Discussing women's drug use careers, this stakeholder asserted that friendships with drug using men was a root cause of their initiation and entrapment into drug use:

Females are very easily trapped into drugs because they tend to have friendships with male [drug using] peers (Stakeholder # 1, outreach worker, Mombasa).

Elaborating on the specific nature and process of this influence, this stakeholder asserted that:

It's very easy when a female has a partner who is using drugs to be driven into drug use. It is very easy because the trust is very high upon the partner (Stakeholder # 1, outreach worker, Mombasa).

Once in relationships with males who were using drugs, the lives of women and their partners were intertwined, and women found themselves unable to extricate themselves from drug use. Intimacy, companionship, economic imbalances and affective interdependencies were blamed for these influences:

They tend to share a lot of things with the partner, like how to earn money and look for the stuff [heroin] together (Stakeholder # 1, outreach worker, Mombasa).

Financing of drugs

However, it was stressed by participants that sexual partners' influence emanated from their economic power, in a context where getting drugs was said to be economically "*hard*" (Participant #8, aged 30 years, Kilifi). One woman described how her sex partner supported her by giving her money to inject, stating that "*he normally gives me two hundred [shillings]*" (Participant #4, aged 32 years, Kilifi). Alluding to the economic role that intimate partners played acquisition of drugs, a focus group participant summarized the roles of intimate partners in women's drug use by stating that "*he takes care of your smoking*" (Participant FGD #1, Kilifi).

Indeed, it was common that the participants' boyfriends were also drug peddlers who also provided drugs to the women. In addition, intimate sex partners were often drug users themselves, which created opportunities for reinforcement of drug use as couples used drugs together. For example, in response to a question about how she met her ongoing need for drugs, one participant pointed out that:

My husband at times sells so you know I can't miss...I get it from there (Participant #8, aged 30 years, Kilifi).

In sum, the economic difficulties of drug acquisition intersected with gender-based income inequalities emanating from men's better income, to reinforce male influence.

Transactional provision of drugs

Many women were in long-term intimate relationships for material benefits. Indeed, several participants were quick to proclaim their relationships as transactional in nature. Commenting on the perverse nature of transactional relationships that women had with male peddlers, one

participant stated that it was usual or expected that “*when you have a relationship with someone like that, and he sells, he provides you with drugs so that you can make him happy [sexually]*” (Participant #8, aged 26 years, Mombasa). While economics played a role at the most basic level in explaining sex partners’ influence, it was also apparent that transactions were premised on the social capital that intimate partners held. For instance, this participant added that like most peddlers, his partner was well connected socially, which benefited her. She elaborated that “*in other ways, he protects me from the bad things that happen at the drug dens. He will be the first person to be informed if the police are arresting people. He tells me to leave, or we leave together. He cannot leave me to be arrested, you see!*” (Participant #8, aged 26 years, Mombasa).

As illustrated in the following excerpt however, participants in transactional relationships were highly vulnerable to sexual and physical harms from their intimate partners:

There is a guy who used to accommodate me, because I could not afford to pay for a house. He used to force me to have sex with him, it was like he used to rape me... as in, I didn’t like it. However, because it was like a type of rent, it was compulsory for me to give it by way of sex. So I had to accept (Participant #1, aged 33 years, Kilifi).

Apart from social capital and accommodation from drug users, women were also involved in transactions with non-drug users, who sustained drug use of women in exchange for sex. In one unusual case, an outreach worker was involved in a sexual relationship with a participant who ruefully stated that:

He [outreach worker] was ready to buy for me injecting drugs and to have sex with me. He would even buy for me a drugs. Imagine! (Participant #10, aged 21 years, Mombasa).

Considering the negative influences that boyfriends and partners were exerting on women, stakeholders noted the paradox that “*women see the peddlers and the spouses as their main backbone of support although in real sense they are not*” (Stakeholder #3, Outreach Manager, Kilifi).

Interdependence drug acquisition

The significance of men providing women with drugs was relevant in a context where participants acknowledged getting drugs was 'hard' (as noted above) and peddling was predominated by men. Among the 45 women involved in this study, only three were peddlers. Women were frequently desperate to acquire drugs, especially when withdrawal symptoms were eminent or being experienced. In these situations, having a partner who could provide drugs was seen as an asset, as it was expected that intimate partners would 'hustle' for drugs and assist each other by sharing whatever they found:

There are times he doesn't have. When he lacks totally, I usually to go to search, and he too goes to search (Participant #11, 26 years old, Kilifi).

Although the general expectation was that men would be successful in acquiring drugs, several participants described situations in which their men totally depended on them to find drugs. In some cases, women would "go and hustle" (Participant #10, 21 years old, Mombasa) to sustain their own and their boyfriends' drug use, which practically meant sex work. The above participant was cognizant of this dependence, concluding that "I am the one he is using as a means of survival" (Participant #10, 21 years old, Mombasa).

Indeed, it was not uncommon to hear that with time, intimate partners became almost totally reliant on their women for drugs. Indeed, one participant (mentioned previously) who had been involved in transactional sex for accommodation narrated how her partner (who was a cocaine user) also required her to get cocaine for him, in addition to sex in exchange for accommodation. Noting the irony of her situation, she stressed that:

So it became I who was hustling. I could go to him for accommodation, but he did not have any means for getting drugs. He too stays and waits for me, it as if he were my child. So it's as if I am paying him through sex and by looking for what he will use for buying his cocaine. And it's been a daily routine. I feel very annoyed, but I have no other choice (Participant #1, aged 33 years, Kilifi).

Thus, women's economic pressures intersected with inequitable gender power to increase women's exposure to exigent harms of drug use, including sex work:

If a woman is into drugs, the risk is high, because they have double or multiple issues.

They can do drugs, they can have a sexual partner who is a drug user, and at the same time, they might be involved in sex work with multiple other sex clients as well. So the risk is very high (Stakeholder #1, Outreach worker, Mombasa).

Enduring influence of intimate partners on women's drug use

The complexity of the interdependence between women and their intimate partners was a challenge to community based organizations whose goal was to extricate women from drug use. Discussing this interdependence, a stakeholder stated that “*it is difficult for us to talk to them about not associating themselves with peddlers or spouses that use drugs*” (Stakeholder # 3, Outreach manager, Kilifi). The persistence of sex partners' influence was demonstrated by the observation that women were still influenced by intimate partners even after enrolling at residential rehabilitation centers. Because short term shelters and other residential services were not routinely offered to couples, women were soon influenced by their sex partners to return to drug use:

When we shelter them at the temporary shelter houses and we do not host their spouses at the temporary shelter, it is a challenge for us because their spouses normally come saying that they want to see or to talk with the women. That bonding again makes them to go back to risky behaviors (Stakeholder # 3, Outreach Manager, Kilifi).

Not surprisingly, relapsing was commonly attributed to such contacts by stakeholders:

You are rehabilitating this person, then again, she meets with the same, same people that she was using the drugs with...relapsing is very easy (Stakeholder # 2, Ministry of Health Official, Mombasa).

Boyfriends and intimate partners as a moderator of women's injecting drug use

In contrast with the foregoing narrative, which was common among most women, there were cases in which intimate partners were a source of positive influence on women's injecting trajectories. In these cases, these 'protective' intimate partners were discordant with their women in terms of drug-injecting.

Psychosocial support to reduce drug intake

Seven participants reported how their intimate partner tried to moderate their drug injecting practices, primarily through psychological support and verbal dissuasions to moderate their drug injection:

He doesn't use. He knows that I use, but he has sat me down and asked me to try and reduce (Participant # 4, aged 32 years, Kilifi).

Partners who were non-injectors disapproved of injecting because of its perceived side effects. Explaining how she and her drug using partner who was an injector frequently differed, a participant stated that her partners' opposition was motivated by swellings and scars that occurs following injecting into sub-cutaneous tissue:

We differ because injecting is dangerous: while injecting, you might miss a vein and you swell. So you end up having many spots and swellings every time. It makes him angry and he does not find pleasure in that (Participant #9, aged 36 years, Kilifi).

Economic support to quit drug use

Intimate partners' support to women was not confined to psychosocial realm. In a few cases, partners – especially those that were non-drug users –financially supported the women to quit drug use altogether. In an illustrative example, one participant described how her non drug-using partner had paid for her rehabilitation sessions after she had gotten pregnant:

He had tried to help me by all means, he even brought me to this rehab and enrolled me for seven days. He was determined not to desert me (Participant #11, aged 26 years, Kilifi).

Discordancy in drug use patterns and conception

Specific events such as pregnancy played a role in intimate partners influences as might be noted above. More generally however, intimate partners who smoked or snorted heroin but were non-injectors intended to get their female partners to stop injecting, rather than stop use of drugs altogether. Several women who had discordant partners in terms of their drug injecting faced frequent subtle pressure to stop injecting. Despite the persistent nature of these dissuasions all the women who had been influenced by their intimate partners to stop or reduce their injecting drug use reported that these influences had not been unpleasant.

Indeed, most appreciated them. Nevertheless, women struggled to change their injecting drug use given its addictive nature. Commenting on her partner's advice, one woman said that "*he has tried advising me to stop but it is difficult*" (Participant #9, aged 36 years, Kilifi). In many cases, participants were unable to stop injecting, often opting to inject in secret:

I usually pretend that I don't inject. I can hide and pretend that I am smoking so that he doesn't know that I have injected myself (Participant #8, aged 30 years, Kilifi).

Women's ongoing use of drugs in the face of sustained persuasion to modify their drug use was said to "*bring conflict*" (Participant # 4, aged 32 years, Kilifi). In a typical response, another participant described how her continued injecting caused "*misunderstanding*" with her intimate partner, because "*he doesn't want me injecting myself*" (Participant # 8, aged 30 years, Kilifi). Furthermore, although some women tried to conceal their injecting in a bid to preserve intimacy, more often than not, ongoing injecting caused a rift, loss of intimacy or separation, especially when their sex partners were non-injectors or non-drug users. In response to a question regarding whether she continued to use drugs during pregnancy, and the nature of her partner's reaction if she did so, one participant stated that she continued to, and this caused a rift in her relationship:

Yes, I just continued with the drugs. He told me doesn't want it but then I could not stay without using, then we had to call it quits (Participant #11, 30 years old, Mombasa).

Discussion

This paper sought to document the role of boyfriends and intimate partners in shaping drug injecting practices of women who inject drugs in coastal Kenya. Findings revealed that intimate partners wielded significant influence, particularly on the initiation and maintenance of use by women, and that this influence was mediated by inequitable economic and gender-power. While our findings are consistent with other studies reporting the importance of intimate partners and boyfriends in influencing injecting practice of women ([Lazuardi et al., 2012](#), [MacRae and Aalto, 2000](#), [Kirtadze et al., 2015](#), [Higgs et al., 2008](#), [Simmons et al., 2012](#)), three points are worth discussing further.

First is that women tended to have two distinct perspectives about the influence of their intimate partners on their ongoing drug use. For the vast majority, intimate partners enabled or facilitated their entry or sustained injecting drug use, while for fewer others, intimate partners moderated women's drug use behaviors, specifically the practice of injecting. In a recent study, [Rhodes et al. \(2017\)](#) found that intimate partnerships can be a site of both injecting risks and social protection, for example, shielding couples from stigma and other environmental hostilities. [Rhodes and Quirk \(1998\)](#) argue that the proposition that intimate partnerships can be protective of drug use harms opposes the previous portrayal of these relationships as sites that exclusively generate risks.

Thus, our study corroborates findings by [Rhodes et al. \(2017\)](#) of intimate relationships as protective from drug-injecting harms. In our study, men's opposition to injecting was based on their understanding of the risks associated with this practice, including scars and tissue damage following missed veins. This protective influence occurred in situations where couples were discordant, that is, men were either smokers or snorters, or non-drug using, while their female partners were injectors. In addition, this positive influence was reinforced when couples conceived. This finding suggests that achievement of joint goals, such as ideal parenthood is important in moderating the nature of drug use and attendant risks. This finding also supports the assertion that intimate partnerships can provide a location for expression of care, normalcy and 'doing everything together' among drug users, similar to what non-drug using heterosexual couples might aspire in their intimate relationships ([Rhodes et al., 2017](#)). However, our findings go somewhat further by suggesting that leveraging men within discordant drug-using relationships could provide positive psychosocial support to reduce drug consumption and attendant harms among injecting women. To be optimally effective, such interventions should involve couples, rather than just male partners of such women as [Lazuardi et al. \(2012\)](#) also assert.

Second, findings in our study suggested that influence of intimate partners was not entirely predicated on sexual relationships between men and women, but also by intersections with economic inequalities. Although affective grounds – whereby women invested heavily in their social relations with men in pursuit of social expectations and norms – contributed to women's vulnerability, intimate partners' role was bolstered by the fact that men financed, acquired or provided drugs. This is largely in keeping with Connell's (1987) hypothesis that economic and affective causes often co-exist to enforce gender-power and inequality. Thus

the observed influence of gendered acquisition of drugs on women's drug use is a product of economic inequalities, which in the study context are often driven by gendered division of labor. The majority of women in our study did not have stable source of income, in a context where and gender norms designate men as breadwinners and decision-makers within families and couples ([Sarna et al., 2009](#)). Similar intersections of economics and gendered-acquisition of drugs as an enabler of intimate partners' influence has been noted elsewhere ([Simmons et al., 2012](#)). However, this intersection is particularly important given the economic basis for transactional sexual relationships noted in our sample. Evidence from other studies show that female injecting drug use in the context of intimate partnerships is often intertwined with risky sexual practices that aggravate the risk of HIV acquisition ([Khuat et al., 2015](#), [Higgs et al., 2008](#)). In our study context, this link has additional relevance given the fact that almost a fifth of all injecting drug users nationally are infected with HIV ([NACC, 2014](#), [Tun et al., 2015](#)). Yet, despite the importance of potential HIV risks, women's economic needs governed whether and how men influenced their injecting drug use and sexual behaviors.

It follows that intimate partners' influences could be tampered if women were more empowered economically. Evidence from other countries support this proposition. To start with, a study from Indonesia reported that women who were financially independent had more control on their drug use and attendant sexual risks ([Lazuardi et al., 2012](#)). In another example from the USA, livelihood, microfinance and other approaches that increased employability of female drug users were associated with a reduction in both their drug use and dependency on sex work as a source of income ([Sherman et al., 2006](#)). As such, incorporating upstream livelihood, employment, or other forms of income-boosting interventions into existing harm reduction services could cushion women from negative influences of their male sex partners, by redistributing economic power. Given the limited data available on female injecting drug users in Kenya, and the increasing calls to deliver gender-sensitive interventions for this population globally ([Lambdin et al., 2013](#), [Azim et al., 2015](#), [Pinkham et al., 2012](#), [Simpson and McNulty, 2008](#)), our study suggest that that the integration of livelihood / income empowerment interventions will strengthen women's independence.

Third, and based on the above, intimate partners' influences observed in our study required the operation of wider macro-environmental factors. Thus, apart from economics, the availability of drugs, peddling, and the lack of couple based treatment opportunities or

shelters all have a bearing of how women use drugs in the study context. The intersection of social with structural determinants of drug use was notable in our study, and has been noted among aboriginal Canadian women who inject drugs ([Shahram et al., 2017](#), [Shahram, 2016](#)). Therefore, women's drug injecting (and associated sexual behaviors) should be viewed broadly as a product of their micro-level relationships, lifestyles, as well as macro-level social, economic, healthcare and policy environments.

Given that harm reduction programs and policy are still nascent and coverage of harm reduction interventions remain limited in Kenya ([Rhodes et al., 2016](#)), there is an opportunity to strengthen upstream macro-interventions as part of holistic harm reduction approach. Thus, the above suggestions related to couple- and economics-based interventions should be implemented in a context where a comprehensive package of harm reduction interventions is available including opioid substitution therapy, clean needles and syringes, and condoms among others, all of which mitigate harms of injecting drug use including HIV ([WHO et al., 2009](#)). At the same time, and as implied in the going narrative and elsewhere, there is a need for both harm reduction national policies and services to cushion women from the economic, gender and other macro-environmental drivers of risky injecting and/or sexual behavior, by shifting from the default emphasis on micro-level interventions to also include macro-level interventions ([Mburu et al., 2019](#), [Khuat et al., 2015](#)). From a social ecological perspective, a combination of individual, social and structural interventions is essential ([Sallis et al., 2008](#)).

Limitations

Participants in this study were in contact with community-based harm reduction services. As a result, their experiences and perspectives might not reflect that of women who are not accessing such services. In addition, participants' responses may have been influenced by recall or social response bias common in studies of drug use ([Latkin et al., 1993](#)). This is relevant given that participants in FGDs were less willing to divulge sensitive information related to their intimate partners. As may be noted from the results section, majority of presented quotes were from IDI participants. In addition, our study sites were situated in the coastal region, where, alongside Nairobi, injecting drug use is more established compared to other regions in Kenya ([Syvertsen et al., 2015](#), [Kurth et al., 2015](#)). This disparity could potentially limit the applicability of our data to women in other major cities in Kenya. Nevertheless, the sample represents a wide variety of women, including single, married and those in cohabiting arrangements in a coastal community where gender-based economic,

sexual inequalities exist. Thus, our study's findings are useful in informing the potential development of gender-sensitive interventions at the coast as well as future studies elsewhere.

Because this was a secondary analysis of a qualitative dataset, participants' accounts were not uniformly rich across different roles that intimate partners played along the trajectory. However, this limitation is not unique to our study: it is not uncommon to have gaps in some variables or concepts of interest to a secondary analyst ([Bryman, 2012](#)). That said, the interpretation of the available data may still have been affected by the limited involvement of the authors in the initial co-construction of data in the primary IDI and FGDs, which is a common problem in secondary analysis ([Fielding and Fielding, 2000](#), [Hammersley, 1997](#)). However, this study used an established social ecological framework to prevent complete de-contextualization of our findings, while supporting generation of new knowledge ([Torraco, 1997](#), [Moore, 2005](#)). Furthermore, while impartiality in qualitative analysis is difficult to achieve ([Bryman, 2012](#)), rigorous use of codes and memos facilitated derivation of themes grounded in the data, thereby limiting potential for biased and de-contextualized interpretation. More fundamentally however, this study contributes to the scarce literature related to secondary qualitative data analysis.

Conclusion

As Kenya grapples with the reality of rising injecting drug use, the results of this study support the general consensus that sexual partnerships affect women's drug use significantly, while going further to illustrate the distinct influence of intimate partners as facilitators or moderators of women's injecting drug use. As such, for the women involved in this study, intimate partnerships provided a context for risky behaviors or social protection. These results demonstrate a need for introducing couple-based harm reduction interventions leveraging on male partners who can support their female partners to adopt safe drug using behaviors. The findings support the call to incorporate upstream livelihood interventions to reduce women's economic dependency on male intimate partners. For optimal impact, these interventions should be implemented within a context in which harm reduction interventions universally available and where gender transformative approaches are used to reduce inequalities. Given that economics and other macro-determinants could mediate intimate partners' influence on women's drug use, future studies should explore both micro-interpersonal as well as macro-structural contexts of women to better understand how social

influences affect female injecting drug use.

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Authors' contributions

GM was involved in the design of the primary study on which this analysis is based. GM analyzed the data and drafted the manuscript. ML and PH supervised the PhD thesis on which this manuscript is based. All authors read and approved the final manuscript.

Availability of data

Data used in this manuscript cannot be made publicly available due to the ethical restriction stated in the ethical approval. Injecting drug use is criminalized and stigmatized in Kenya. Reasonable requests for data can be directed to the corresponding author.

Conflict of Interest

All authors state that no conflicts of interest exist.

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