Barriers and facilitators of access to HIV, harm reduction and sexual and reproductive health services by women who inject drugs: role of community-based outreach and drop-in centers.

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Abstract

There is limited data regarding women who inject drugs, and how harm-reduction services can be made more women-centered. This study explored experiences of Kenyan women who inject drugs, with regard to access to HIV, harm reduction and sexual and reproductive health (SRH) services. A total of 45 women who inject drugs and 5 key stakeholders participated indepth interviews and focus group discussions. Thematic analysis of the data revealed that stigma, long distances, lack of confidentiality, user fees, multiple appointments, drug users' unfamiliarity with health facilities, disconnect in communication with healthcare providers, and healthcare providers' lack of understanding of women's needs were factors that impede women's access to health services. Community-based services, comprising of outreach and drop-in centers mitigate these barriers by building trust, educating women on their health and rights, linking women to health facilities, sensitizing health providers on the needs of women who inject drugs, and integrating women's SRH services into community-based harmreduction outreach. Inclusion of SRH services into community-based harm-reduction activities increased women's interest and access to harm-reduction interventions. These findings underscore the need to strengthen community-based programming for women who inject drugs, and to integrate SRH services into needle and syringe exchange programs.

Key words: HIV, injecting drug use, women, sexual and reproductive health, integration.

Introduction

Human Immunodeficiency Virus (HIV) is a significant cause of morbidity globally. In Kenya HIV is generalized, with a national prevalence of 5.6% (NACC, 2014). Although HIV is predominantly transmitted via heterosexual sex, importance of injecting drug use (IDU) is emerging (NASCOP, 2014; Petersen, Myers, van Hout, Pluddemann, & Parry, 2013). Almost a fifth (18.7%), of all 18,327 injecting drug users nationally are infected with HIV (NACC, 2014; Tun et al., 2015). Within this IDU-related HIV epidemic, gender and geographic disparities exist. Prevalence is higher at the coast and among women (Kurth et al., 2015; Tun et al., 2015).

Globally, women who inject drugs (WWID) face unique vulnerabilities. Compared to men, they are more likely to be homeless, have more sexual partners, and engage in sex work (Lambdin et al., 2013; Williams et al., 2007). Overlapping sexual relationships affect women's injecting risks more than they affect men (Evans et al., 2003). Additionally, gender vulnerabilities prevent WWID from accessing services. For instance, WWID face stronger stigma from their communities and health professionals (Azim, Bontell, & Strathdee, 2015). Due to sociocultural reasons, they rarely gather at outdoor areas where male injectors congregate, which prevents them from being reached by outreach interventions (Zamudio-<u>Haas, Mahenge, Saleem, Mbwambo, & Lambdin, 2016</u>). Few WWID access antenatal services which are a spring board for HIV and child services (Peters et al., 2003). Consequently, WWID are less likely to enter drug treatment compared to men (Greenfield et al., 2007). Besides affecting their own health, women's injecting drug use has negative consequences on their children's well being (Howell, Heiser, & Harrington, 1999).

To mitigate harms of injecting drug use, a comprehensive package of harm reduction interventions is recommended for all injecting drug users (<u>WHO, UNODC, & UNAIDS</u>,

2009). This package includes needle and syringe exchange programs (NSP); opioid substitution therapy (OST); education interventions; and, prevention, diagnosis and treatment of hepatitis, tuberculosis (TB), HIV and other sexually transmitted infections (STIs) (WHO et al., 2009). In Kenya, a harm reduction approach was incorporated into the national HIV strategy in 2013, following which harm reduction interventions were introduced in public facilities (NASCOP, 2013).

Precise data on WWID's access to harm reduction services in Kenya are lacking. However, anecdotal observations suggest that gender-related inequalities in service access exist. While is essential to provide gender-sensitive services to WWID, provision of sexual and reproductive health (SRH) services, including contraception is limited (Mburu et al., In Press).

Given the known difficulties of accessing conventional health services by WWID (<u>Hunter & Judd, 1998</u>), community-based outreach programs could be a particularly useful for reaching them, especially if they are tailored to their needs, and are socially, rather than just bio-medically oriented. In spite of their potential utility in reaching WWID, majority of community-based outreach programs are not adapted to WWID's SRH and social circumstances (<u>Armstrong, 2017; Lambdin et al., 2013; Pinkham, Stoicescu, & Myers, 2012</u>).

In Kenya, there is little experience and documentation regarding WWID, which is to be expected, given the nascent nature of harm reduction programming nationally. However, there is a need to identify effective approaches of providing tailored services to WWID. This paper reports experiences of WWID accessing conventional health services, as well as community-based based harm reduction outreach services that had been designed to be more women-centered.

Methods

Study design

Data were generated from a 2015 qualitative study conducted in Kilifi and Mombasa.

Study setting

In these two coastal towns, harm reduction interventions were being provided to injecting drug users through community-based outreach by three community-based organisations (CBOs): Kenya AIDS NGOs Consortium (KANCO), Reach out Centre Trust (REACH OUT) and the Muslim Education and Welfare Association (MEWA). As opposed to relying on drug users to seek health facilities, outreach brought services to them. Each outreach team comprised of a lead outreach worker and 3-4 peer educators, some of whom were former drug users.

Outreach services were complemented with services at drop in-centers, as is the case in other countries (<u>Ti et al., 2015</u>; <u>Zamudio-Haas et al., 2016</u>). A key feature of the drop-in centers was their informality, closeness and familiarity to drug users. At drop-in centers, services were provided by multi-disciplinary teams comprising of managers, coordinators, counsellors, clinical officers, nurses and paralegals.

Services and interventions

The above services were initiated in mid-2012. In 2014, the program was expanded to include gender-sensitive SRH interventions (**Table 1**).

Table 1. Services provided to women who inject drugs at the study sites.

Service domain.	Services provided through	Services provided at	Referrals to private or
	community outreach.	drop-in centres.	government health and
			social services.
Prevention and	Condoms, HIV testing,	HIV testing and	Referrals for confirmation
treatment of HIV	information, communication	counselling.	of HIV status, and
and co-infections.	and education on HIV and		screening of Hepatitis C
	STIs.		and Tuberculosis.
Harm reduction	Clean needles and syringes,	Addiction counselling, and	Referrals for OST/
services.	alcohol swabs, cotton wool.	first aid for violence or	medication-assisted
		overdose.	treatment (MAT) with

			methadone.
Sexual and	Information on family	Antenatal education, sister-	Referrals for long-acting
reproductive	planning, provision of	to-sister counselling, and	contraceptives, antenatal
health services.	hygiene packages/tampons	provision of oral	care, and cervical cancer
	and oral contraceptive pills.	contraceptive pills.	screening.
Social and child	Transportation to health	Personal care (shower,	Referrals for post-sexual
care related	facilities, and provision of	soap, toothbrush/paste,	violence services,
services.	personal care kits.	lotions), meals, short-term	including legal assistance.
		shelter, and diapers for	
		children.	

Participant recruitment

WWID were invited to participate by outreach workers, were screened, and based on availability, scheduled for IDIs or FGDs. To participate, women had to be aged ≥ 18 years, be within reproductive age bracket of 18–49 years, and have injected drugs within 90 days. For triangulation purposes, several stakeholders were purposively selected to participate, based on their expertise in providing services to injecting drug users.

Data collection

IDIs and FGDs explored drug use, SRH, HIV, and participants' experiences with outreach or conventional government health services. Data were collected by two experienced researchers and speakers of Swahili (SA and JN) in private rooms at drop-in centers, or at key stakeholders' offices. All IDIs and FGDs were conducted in Swahili or English. IDIs and FGDs were audio recorded and lasted 45-60 minutes. At the end of the IDIs and FGDs, a brief questionnaire was used to collect socio-demographic data.

Data analysis

Thematic analysis was conducted (<u>Bryman, 2012</u>). IDI and FGD data were transcribed in English. Transcripts were imported into Nvivo® (<u>Bazeley, 2007</u>), and used to generate initial nodes and codes independently by GM and JN. These were compared, and differences

resolved through consensus. Preliminary codes were refined by GM through constant comparison (<u>Silverman, 2001</u>) and categorized to generate descriptive and analytical themes (<u>Bryman, 2012; Charmaz, 2000</u>).

Ethical considerations

Informed consent was obtained from participants, who retained a right to withdraw at any time. Ethics committee of the National Commission for Science Technology and Innovation authorized the study (P/15/8861/4510).

Results

Participant characteristics

Overall, 45 WWID took part: 24 participated in IDIs (12 per site) and 21 attended three FGDs (2 sessions in Mombasa and 1 session in Kilifi) (**Table 2**). Additionally, 5 key stakeholders, of whom three were women, participated. These included a community health worker (n=1), outreach workers (n=2), a ministry of health official (n=1) and a CBO manager (n=1).

	IDI	FGDs	Total	
Characteristic	(n=24)	(n=21)	(n=45)	%
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%

Table 2. Participant characteristics.

Single	11	13	24	53%	
Unknown	1	0	1	2%	
Income source			I	1	•
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%	· ·
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%	

Emerging themes

Descriptive themes were related to barriers and facilitators to health service access by WWID. Specifically, data pointed to a range of barriers which were experienced largely within conventional health services, and a range of facilitating factors, mostly emanating from outreach services, which enabled them to access essential services. An emerging analytical theme was related to the integration of SRH services in harm reduction programs.

Participants' experiences with conventional health services: barriers to access to services

Several barriers to accessing conventional health services emerged. To start with, participants encountered stigmatizing attitudes at conventional health facilities. Denoting her interactions with health providers, a participant reported that "*they despise us a lot*." She added that:

Should they know that you are an addict, they send you backwards on the queue or tell you to go and come later. (Participant # 10, Kilifi).

As noted above, WWID were frequently isolated and often served last. One participant asserted that "they tell each other "that is a drug user", they take you round from one place to another once they know you are a drug user, and you end up being the last one to be served." (Participant # 5, Kilifi). A stakeholder explained that negative interactions occurred because "the health care workers did not understand why and how they needed to serve female drug users". (Stakeholder # 3, Kilifi).

This stigmatization meant that some participants had "*never gone back*" (Participant # 10, Kilifi). Others attempted to hide their drug-using identity at health facilities:

I was forced to tell the truth that I was an addict. It was by luck that I meet a good nurse. Had I have found the wrong one, I would have been insulted a lot, and not attended to. (Participant # 10, Mombasa).

Long queues at health facilities were described as particularly difficult to navigate, especially when experiencing drug withdrawals:

Since I had 'arosto' [drug withdrawal] and could not queue, I just left. (Participant # 10, Mombasa).

Additionally, lack of privacy and frequent interruptions in counselling rooms was a barrier, especially in relation to HIV services:

I was talking to that counselor and people kept coming into her office. When someone comes in, you freak; you fear that maybe they have known what is going on. (Participant # 8, Mombasa).

Often, participants had to travel by public transport to access services, which was a barrier. One participant rhetorically asked "*will you take 40 shillings to go to the hospital or will you first look for drugs?*" (Participant # 5, Kilifi). WWID's de-prioritization of their healthcare was often exacerbated by user-fees:

The provider who injects...told me to give out 50 shilling so that I can be injected. I told him I don't have. I wasn't injected. (Participant # 5, Kilifi).

Lastly, multiple appointments were blamed for missed services. Participants rued having to remember different appointment dates, yet given their drug use, they were not very adept at remembering multiple dates:

I went last week...first they gave me an appointment on the following day. On the day, I remembered when it was late. Now they told me there is another date, so I'm now waiting for the next appointment, although I have not confirmed on what day it will be, but I will go there today to confirm. (Participant # 1, Kilifi).

	C			
Thoma	Health system	Outreach elements	Illustrative quotes	

Theme	Health system related barrier	Outreach elements that counter barriers	Illustrative quotes
Attitudes.	Stigma/judgmental	Trust, and personal	The outreach workers are okay. They don't have anything against us. If you have
	communication.	support.	problems, you tell them; they will help you. (Participant # 6, Kilifi).
Accessibility.	Long distances.	Provision of transport.	They tell you the day they will come and take you to the hospital. (Participant # 5, Kilifi).
		Bringing services closer.	They visit us, educate us, and bring us condoms and needles. (Participant # 6, Mombasa).
Convenience.	Long queues, and 'seen last'.	Referral slips that facilitate access to services.	Immediately they see this paper from REACHOUT they treat you with respect; if you don't have it, you can be really mistreated. (Participant # 12, Mombasa).
Confidentiality.	Lack of privacy in health clinics.	Confidential with drug use information.	The outreach workers will not leave you if you get any problemyou could get sick because you are addicted to drugsthey will attend to you without telling on you. (Participant # 7, Mombasa).
Cost.	User fees.	Fee-free referral vouchers.	People from REACHOUT will write a referral to go to a certain hospital. Because of their referral when you get there, you will be treated [for free]. (Participant # 7, Mombasa).
Health provider competency.	Unfamiliarity of health providers with the needs of drug users.	Use of outreach workers/ peer educators who understand women's needs.	When you get to the hospital they connect you to health care workers. The outreach worker will tell them your problem, then you get treatment. (Participant # 7, Kilifi).
Navigation of	Unfamiliarity of	Accompaniment and	If you come along with an outreach worker they give you the required services but if
health services.	drug users with health facilities.	assisted navigation.	you come alone, they may not attend to you. (Participant # 10, Mombasa).
	Multiplicity of appointments.	Appointments reminders.	We go to the field to remind them that they have to come. (Stakeholder # 1, Kilifi).
	Unlinked vertical	Integrated services.	We perform blended outreach where we bring them together and offer them health
	services.		services related to reproductive health, TB, hepatitis and HIV. (Stakeholder # 1, Kilifi)

Value of outreach services in increasing access to harm reduction, HIV and reproductive services

Participants valued outreach teams as a source of information, reporting outreach workers *"come and educate us"* regarding *"protection from infections"* (Participant # 7, Mombasa) or *"how to stop drug addiction and to go to rehabilitation"* (Participant # 11, Kilifi).

Participants highlighted how outreach brought commodities such as injecting needles, syringes, HIV testing, condoms and combined oral contraceptive pills directly to them. A participant stated that *"they visit us in our residence, bringing us syringes and needles"* (Participant # 11, Kilifi). Free transport and appointment reminders were regularly offered by outreach workers as illustrated in **Table 3**. In other cases, outreach workers collected drugs on behalf of WWID who were experiencing difficulties:

The outreach people help us; sometimes they take the medicines for us and they bring it to [our] dens. (Participant # 5, Kilifi).

While free transport was important, it was accompaniment to health facilities by outreach teams that was a highly regarded as it often meant that women were "given free services" and were not "looked down upon" (Participant # 5, Kilifi). This was particularly important given that as shown in **Table 2**, most WWID were unemployed. Accompaniment was particularly valuable as outreach workers - including peer educators who were former drug users - understood drug users' problems well and hence mediated communications with health care workers while at the same time enabling WWID to navigate unfamiliar health facilities. Because most WWID were uneducated as illustrated in **Table 2**, they appreciated having someone "who will be in front at the doctor" or who could "talk" and explain their health needs to health providers, (Participant # 5, Kilifi). Outreach workers were familiar with lingo used by both WWID and healthcare providers, and were therefore well positioned to mediate this communication. When accompaniment was not possible, referral slips and

vouchers from outreach workers 'unlocked doors', and enabled women to be treated with respect as described in **Table 3**.

In contrast to the fear of breach of confidentiality, stigmatisation and social distancing associated with health facilities, outreach workers had gained participants' trust, which according to one participant was due to "*the way they treat us well; they do not isolate us*" (Participant # 7, Kilifi). Describing her interaction with outreach workers, a participant described that it was common to "*meet them if you have any problem*" and discuss sensitive matters including "*sexual issues, in case there is someone who has sexually assaulted you*" (Participant # 8, Kilifi). Positive perceptions were also reported in relation to a range of psychosocial support provided at drop-in centers as illustrated in **Table 1**. For instance, one participant remarked that "*they were giving us food, and clothes; if you come here you are free to have a bath*" (Participant # 7, Mombasa).

Integration of reproductive health services as an additional incentive for harm reduction services

Inclusion of SRH services in the outreach program leveraged on the motivation for contraception and need for childcare among WWID, and attracted them to harm reduction services, including drop-in centers:

I have seen change as an outreach worker. I have seen them improve in terms of their interest in needles and syringes because of this sexual and reproductive program. (Stakeholder # 2, Kilifi).

These findings were supported by a program manager, who asserted that "*we have seen that clients themselves are very committed; they want these services*." (Stakeholder # 3, Kilifi). Before inclusion of SRH services, providing appropriate services for WWID was said to be difficult: We didn't have a specific package for females, and there was no project that was addressing issues of women. (Stakeholder # 1, Mombasa).

In contrast to the previous situation, integration of SRH into harm reduction was seen as "bringing about positive change" as it was "benefitting a lot of women who have SRH needs that for a long time remained unaddressed." (Stakeholder # 1, Mombasa).

Discussion

Women who inject drugs are known to have low access to harm reduction services and other essential health services. Our study documents specific barriers that prevent WWID's access to health services at the Kenyan Coast. These barriers are not necessarily surprising, and they add on existing literature regarding barriers of access to health services among drug users in general (Appel, Ellison, Jansky, & Oldak, 2004; Appel & Oldak, 2007; Bobrova et al., 2006; Guise, Rhodes, Ndimbii, Ayon, & Nnaji, 2016; Mlunde et al., 2016; Nambiar, Stoove, & Dietze, 2014) and specifically women (Azim et al., 2015; Khuat, Morrow, Nguyen, & Armstrong, 2015; Zamudio-Haas et al., 2016).

At the same time, our study shows the value of community-based outreach services in mitigating these barriers and facilitating access to harm reduction and SRH services. Our findings corroborate studies documenting the value of outreach and peer-based approaches in facilitating access to NSP and HIV services for drug users (Guise et al., 2016; Hayashi et al., 2015; Morgan, Lee, & Sebar, 2015; Ti et al., 2015), including women (Zamudio-Haas et al., 2016).

A unique contribution of our study is in advancing literature related to potential contribution of outreach services as strategy for integrating gender-sensitive SRH services within harm reduction programs. In our study context, integrating SRH services increased demand for harm reduction services, which is particularly relevant given existing gap in contraception and other SRH services for WWID (<u>Mburu et al., In Press</u>). Integrating harm

reduction with HIV services has been called for by others (<u>Armstrong, 2017</u>; <u>Bachireddy et</u> al., 2014; <u>Guise et al., 2017</u>; <u>Pinkham et al., 2012</u>), and additionally we argue, integration of SRH services offered through outreach is acceptable in our study setting. In a rare study examining this issue <u>Armstrong, Kenen, and Samost (1991</u>) found that integrating SRH and drug treatment was feasible. Integration of other services may be increasingly needed to ensure a holistic response to the health and social circumstances of women. For instance, drop-in centers have been used as a space to provide nutritional, self-care and other social support (<u>Kerr et al., 2010</u>; <u>Ti et al., 2015</u>). In our context, provision childcare interventions enhanced the utility drop-in centres for WWID with children.

Implications for programs and policy

Given this value and demand-creating potential, integrating SRH into harm reduction would be an effective strategy for increasing uptake of harm reduction services by WWID. Our argument is not to necessarily have women-only drug treatment programs as <u>Kermode</u>, <u>Songput</u>, <u>Sono</u>, <u>Jamir</u>, <u>and Devine (2012)</u> call for, but rather to include program elements that address the unique SRH needs of WWID. The choice of women-only programs should be based on the population size of WWID in each context (<u>Armstrong et al., 1991</u>), bearing in mind that women-only treatment is not necessarily more effective than mixed-gender treatment (<u>Greenfield et al., 2007</u>). However, harm reduction programs that address unique needs of drug-using women have been shown to be effective (<u>Greenfield et al., 2007</u>), acceptable (<u>Armstrong et al., 1991</u>) and beneficial to children of WWID (<u>Pinkham et al., 2012</u>).

We hypothesize that services for WWID in our context could be further improved by the inclusion of additional gender-sensitive services, such as engaging women as outreach workers and peer educators, further sensitizing health providers regarding unique needs of WWID, supporting WWID to access MAT/OST, strengthening interventions related to gender-based violence, strengthening referrals for immunization and post-natal care of children of WWID, creating opportunities for screening of minor ailments of children of WWID at drop-in centers, and creating opportunities for economic empowerment for WWID. Future research should document the precise nature of services that WWID desire. Nevertheless, addressing these needs will require cross-sectoral collaboration between social and health services, paralleling diverse social and structural determinants of health and wellbeing of WWID and their families.

Limitations

Generalizability of our findings is limited by convenience sampling. Our participants were in contact with outreach services, and their behaviours differ from those not reached by outreach (Coyle, Needle, & Normand, 1998). Their responses may have been influenced by social desirability bias given that they were recruited by outreach workers in the same program they were asked to discuss.

Conclusion

WWID are more likely than men to face multiple barriers preventing their access to harm reduction and other essential services (Tuchman, 2010). Increasing women's access to comprehensive services is likely to curb HIV infections, improve their quality of life, enable achievement of national and global HIV and hepatitis prevention goals. Our findings show that outreach has a role in increasing access to harm reduction services, and that integrating SRH services into harm reduction services can increase demand and motivation of WWID to use harm reduction interventions, and could potentially improve the welfare of their children.

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Disclosure statement

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References

- Appel, P. W., Ellison, A. A., Jansky, H. K., & Oldak, R. (2004). Barriers to enrollment in drug abuse treatment and suggestions for reducing them: opinions of drug injecting street outreach clients and other system stakeholders. Am J Drug Alcohol Abuse, 30(1), 129-153.
- Appel, P. W., & Oldak, R. (2007). A preliminary comparison of major kinds of obstacles to enrolling in substance abuse treatment (AOD) reported by injecting street outreach clients and other stakeholders. Am J Drug Alcohol Abuse, 33(5), 699-705. doi:10.1080/00952990701522641
- Armstrong, G. (2017). Commentary on McFall et al. (2017): The need for harm reduction interventions that are effective for women who use drugs. *Addiction*, *112*(8), 1488-1489. doi:10.1111/add.13856
- Armstrong, K. A., Kenen, R., & Samost, L. (1991). Barriers to family planning services among patients in drug treatment programs. *Fam Plann Perspect, 23*(6), 264-266, 270-261.
- Azim, T., Bontell, I., & Strathdee, S. A. (2015). Women, drugs and HIV. *Int J Drug Policy, 26 Suppl 1*, S16-21. doi:10.1016/j.drugpo.2014.09.003
- Bachireddy, C., Soule, M. C., Izenberg, J. M., Dvoryak, S., Dumchev, K., & Altice, F. L. (2014). Integration of health services improves multiple healthcare outcomes among HIVinfected people who inject drugs in Ukraine. *Drug Alcohol Depend*, *134*, 106-114. doi:10.1016/j.drugalcdep.2013.09.020
- Bazeley, P. (2007). Qualitative data analysis with NVIVO. . London Sage
- Bobrova, N., Rhodes, T., Power, R., Alcorn, R., Neifeld, E., Krasiukov, N., . . . Maksimova, S. (2006). Barriers to accessing drug treatment in Russia: a qualitative study among injecting drug users in two cities. *Drug Alcohol Depend*, *82 Suppl* 1, S57-63.
- Bryman, A. (2012). Social Research Methods: Oxford University Press.
- Charmaz, K. (2000). Grounded theory: Objectivist and constructivist methods. In N. K. Denzin & L. Y.S. (Eds.), Handbook of Qualitative Research (pp. 509–535). Thousand Oaks, CA: Sage.
- Coyle, S. L., Needle, R. H., & Normand, J. (1998). Outreach-based HIV prevention for injecting drug users: a review of published outcome data. *Public Health Rep, 113 Suppl 1,* 19-30.
- Evans, J. L., Hahn, J. A., Page-Shafer, K., Lum, P. J., Stein, E. S., Davidson, P. J., & Moss, A. R. (2003). Gender differences in sexual and injection risk behavior among active young injection drug users in San Francisco (the UFO Study). *J Urban Health, 80*(1), 137-146. doi:10.1093/jurban/jtg137
- Greenfield, S. F., Brooks, A. J., Gordon, S. M., Green, C. A., Kropp, F., McHugh, R. K., . . .
 Miele, G. M. (2007). Substance abuse treatment entry, retention, and outcome in women: a review of the literature. *Drug Alcohol Depend*, *86*(1), 1-21. doi:10.1016/j.drugalcdep.2006.05.012
- Guise, A., Rhodes, T., Ndimbii, J., Ayon, S., & Nnaji, O. (2016). Access to HIV treatment and care for people who inject drugs in Kenya: a short report. *AIDS Care, 28*(12), 1595-1599. doi:10.1080/09540121.2016.1191606
- Guise, A., Seguin, M., Mburu, G., McLean, S., Grenfell, P., Islam, Z., . . . Rhodes, T. (2017). Integrated opioid substitution therapy and HIV care: a qualitative systematic review

and synthesis of client and provider experiences. *AIDS Care*, 1-10. doi:10.1080/09540121.2017.1300634

- Hayashi, K., Ti, L., Avihingsanon, A., Kaplan, K., Suwannawong, P., Wood, E., . . . Kerr, T. (2015). Compulsory drug detention exposure is associated with not receiving antiretroviral treatment among people who inject drugs in Bangkok, Thailand: a cross-sectional study. *Subst Abuse Treat Prev Policy*, *10*, 16. doi:10.1186/s13011-015-0013-6
- Howell, E. M., Heiser, N., & Harrington, M. (1999). A review of recent findings on substance abuse treatment for pregnant women. *J Subst Abuse Treat*, *16*(3), 195-219.
- Hunter, G. M., & Judd, A. (1998). Women injecting drug users in London: the extent and nature of their contact with drug and health services. *Drug Alcohol Rev, 17*(3), 267-276. doi:10.1080/09595239800187101
- Kermode, M., Songput, C. H., Sono, C. Z., Jamir, T. N., & Devine, A. (2012). Meeting the needs of women who use drugs and alcohol in North-east India - a challenge for HIV prevention services. *BMC Public Health*, *12*, 825. doi:10.1186/1471-2458-12-825
- Kerr, T., Hayashi, K., Fairbairn, N., Kaplan, K., Suwannawong, P., Zhang, R., & Wood, E. (2010). Expanding the reach of harm reduction in Thailand: experiences with a drug user-run drop-in centre. *Int J Drug Policy*, *21*(3), 255-258. doi:10.1016/j.drugpo.2009.08.002
- Khuat, O. T., Morrow, M., Nguyen, T. N., & Armstrong, G. (2015). Social context, diversity and risk among women who inject drugs in Vietnam: descriptive findings from a cross-sectional survey. *Harm Reduct J*, *12*, 35. doi:10.1186/s12954-015-0067-9
- Kurth, A. E., Cleland, C. M., Des Jarlais, D. C., Musyoki, H., Lizcano, J. A., Chhun, N., & Cherutich, P. (2015). HIV Prevalence, Estimated Incidence, and Risk Behaviors Among People Who Inject Drugs in Kenya. J Acquir Immune Defic Syndr, 70(4), 420-427. doi:10.1097/qai.0000000000000769
- Lambdin, B. H., Bruce, R. D., Chang, O., Nyandindi, C., Sabuni, N., Zamudio-Haas, S., . . .
 Mbwambo, J. (2013). Identifying programmatic gaps: inequities in harm reduction service utilization among male and female drug users in Dar es Salaam, Tanzania.
 PLoS One, 8(6), e67062. doi:10.1371/journal.pone.0067062
- Mburu, G., Ndimbii, J., Ayon, S., Mlewa, O., Mbizvo, M., Kihara, C., & Ragi, A. (In Press). Contraceptive use among women who inject drugs: Motivators, barriers and unmet needs. *Women's Reproductive Health*.
- Mlunde, L. B., Sunguya, B. F., Mbwambo, J. K., Ubuguyu, O. S., Shibanuma, A., Yasuoka, J., & Jimba, M. (2016). Correlates of health care seeking behaviour among people who inject drugs in Dar es Salaam, Tanzania. *Int J Drug Policy*, *30*, 66-73. doi:10.1016/j.drugpo.2015.12.012
- Morgan, K., Lee, J., & Sebar, B. (2015). Community health workers: a bridge to healthcare for people who inject drugs. *Int J Drug Policy, 26*(4), 380-387. doi:10.1016/j.drugpo.2014.11.001
- NACC. (2014). *Kenya AIDS Epidemic Update 2014* Retrieved from <u>http://www.unaids.org/sites/default/files/country/documents/KEN narrative repor</u> <u>t 2014.pdf</u>
- Nambiar, D., Stoove, M., & Dietze, P. (2014). A cross-sectional study describing factors associated with utilisation of GP services by a cohort of people who inject drugs. *BMC Health Serv Res, 14*, 308. doi:10.1186/1472-6963-14-308

- NASCOP. (2013). Kenya National Guidelines for the Comprehensive Management of the Health Risks and Consequences of Drug Use. Nairobi: National AIDS and STI Control Programme (NASCOP). Ministry of Health, Government of Kenya.
- NASCOP. (2014). *Kenya AIDS Indicator Survey 2012. Nairobi: Republic of Kenya Ministry of Health, 2014.* Nairobi: National AIDS and STI Control Programme (NASCOP), Ministry of Health, Kenya.
- Peters, V., Liu, K. L., Dominguez, K., Frederick, T., Melville, S., Hsu, H. W., . . . Thomas, P. (2003). Missed opportunities for perinatal HIV prevention among HIV-exposed infants born 1996-2000, pediatric spectrum of HIV disease cohort. *Pediatrics, 111*(5 Pt 2), 1186-1191.
- Petersen, Z., Myers, B., van Hout, M. C., Pluddemann, A., & Parry, C. (2013). Availability of HIV prevention and treatment services for people who inject drugs: findings from 21 countries. *Harm Reduct J*, 10, 13. doi:10.1186/1477-7517-10-13
- Pinkham, S., Stoicescu, C., & Myers, B. (2012). Developing effective health interventions for women who inject drugs: key areas and recommendations for program development and policy. *Adv Prev Med*, *2012*, 269123. doi:10.1155/2012/269123
- Silverman, D. (2001). *Interpreting qualitative data. Methods for analyzing talk text and interaction (2nd ed.)*. London: Sage Publication.
- Ti, L., Hayashi, K., Hattirat, S., Suwannawong, P., Kaplan, K., & Kerr, T. (2015). 'Drug users stick together': HIV testing in peer-based drop-in centres among people who inject drugs in Thailand. *Sex Health*, *12*(3), 263-268. doi:10.1071/sh14107
- Tuchman, E. (2010). Women and addiction: the importance of gender issues in substance abuse research. *J Addict Dis, 29*(2), 127-138. doi:10.1080/10550881003684582
- Tun, W., Sheehy, M., Broz, D., Okal, J., Muraguri, N., Raymond, H. F., . . . Geibel, S. (2015). HIV and STI prevalence and injection behaviors among people who inject drugs in Nairobi: results from a 2011 bio-behavioral study using respondent-driven sampling. *AIDS Behav, 19 Suppl 1*, S24-35. doi:10.1007/s10461-014-0936-3
- WHO, UNODC, & UNAIDS. (2009). Technical Guide for Countries to Set Targets for Universal Access to HIV Prevention, Treatment and Care for Injecting Drug Users. Geneva, Switzerland: WHO, UNODC and UNAIDS.
- Williams, M. L., McCurdy, S. A., Atkinson, J. S., Kilonzo, G. P., Leshabari, M. T., & Ross, M. W. (2007). Differences in HIV risk behaviors by gender in a sample of Tanzanian injection drug users. *AIDS Behav*, *11*(1), 137-144. doi:10.1007/s10461-006-9102-x
- Zamudio-Haas, S., Mahenge, B., Saleem, H., Mbwambo, J., & Lambdin, B. H. (2016).
 Generating trust: Programmatic strategies to reach women who inject drugs with harm reduction services in Dar es Salaam, Tanzania. *Int J Drug Policy, 30*, 43-51.
 doi:10.1016/j.drugpo.2016.01.012