

LONDON
SCHOOL of
HYGIENE
& TROPICAL
MEDICINE



Ndimbii, J; Guise, A; Ayon, S; Kalam, M; McLean, S; Rhodes, T (2016) Implementing needle and syringe programmes in Kenya: changes, opportunities and challenges in HIV prevention. *African Journal of Drug & Alcohol Studies*, 14 (2). 95- 103.

Downloaded from: <http://researchonline.lshtm.ac.uk/2901259/>

DOI:

Usage Guidelines

Please refer to usage guidelines at <http://researchonline.lshtm.ac.uk/policies.html> or alternatively contact researchonline@lshtm.ac.uk.

Available under license: Copyright the publishers

IMPLEMENTING NEEDLE AND SYRINGE PROGRAMMES IN KENYA: CHANGES, OPPORTUNITIES AND CHALLENGES IN HIV PREVENTION

**James Ndimbii¹, Andy Guise^{2 3}, Sylvia Ayon¹, Mlewa Kalama¹,
Susie McLean⁴, Tim Rhodes²**

¹Kenya AIDS NGOs Consortium-Community Action on Harm Reduction, Nairobi, Kenya

²London School of Hygiene and Tropical Medicine, London, UK

³University of California San Diego, USA

⁴The International HIV AIDS Alliance, London, UK

ABSTRACT

HIV infection among people who inject drugs (PWID) in Kenya is at 18%, and has been attributed to risky injecting practices. The risk environment enabling these practices has not been explored. This paper reports findings from Access to Care, a qualitative study in Kenya. Using in-depth interviews with PWID, we explore how the introduction of needle and syringe programmes (NSP) has impacted on needle and syringe sharing. PWID report significant reductions in sharing injecting equipment following NSP, although sharing continues, linked to challenges in supply and amongst PWID living with HIV, linked to hopelessness for the future. We conclude that NSP should expand across Kenya, linked to efforts to overcome delivery challenges and efforts to support people living with HIV.

Key words: People who inject drugs, HIV, needle and syringe programme, Kenya, people living with HIV

INTRODUCTION

HIV prevalence within the Kenyan population of People Who Inject Drugs (PWID) is an estimated 18%, three times that of the general population, and being even more burdensome among women who inject drugs, whose prevalence is estimated at 44% (NACC, 2012). Other

countries in Sub Saharan Africa are also reporting injecting drug use as a major risk factor for HIV (Needle et al 2006; Mathers et al., 2008; HRI 2014). The sharing and reuse of needles and syringes is a key risk factor for HIV for PWID (Mathers et al., 2008; Eluwa et al, 2012). A 2011 study in Kenya reported high rates of sharing, with almost 50% of PWID sur-

veyed reporting sharing at their last injection (CAHR, 2013). In response the Kenyan government has sought to respond to the needs of PWID (NACC, 2009), in particular through partnering with civil society organisations to introduce a needle and syringe programme (NSP). NSP are evidenced to reduce HIV infections among PWID through providing a regular supply of unused needles and syringes (WHO, 2004).

The Needle and Syringe programme in Kenya, one of the first in Sub Saharan Africa, was pioneered by The Kenya AIDS NGOs Consortium (KANCO). The programme, focusing on Nairobi and Coast regions, was implemented by community based organisations working in harm reduction (Nairobi Outreach Services Trust in Nairobi; Muslim Education and Welfare Trust and Reachout Centre Trust in Mombasa, Teenswatch in Ukunda and The Omari project in Malindi). The model followed focused on a combined fixed-site and outreach model of distribution. The programme was rolled out as a flexible needle and syringe exchange programme without a strict one-for-one policy. The programme end line report noted that 88% of PWID interviewed reported using a clean needle and syringe (Mutuku, 2014). After inception, a number of organizations also initiated NSPs, including Medecins du Monde (MdM) and Support for Addiction, Prevention and Treatment of Addiction (SAPTA). Combined with these and other programmes that came after, an approximate 4500 PWID had been reached with clean injecting equipment, and over half of PWID surveyed reported using sterile injecting equipment in the country (HRI, 2014). There are now efforts to scale-up the NSP programme across Kenya.

There has been little study of harmful injecting practices, the risk environments for them, and how NSP programmes can be developed in response in African contexts. Previous study in Kenya highlighted the influence of policing on reuse of needles and syringes left in injecting sites (Beckerleg, 2005). Although availability of clean needles and syringes is a core factor in sharing, there can also be a combination of environmental, political and social factors that increase the risk of sharing (Bourgois, 1998; Rhodes, et al., 2005; WHO 2004; Strathdee, et al., 2010). These factors include, but are not limited to, homelessness, incarceration, local policing practices, costs of syringes, drug trafficking and distribution routes, gender and laws and policies governing possession of drugs and drug paraphernalia (WHO,2004; Strathdee, et al., 2010). As the needle and syringe programme developed in Kenya we set out to investigate PWID experiences of the programme and its reported impacts. In-depth study of the programme and responses to it is essential to understand how the NSP was implemented and shaped in these specific contexts and risk environments (Rhodes et al, 2009). Understanding these experiences is key to informing the on-going development of NSP in Kenya and across Sub-Saharan Africa.

METHOD

This paper draws on data collected through the Access to Care Study, a longitudinal, qualitative study, employing in-depth interviews and observations to understand PWID experiences of HIV and the risk environment for them. Here we report on data as it relates to experiences

of NSP in particular; elsewhere we have reported on experiences of drug treatment and methadone (Rhodes et al., 2015, Rhodes et al., 2015). The study was based in three areas in Kenya: Nairobi and then Malindi and Ukunda in Coast province. We followed PWID over three waves of data collection to understand changes in experience, and increase depth of understanding of the social and structural context. We conducted interviews with 109 PWID at wave 1 in late 2012 just as NSP was being introduced, sampling for a range of experiences based on gender (33 were female respondents), and HIV status (44 PWID were living with HIV). We repeated interviews and included others in our sample over two further waves in 2013 after NSP was introduced, interviewing a total of 118 people who use drugs. These interviews explored the day-to-day lives of PWID in relation to their drug use and access to harm reduction, drug treatment and HIV prevention and care services, and recorded how these were influenced by the social environment.

Analysis followed a thematic approach (Ezzy, 2002), iterating with on-going data collection to explore emerging themes. Interviews were recorded and transcribed. We read transcripts as a group and identified emerging themes. We then explored for these themes across the data set. Based on these initial analyses we developed a coding framework which we applied across the data. Initial findings were discussed with community stakeholders and at an international conference (Ndimbii, 2013) to further develop and explore findings. The study had ethical approval from the University of Nairobi and the London School of Hygiene and Tropical Medicine. All respondents provided informed consent; all

names used are pseudonyms to protect confidentiality.

RESULTS

We first report how PWID described needle and syringe sharing to us before NSP was introduced. The second section focuses on accounts following the introduction of NSP.

Needle and syringe access and sharing before NSP introduction

PWID commonly reported that they didn't share needles and syringes as our study started, and before NSP was introduced. This was often presented around an awareness of HIV and the risks that sharing posed:

"I am so careful because of HIV, because I heard about it, that is why I don't like to share syringes with anybody" (Nelson)

Awareness of HIV was generally high across those we interviewed, linked to long-standing outreach work in the community. However, these reports of not sharing we interpret as often offering 'public accounts' presented to us, reflecting the shame and stigma linked to needle and syringe sharing. Through repeat interviews we developed trust, and people would shift their accounts, from claims of having never shared, to disclosing they had. Beatrice, in the first account narrated how she had never shared, including never sharing with her husband, an injecting drug user as well: *"I don't even share needles with my husband"* In later interview accounts, she did disclose her previous sharing, as well as disclose her recent sero conversion of HIV. *"[Interviewer- How was*

it until you thought of being tested (for HIV)?] Because me I was at times, I was sharing the needle with my husband”.

Accounts of managing risk of sharing and awareness of the risks involved were however widespread suggesting there were common efforts to avoid it. Access to clean injecting equipment was reported to be difficult and involved a balance between the prevention of withdrawals, hustling to get drug money, navigating a punitive policing environment and operating hours of pharmacies. Before the introduction of the NSP, access to clean injecting equipment was mainly from retail pharmacies and shops in the vicinity of drug using sites.

It wasn't always possible to buy from chemists and access to clean injecting equipment was then reliant upon medical practitioners and veterinarians, but also drug dealers, 'hit doctors' (PWID who are paid to inject others) as well as friends and other people who inject:

“R: I went and bought a syringe from someone who sells up there for fifteen shillings per syringe...

I: But it is not a Chemist

R: no, it is not a Chemist. At the Chemist they at times refuse to sell to us” (Lara)

Buying needles was limited by the possibilities of getting money, which itself required hard work and careful planning, and for many a combination of 'hustling', petty crime, sex work, begging, and occasionally formal work, which was limited for most.

As well as buying new needles and syringes to avoid sharing, there were

careful efforts to store and carry injecting equipment that had already been used for later reuse. Abraham for example, who reported never having shared, gave this account:

“I: And you use the same needle for a week?

R: Yeah, that only one needle.

I: How blunt do they get?

R: Yeah I wash, I finish injecting, I take my needle, it get wash, I take the paper, newspaper, I roll it, I tie it with a rope and I keep it in my pocket.

I: Do you have the needle now?

R: I go round with my needle.”

Whereas this carrying of needles and syringes for use would minimize risks of sharing it would increase other risks. Needle and syringe possession in Kenya is illegal, leading to risk of imprisonment, police violence and demands for bribes:

“you cannot keep walking around with this thing...if you are caught by the government, there are those who spoil, there are those who will take you to the police. Now if taken to the police you see you will really suffer” (Simba)

PWID were therefore also afraid of carrying needles and syringes. In response people would leave needles and syringes hidden in walls, under rocks, or under rubbish in public areas, to allow them to have easy access when in a drug using site. It was however possible for others to find and then use this equipment that others had left:

“Maybe he is seeing where I am hiding it. When he sees where I am hiding it, when I leave, He comes and takes it. Now me when I come back I find it is not the one” (Ruth)

Sharing was also widely reported to us. As detailed above, access to clean injecting equipment was reported to be difficult and involved a balance between a range of priorities. PWID talked of ‘struggling’ to get clean injecting equipment. Accounts discussed reuse of friends’ needles and syringes, those found in injecting sites, and collecting used needles and syringes from hospital dump sites. Whilst some could rely on pharmacies for access, others struggled, with damaging consequences:

“We just share syringes because the chemists are not there, people refuse to sell them to us you see? We have to share the syringes, so I used to share the syringes with my boyfriend and then I just got positive in that way.” (Sara)

Distance to pharmacies, and their opening hours, were also cited as limiting factors.

Accessing clean needles and syringes was also linked to the cost of purchase, which, although relatively low (between Ksh. 10 and 20, equivalent to 0.11 and 0.2 USD) was unaffordable for many who struggled to address basic needs of food and shelter alongside their addiction:

“Now you find that we still share, because yes, you have got some money for the drug, like 250 shillings, the money you have is enough for the drugs, you have nothing for the injection and you do not have the

injection... you see and you want to recover so you will go to a friend and ask him ‘bro, help me with yours I want to inject myself then I return it to you’” (Sam)

Sharing was also reported amongst those living with HIV, or those who assumed they were HIV positive. People would share because they were ‘already sick’ and ‘did not care’:

“We usually say the only thing left for us is to die...” (Ruth)

For those already living with HIV sharing was considered to pose no additional risk. There were a few people who reported sharing and having been unaware of the risks involved:

‘I used to share those needles. You know I didn’t know about HIV that can come through that thing. So we used to share, we used to share’ (Moosa)

Others described sharing but being selective about whom they shared with to manage HIV risk. PWID would ‘look’ to see whether others were HIV positive or not:

“I can normally tell one is okay and one is sick” (Solo)

Assumptions about HIV positivity would then shape decisions to share, for example, an assumption that a friend was HIV negative would influence a decision to share. ‘Trust’ was also associated with sharing, with people who considered other individuals as ‘okay’ – i.e. not HIV positive.

Accounts after the introduction of NSP

Following the introduction of NSP PWID reported gratefulness for the program, highlighting the positive changes it had made in their experiences. Many PWID reported significant improvements in their access to clean injecting equipment and impacts on sharing practices:

“Yes there have been changes, because now if you use one needle once, you use, you throw it, because you have many” (Susie)

There were even references to the drug using sites being ‘flooded’ with needles and syringes, and when out walking in the community people would show us the needles and syringes they were carrying.

The NSP reached people through the drop in centres and outreach workers taking supplies to people in the community. An informal secondary exchange by PWID was also reported. Some of the hit doctors, PWID and peddlers would receive the needles and syringes from the outreach projects and distribute these further, sometimes at a small charge, sometimes in an effort to support the hard to reach PWID:

“Yeah, people are not sharing, because even if I go to my friend to tell him help me with your needles he’ll tell you ‘I’m not giving you my needles, I’ll give you this new one’. (Charo)

Despite the availability of free needles and syringes through the programme, some PWID reported still accessing needles and syringes from the pharmacies:

“I: Where are you getting them from at the moment? mainly from the pharmacy?”

R: Yeah...Down there.

I: Yeah, what about from the [outreach] project do you get them from there?

R: The problem is I really, really like to get from them but it’s so far away... sometimes I don’t have money to take a pikipiki, motorbike from here up to there.” (Pat)

This relative convenience of pharmacies, despite cost, hints at the limits on delivery of NSP, including the limiting opening hours of the outreach projects, the distance to them, and the difficulty for outreach workers of finding some PWID, as well as interruptions to the supply of clean needles and syringes to the outreach projects.

Gaps and challenges in the supply from the NSP were linked to accounts of continued sharing. The NSP experienced a number of implementation challenges including interrupted delivery, which would result in shortage of needles and syringes:

“Like this week they did not bring for us, so if I have a syringe and I have maybe used it someone will borrow me. I tell them that I have used it but they still want it and I don’t have a new one which I can give them to use, but they still insist that I give them the one I have used” (Ruth)

Outreach projects were operating under resource constraints, including sometimes in supplies of clean needles and syringes, with outreach workers having a large number of people to cover,

which would limit the contact times between PWID and outreach workers. The fact that they were also not operational over weekends meant delivery gaps which they attempted to cover for by providing more needles and syringes on Fridays.

There were reports of continued sharing following the introduction of NSP related to PWID living with HIV. As reported above, sharing in the context of HIV status was reported before NSP, and continued, again linked to an experience of hopelessness around HIV:

'R And when you tell them they say we are already dead

I: Right how do you mean?

R Yaani, they tell you they are already dead because they have already get HIV...so they use one needle for three people. (Abraham)

DISCUSSION

Based on our findings PWID in Kenya are reporting the introduction of NSP as leading to significant reductions in needle and syringe sharing. In support of the community surveys indicating reducing needle and syringe sharing (Mutuku et al 2014), these findings demonstrate further that the programme is acceptable and accessible to many. These findings point towards an imminent and immediate need to scale up needle and syringe programmes in Kenya, based on the potential for significant impact on Kenya's HIV epidemic and evidence of increased benefits from delivery at scale and integration with other areas of HIV prevention, such

as HIV treatment and opioid substitution therapy (Strathdee et al 2010; Rhodes, et al 2015).

These qualitative findings however also point to specific challenges and gaps in access to the emerging NSP programme in Kenya. The limits on accessing NSP at weekends indicate a need to explore solutions to this. Outreach projects are already working under considerable resource constraints and additional support would be needed to allow this. The continuing role of private pharmacies as an access point for needles and syringes is another area that could be developed to resolve weekend access, and also to support overall reach (see WHO, 2014; APMG, 2010; Charapkani, Newman, Shunmugan & Dubrow, 2013). Interruptions to the supply for NSP highlights the continued need for attention to logistical, financial and organizational contexts. There is need for continued action to foster enabling attitudes and policy, which would help in addressing these operational challenges.

Continued sharing amongst PWID living with HIV must also be a core target for intervention. That some PLHIV perceive themselves as already 'dead' indicates a hopelessness around HIV status that limits the potential for engaging in preventative measures, including NSP but also other areas of HIV prevention, treatment and care. There is an urgent need to address the understanding and expectations of HIV within a context of addressing barriers to integrated HIV care that includes NSP.

Our findings also demonstrate the active role for PWID in managing HIV risk and taking actions to manage the limits on access to clean needles and syringes. The organic development of PWID in secondary distribution of needles and syringes

is an important area for development to support further access. Such peer distribution is demonstrated in other contexts in supporting access to HIV prevention and care (APMG, 2010). The development of more formal peer distribution in Kenya, linked to the outreach led NSP programme, could be an important avenue to reach more marginalized PWID.

In conclusion, our study is one of the first to qualitatively explore the delivery of NSP in Sub-Saharan Africa and therefore makes a valuable contribution to an emerging focus for policy and programmes. We have shown how PWID report the introduction of NSP leading to significant reductions in the sharing of injecting equipment, supported by other factors such as outreach and continued pharmacy access. Continued sharing is however a challenge and scale-up of NSP in Kenya, with specific attention to operational challenges, the needs of PLHIV, and exploring the role of peer distribution will be essential to confronting the HIV epidemic amongst PLHIV.

ACKNOWLEDGEMENTS

Calleb Angira, Abbas Said Abdulaziz, Hussein Rama Owino, Mohammed Shosi, Athman Mohammed Famau, Alphonse Maina Thuo, Ali Omar Haji, Cosmas Maina, Athuman Bundo and Tabitha Waithera supported data collection for the A2C study.

FUNDING

Community Action on Harm Reduction programme, sponsored by the International HIV AIDS Alliance

REFERENCES

- AIDS Projects Management Group. (2010). *“And one for my friend”: Peer distribution of needles, syringes and other injecting equipment*. Newton: AIDS Management Group.
- Beckerleg, S., Telfer, M., & Hundt, G. L. (2005). The rise of injecting drug use in east Africa: a case study from Kenya. *Harm Reduction Journal*, 2, 12.
- Chakrapani, V., Newman, P. A., Shunmugam, M., & Dubrow, R. (2011). Social-structural contexts of needle and syringe sharing behaviours of HIV-positive injecting drug users in Manipur, India: a mixed methods investigation. *Harm Reduction Journal*, 8, 9.
- Degenhardt, L., Mathers, B., Vickerman, P., Rhodes, T., Latkin, C., & Hickman, M. (2010). HIV in people who use drugs Prevention of HIV infection for people who inject drugs: why individual, structural, and combination approaches are needed. *The Lancet*, 376(9737), 285–301.
- Eluwa, G. I., Strathdee, S. A., Adebayo, S. B., Ahonsi, B., & Adebajo, S. B. (2013). A profile on HIV prevalence and risk behaviors among injecting drug users in Nigeria: Should we be alarmed? *Drug and Alcohol Dependence*, 127(1-3), 65–71.
- Ezzy D. (2002). *Qualitative analysis, Practice and Innovation*. London: Routledge.
- Harm Reduction International (2014). *The Global State of Harm Reduction 2014*. London, United Kingdom: Harm Reduction international.
- Mathers, B. M., Degenhardt, L., Phillips, B., Wiessing, L., Hickman, M., Strathdee, S. A., & Wodak, A. (2008). Global epidemiology of injecting drug use

- and HIV among people who inject drugs : a systematic review. *Lancet*, 372(9651), 1733-45.
- Mutuku, A. (2014). *Community Action on Harm Reduction End Line Evaluation Report*. Nairobi: Kenya AIDS NGOs Consortium.
- National AIDS Control Council. (2009). *HIV Prevention Response and Modes of Transmission Analysis*. Nairobi: Government of Kenya.
- National AIDS and STI Control Program. (2012). *MARPs Surveillance Report, 2012*. Nairobi: Government of Kenya.
- Ndimbii J, Guise A, Rhodes T, Ayon S. (December 2013). *HIV Risk and Injecting Practices among People Who Use Drugs in Kenya: Understanding Changes in Needle and Syringe Sharing*. Presented at the International Conference for AIDS and STIs in Africa, Cape Town, South Africa.
- Needle R., Kroeger K., Belani H., & Hegle J. (2006). Substance abuse and HIV in Sub-Saharan Africa: Introduction to the special issue. *African Journal of Drug & Alcohol Studies*, 5(2) 83-94.
- Rhodes T, Guise A, Ndimbii J, Strathdee S, Ngugi E, Platt L, Kurth A, Cleland C, Vickerman P. (2015). Is the promise of methadone Kenya's solution to managing HIV and addiction? A mixed-method mathematical modelling and qualitative study. *BMJ Open*, 5: e007198.
- Rhodes T, Ndimbii J, Guise A, Cullen C, Ayon S. (2015). Navigating the poverty of heroin treatment and recovery opportunity in Kenya: Access work, self-care and rationed expectations. *Global Public Health*, 10(3), 391-409.
- Rhodes, T., Singer, M., Bourgois, P., Friedman, S. R. & Strathdee, S. A. (2005). The social structural production of HIV risk among injecting drug users. *Social Science and Medicine*, 61, 1026-1044
- Strathdee, S. A., Hallet, B. T., Bobrova, N., Author, T., Booth, R., Abdool, R. & Hankins, C. A. (2010). HIV and risk environment for injecting drug users: the past, present, and future. *Lancet*, 376, 268–284
- Varetska, O., Kushakov, V., & Braga, M. (2013). *Baseline report for Community Action on Harm Reduction (CAHR) project*. Ukraine: Community Action on Harm Reduction.
- World Health Organization (2004). *Effectiveness of sterile needle and syringe programming in reducing HIV /AIDS among injecting drug users*. Evidence for Action Technical Papers. Geneva: WHO.