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NEED FOR NEEDLE AND SYRINGE PROGRAMMES IN AFRICA

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ABSTRACT

A narrative review was conducted, drawing on peer reviewed literature and relevant grey literature on injecting drug use in African countries and ethical dilemmas facing harm reduction especially the provision of sterile needles and syringes to injecting drug users. This review aimed at highlighting evidence and the arguments for and against the provision of sterile injecting equipment to people who inject drugs (PWID), and to consider the implications for the African context. The narrative established that high risk injecting drug practices are common among PWID in many African communities, and so are HIV and hepatitis. Current services for this population in Africa are less pragmatic and inadequate. Needle and syringe programmes are both effective and ethical and should be part of the response to injecting drug use in Africa.

Key words: Needle and syringe programmes, injecting drug use, ethics, HIV

INTRODUCTION

Needle and syringe programme (NSP) is among the 9 endorsed interventions by World Health Organization (WHO), United Nations Office on Drugs and Crime (UNODC) and Joint United Nations Programme on HIV and AIDS (UNAIDS) as a part of the comprehensive package for prevention, treatment and care of HIV among injection drug users (WHO, 2009)**.** According to several studies (Beckerleg, Telfer, and Hundt, 2005; McCurdy, Kilonzo, Williams, and Kaaya, 2007; Savanna, 2009) Africa continues to experience the unheeded spread of heroin and injecting drug use, particularly along the East African coast where heroin is trafficked from Pakistan and Afghanistan by sea. African states such as Kenya, Tanzania, Cote d'Ivoire, Mauritius, Morocco, Nigeria, Egypt, Mozambique, South Africa, Ghana and the Democratic Republic of Congo have a documented growing burden of injecting

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drug use. Of significant public health importance is the rise in injecting drug use, usually without sterile injection equipment, and sometimes with very high risk practices such as the deliberate sharing of blood with fellow users who cannot afford heroin, a practice called "flash blood" (Atkinson et al. 2011; McCurdy et al. 2007; Ross, McCurdy, Kilonzo, Williams, and Leshabari, 2008). In Kenya, the HIV prevalence was found to be six times higher amongst drug users who had shared needles compared to those who had not (National AIDS & STI control Program [NASCOP], 2012). In addition, Savanna (2009) notes that whereas some of Africa's growing population of people who inject drugs (PWID) is largely unaware that sharing needles carries a risk of transmitting HIV; many of the AIDS prevention programs in the continent have perceived injection drug related HIV transmission as uncommon and thus not suitably addressed injection risks in their communications with the public. Mathers et al. (2010) and Savanna (2009) also note that only few countries have implemented HIV prevention and care programmes specifically for PWID in Sub-Saharan Africa. See Table 1 for a summary of injecting drug use, HIV, hepatitis and NSP data in selected high prevalence countries in Africa. The statistics in Table 1 illustrate the unmet need for adequate services among PWIDs. In one of the large studies including some African states, NSPs were absent or unreported among 14 of the 16 countries in sub-Saharan Africa where injecting drug use occurs (Mathers et al. 2010). In addition, where some of the NSP were present, the rates of distribution were as low as 0·1 needle–syringes per person injecting drugs per year. Mathers et al. (2010) also established that the number of PWID receiving antiretroviral therapy (ART) relative to the estimated number of PWID living with HIV varied greatly, from as low as less than one recipient per 100 HIV-positive injecting drug users. The prevailing low access to NSP among most IDUs in African communities still makes it challenging to ascertain the overall impact of the NSP; however, there are already documented benefits for those receiving these services as discussed further in this article. Kelly et al. (2006) also notes that the majority of the organizations working in HIV treatment and prevention in Africa were most likely to target the general population and youth with a more generalized heterosexual epidemic perspective which as a result widely excludes special groups such as PWID. According to Kelly et al. (2006) and

Table 1. NSP coverage, injecting drug use, and related disease prevalence in selected sub-Saharan African countries

Country	Population of PWID[1]	% of HIV among PWID[a]	% of HIV in general population[b]	Coverage of NSP[2]	% of Hepatitis C among PWID[3]
Kenya	30,000	36-43	6.1	-	42.2-60.6
Mauritius	10,000	47.4	1.2	51.9	97.3
Nigeria	-	8.9	3.1	-	-
South Africa	67,000	19.4	17.9	-	-
Tanzania	25,000-50,000	42	5.1	-	22.2

Sources: Peter, Myers, vanHout, Pluddeman & Parry (2013); [b]AIDSinfo (2012); [c]IHRA (2013)

Todd, Nassiramanesh, Stanekzai, & Kamarulzaman, (2007) some of the barriers to equitable or comprehensive programme implementation include: governmental indifference or opposition, stigma, public discomfort and religious beliefs. The lack of mandate from some African governments on acceptable ways to address problems faced by PWID is still a barrier to comprehensive programming (Klein (2011); McCurdy et al. 2007). In addition, existing policies, regulations and strategies are not conducive for implementation of evidence-informed interventions such as NSP (NASCOP, 2012). Much as drug use prevention is important, the "war on drugs" in some countries like Tanzania has been characterized as having accompanying policy that inadequately focuses on the needs of the communities and the drug users themselves (McCurdy et al. 2007).

Therefore, the inadequate coverage of needle syringe programmes in most African states sets center stage for the need to explore the commonly associated fears among the general public and policy makers from around the world. There is as well need to elaborate on the benefits and ethics point of view in support of needle and syringe programmes and harm reduction in general.

METHOD

A narrative review was conducted, drawing on peer reviewed literature and relevant grey literature on injecting drug use in African countries and ethical dilemmas facing harm reduction especially the provision of sterile needles and syringes to injecting drug users. The search terms; *(Africa) AND needle exchange* were used in PubMed to generate most of the peer reviewed articles used in this narrative. However, these were supplemented by literature from other relevant peer reviewed articles on ethics of NSP and from reports and internet sources of reputable actors in this field such as WHO, UNAIDS, UNODC, International Harm Reduction Association and government ministries.

DISCUSSION

What kind of opposition prevails against Needle and Syringe Programmes?

The controversy on needle and syringe programmes (NSPs) has been mainly fueled by the notion of whether a person who uses drugs should be seen as a patient or a criminal, and whether it is ethical or lawful to provide a person using drugs the means to inject (Tempalski et al. 2007). The criminalization of drug use, which sometimes also involves criminalizing the possession of injection equipment, has been found to cause tension between the PWID, the NSP service providers and police (Klein, 2011; Shaw, 2006). Intense policing and criminalization of drug possession and use potentially worsens the risky injection practices among PWID (Klein, 2011) as also was the case observed in Tanzania (McCurdy et al., 2007). In addition, Savanna (2009) and Klein (2011) observe that criminalization has driven PWID underground thus making this population hard to reach on the streets. Also, due to increased rates of incarceration, an increase in injecting drug use has been reported in African prisons in Kenya, Cote d'Ivoire, Mauritius and Ghana (NASCOP, 2012; Savanna, 2009). In addition, the lesson that should be drawn from the high recidivism rate of

ex-prisoners after release from jail is that the law enforcement approach through punishment by incarceration of criminals (drug users) will not be effective either in preventing drug use in communities or in preventing the spread of HIV and hepatitis through unsterile injection equipment (Visher &Travis, 2003).

One solution that has been used extensively in other regions with high rates of injecting drug use is through pragmatic approaches such as the inclusion of NSPs in the continuum of services for people who use drugs. Shaw (2006) explains that usually the opponents of NSPs greatly support drug treatment programmes that are based on abstinence and ''drug-free'' treatment for addiction. The WHO (2006) explains that this is because many NSP opponents wrongly perceive that harm reduction opposes abstinence based approaches or even condones drug use but contrary to their views, abstinence is on the same spectrum as harm reduction, with harm reduction being the first step towards being abstinent and healthy for many people who use drugs. Adding more to the opponents' views, some argue that providing sterile needles to PWID sends conflicting signals to the clients of addiction treatment programmes (Shaw, 2006; WHO, 2006). In reality, most clinical services are skilled in dealing with the simultaneous and seemingly contradictory desires in their patients by explicitly encouraging abstinence and avoidance of harm. If we look close enough, most of us are also full of simultaneously held seemingly contradictory desires (Zhang, Yap, Xun, Wu, and Wilson, 2011). As a result of integration of harm reduction in services delivered by "We Help Ourselves"; a local organization in Australia (WHO, 2006), there were observed improvements in client retention and completion of rehabilitation programme. There were also reductions in risky sex behaviour among the clients. In addition several other benefits of NSPs include; improved entry to primary health care and drug treatment, plus prevention of other blood borne and viral or bacterial infections (WHO, 2004). Contrary to opponents' fears and beliefs, WHO (2004) notes that there is not so far convincing scientific evidence of unintended complications of NSPs such as greater injection frequency, increased illicit drug use, recruitment of new PWID, greater number of discarded needles and less motivation among PWID to reduce drug use.

The opponents of NSPs have furthered expressed concerns that NSPs are expensive programmes. Shaw (2006) also notes that others have unfair, judgmental views about addiction. As an example, a protest against NSPs in Springfield, USA involved opponents expressing a concern that tremendous financial resources (tax payers' money) would be spent on NSPs and yet addiction is a personal choice in which the drug users should be held responsible for its consequences (Shaw, 2006). On the contrary, NSPs have been shown to be a cost effective way of preventing HIV in other low income settings, particularly when started early and with adequate availability (Zhang et al., 2011). Furthermore, to deny access to needles on the basis that people should not be injecting is like banning seat belts on the basis that if people drove carefully there would be no accidents.

Furthermore, some NSP opponents fear that by opening NSPs their communities will be represented as plagued by AIDS and drug use (Shaw, 2006). In addition, there are many examples of

political interference that hinders the desirable progress of NSPs (Buchanan, Shaw, Ford, and Singer, 2003). Similarly, according to McCurdy (2007) and Klein (2011), in some African countries there has been the lack of a clear mandate from governments on acceptable ways to address problems faced by PWID. In addition to lack of government mandate, some critics are skeptical of their governments' commitment in properly implementing NSPs (Voice of America, 2012). From elsewhere in the world, political suppression has been echoed through negative comments on NSPs from influential leaders such as: the former governor of New Jersey Christine Whitman, former US president George W. Bush and Reverend Michael Orsi (Buchanan et al., 2003). Such negative publicity plays a role in stigmatizing NSP.

What ethical basis supports the implementation of needle and syringe programmes (NSPs)?

Social justice (fairness): The principle of justice and fairness mandates that benefit and burdens are equitably distributed with in a community (Loue, Lurie and Lloyd, 1995). Therefore people who inject drugs and those who are related to them such as co-users, sex partners, parents, friends or children deserve the equal protections through needle and syringe services to prevent the potential harms and risk to their lives (Iozzio, 2011). However, in comparison to other concerns, drug dependence treatment needs and services have always been allocated inadequate resources. For instance, according to Mathers et al. (2010) worldwide, the proportion of HIV positive PWID receiving ART was estimated at 4%, as compared to 40% for the non drug using population. This neglect for drug dependence treatment is attributable to society's prejudice which is contrary to the principles of justice and fairness (Loue et al. 1995). In addition, there is usually a divide between the active citizens who participate in shaping government/society decisions and the group of marginalized individuals (PWID) that are bound together by their experience of drug use and HIV (Shaw, 2006).

Utilitarianism: When considering the allocation of resources for public health, the right choice is often considered as the one that produces the most gain for the most people, for instance, the greatest reduction in the burden of disease (Roberts and Reich, 2002). In support of utilitarianism, the beneficence and non-maleficence of NSPs are demonstrable by the variety of benefits (Bastos and Strathdee, 2000; Voice of America, 2012) that PWID receive from these services. Furthermore, NSPs are beneficial to non-injecting drug users as well since they reduce transmission of HIV to PWIDs' sexual partners and to new born infants (Iozzio, 2011; Loue et al. 1995). Also, extra services such as legal support systems provided through NSPs among PWID are essential in combating crime resulting from drug dependency (Klein, 2011; Shaw, 2006).

Human Rights: Liberal egalitarians state that everyone has a positive right to the minimum level of services and resources needed to assure minimum quality and quantity of life and thus to health care needed to guarantee that minimum (Roberts and Reich, 2002). This therefore entitles PWID to a comprehensive package of care endorsed by UNODC, WHO

and UNAIDS for addressing blood borne infections among this group. In addition, Iozzio (2011) notes that the provision of NSPs is a common good and a sign of respect and ensures that IDUs and their families are treated with dignity and with sensitivity to cultural, racial, ethnic and gender-based differences. Furthermore, NSPs respect PWID by helping them to make healthy choices such as use of sterile needles instead of unsafe, contaminated ones (Loue et al. 1995). Furthermore, the same author explains that NSPs observe human rights through respect for PWID by increasing their access to primary health care and as well through ensuring high level confidentiality during service delivery.

Communitarianism: The philosophy of communitarianism aims at creating a good society by grooming individuals for that society (Roberts & Reich, 2002). Religious and moralistic approaches largely dwell on this ideology. Todd et al., 2007 emphasizes that if there is continued involvement of the religious community, their focus should be on supporting treatment rather than punishment and this will be a key factor in acceptability of NSPs. In Kenya for instance, punishment of drug users through incarceration has proved inadequate since there are few biological and behavioural interventions in prisons to deter inmates from drug use and other risky practices while in prison (NASCOP, 2012). Indeed, there are also many different views about what constitutes individual and social virtue (Roberts & Reich, 2002). Much as local approval is fundamental in the establishment of NSPs, there are often situations in which decision makers are intimidated and forced to pick sides that may not necessarily represent the interests and needs of the community (Shaw, 2006). Additionally, there exists a challenge in defining who should constitute the local approval. However, there exists a sharp contrast between relativist communitarians and universalist communitarians (Robert & Reich, 2002). The relativists view morality as entirely contextual while the latter argue that access to proper health should be promoted in all communities regardless local cultural norms. Therefore, it is imperative for the NSP opponents to embrace the moral realism notion which according to Roberts and Reich (2002) emphasizes that morality can be learnt by understanding human nature and analyzing human needs plus requirements of social life.

CONCLUSION

Access to clean injecting equipment has not been achieved in most developing communities, even those with documented injecting drug use (Beckerleg et al., 2005; NASCOP, 2012). People who use drugs in developing communities continue to ask for assistance from their governments, key stakeholders and actors. There is an unmet demand for a greater access to services including NSP (Klein, 2011; Atkinson et al., 2011; McCurdy et al., 2007). In preventing the spread of HIV, including in Africa, high risk groups for injecting transmission (PWID) need to be acknowledged and targeted for outreach (Atkinson et al., 2011; Savanna, 2009). Despite arguments to the contrary, the existing scientific evidence and a broad consideration of ethical principles justifies the use of NSPs in African communities.

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