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The becoming of methadone in Kenya: How an intervention's implementation constitutes recovery potential

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Title

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Running head

Methadone's becoming

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Abstract

This analysis treats the recent introduction of methadone treatment in Kenya as a case of 'evidence-making intervention'. Using 30 qualitative interviews with people in receipt of methadone treatment in Nairobi, Kenya, methadone's becoming is treated as an effect of its narrative and material implementations. The interviews are shown to enact a narrative of methadone recovery potential towards normalcy beyond addiction. Such recovery potential is materialised in practice through social interactions wherein methadone's embodied effects are seen to be believed. Here, the recovering body affects others' recovery potential. In a context of competing claims about methadone's effects, including the circulation of doubt about experimenting with methadone treatment, embodied methadone effect helps moderate the multiverse of methadone knowledge. The material dynamics of methadone treatment delivery also affect its recovery potential, with the methadone queue enacting a rationing of recovery hope. Here, the experience of methadone's implementation loops back to a life with drugs. I conclude that there is a coexistence of potentiality and actuality, a 'methadone multiple', produced through its narrative and material implementations.

Keywords

Kenya; Evidence-making intervention; Methadone; Recovery; Addiction; Assemblage

Introduction

Methadone treatment is being introduced in Kenya as part of policy responses to control HIV transmissions linked to drug injecting (Rhodes et al., 2015a, 2016). Systematic reviews proffer such treatment as one of the best evidenced interventions for HIV prevention, linked to reductions in HIV infections and drug injecting risk practices as well as overdose and acquisitive crime (MacArthur et al., 2012). Such discourses of evidence-based intervention emphasise universal effect potential moderated in relation to context (Adams, 2008). In contrast, critical approaches do not separate knowledge from the practices of its making (Law, 2004). Here, the effects of methadone treatment are subject to the practices of its implementation (Rhodes et al., 2016). From this perspective, there is no single biomedical object of methadone intervening on a single biological body across an assumed boundary of context, and thus no single universe of evidence (Mol, 2002; Law, 2004). Rather, there is a multiplicity of methadone contingent on its local productions. In this article, I draw on qualitative interview accounts to explore the becoming of methadone treatment in Kenya. I concentrate on how practices of intervention implementation constitute recovery potential.

Methadone can be appreciated as an object of the knowledge practices which enact it. In Europe and the West, methadone is generally cast as a treatment of drug withdrawal alleviation enabling individuals to exercise a freedom from addiction to live as normal citizens (Dole et al., 1966; Nettleton et al., 2013; Harris, 2015). Yet, there are markedly different versions of methadone possible. Policy discourses in Russia and parts of Eastern Europe, for example, constitute this same substance a toxic drug of addiction, a cause of criminality, and a failed addiction treatment of the West (Rhodes et al., 2010a). Similarly, the methadone produced in medical discourses as a treatment of pain relief is a different methadone, with distinct effects, to that produced in discourses of addiction (Keane, 2013). The technology of methadone treatment is subject to friction and shift, as seen in its various historical revisions as addiction recovery, harm reduction, HIV

prevention, and crime reduction (Berridge, 2012). While 'post AIDS' drug policies in parts of the West, such as the UK and US, are no longer framed by discourses of HIV emergency, and accordingly de-emphasise methadone as harm reduction in favour of addiction recovery, methadone in Kenya is promoted with international support as primarily a technology of HIV prevention (Rhodes et al., 2015a). How the technology is enacted in policy as a solution to represented problems – HIV, addiction, crime – at once makes those problems and constitutes them as in need of addressing (Bacchi, 2009; Lancaster et al., 2017). Methadone is enacted as a resource through its material implementations. It therefore becomes necessary to ask of its enactments, what is methadone capacitated to *do*?

Methadone's representations are, of course, not separate from its material implementations. As Gomart (2002) has illustrated, the effects methadone performs are inextricably folded into its practices of implementation. Gomart explored the multiple meanings ascribed to methadone in different methadone trials, one in the USA in 1965 and one in France in 1975, showing how these trials produced opposing methadone effects. In one trial (USA), methadone was found to be different to heroin, and in the other (France), the effects produced between methadone and heroin were similar. Following the classic laboratory ethnographies of Latour and Woolgar (1986), Gomart finds that the properties of methadone, the substance itself, are produced through the particular relations of the trials. Rather than assumed to have an inherent or stable essence which is variously interpreted according to a given context (an approach adopted by mainstream implementation science), the "sheer multiplicity" of methadone meaning makes it "impossible to hold that the substance is constant". Methadone's evidence-making is inseparable from its practices (Rhodes et al., 2016).

This accentuates attending to how an intervention's implementation enacts its becoming. Attention accordingly shifts beyond representations alone (how meanings of methadone are made in

discourse) to the material assemblages of effects (human and non-human) which make-up an intervention and afford it capacity (Latour, 2005; Deleuze and Guattari, 1987). For instance, Fraser (2006) and Fraser and valentine (2008) illustrate how methadone's implementations in Australia enable it to affect methadone consumption as a mode therapeutic and normalising conduct. One instance is how the material configurations of the methadone clinic, and the methadone queue especially, enact a sense of discipline upon its waiting patients, which in turn reproduces the trope of a problematic addict who is less-than deserving, less-than normal, and less-than citizen. Harris (2015), in her ethnography of how buprenorphine (another form of opioid substitute treatment) is constituted differently to methadone, also notes how the material implementation of the intervention energises, among its consuming subjects, its sense of recovery potential. She argues that detaching the delivery of the medicine (buprenorphine) from the physical space of the clinic (as with methadone's delivery) enacts a sense of relative normalcy, underscored by the treatment being delivered by community-based pharmacists rather than by doctors. In addition, the physical effects of buprenorphine are felt by its users as 'more normal' than those of methadone's 'opiate feel', and are thus afforded greater recovery potential. These studies push the focus of critique beyond that of how implementation science constitutes evidence-based intervention to tracing, empirically, an intervention's evidencing and knowing as an effect of its implementation.

A primary site in making methadone's recovery potential is its enactment of normalcy. Addiction recovery discourses tend to portray overcoming addiction as a process of self-change and identity transformation, in which the spoiled addict identity is refashioned into a recovering self (Keane, 2000; McIntosh and McKeganey, 2000). Personal narratives enact a recovery script, at once for self and in relation to others, to take account of past failings towards enabling a new, normal, and thus more socially acceptable, self no longer disrupted by addiction (Valverde, 2002; Keane, 2000; Jarvinen, 2004; Rhodes et al., 2010b). Here, addiction recovery is constituted as a promise of normalcy (Nettleton et al., 2013). The invention of methadone itself was predicated on its capacity to

“block the abnormal reactions of addicts” to permit them “to live as normal citizens” (Harris, 2015: 516; Dole et al., 1966: 304). The recovery potential afforded by the promise of normalcy has a *normalising effect* (Nettleton et al., 2013; Fraser and valentine, 2008). The apparatus of methadone treatment can be viewed as one element in a relation of governance, reorganising addicts as more productive, healthy and normal (Bourgois, 2000; Weinberg, 2000). Enacting the self as free-to-choose to self-govern itself appropriately is a key resource in this becoming of more normal (Rose, 1999; Foucault, 1991). With addiction troubling freedom and choice (Keane, 2002; Valverde, 2002), methadone’s recovery potential is indexed to its capacity to rid or moderate the body of its addictions.

Yet methadone’s potential to capacitate the addicted body to recover is, as already noted, not merely a matter of narrative construction but of *enactments* in situated discursive-material implementations (Law, 2004). This accentuates methadone’s recovery potential as an effect of an assemblage of relations (Deleuze and Guattari, 1987); of connections between various social, affective and material forces which flow between, and thus make-up, both the objects of methadone and recovery (Duff, 2014, 2016). For instance, Duff has explored recovery in relation to mental illness as a relational achievement, wherein the recovered body is enacted through the affective flows it encounters in its social and material relations. Sociality and social support feature strongly as resources enabling social inclusion, while other forces in the assemblage of recovery include places, objects and activities. Recovery potential is afforded through the capacity of bodies to affect and be affected (Deleuze, 1992): “In its encounters, in each affective modulation, the recovering body takes on additional simple parts, both human and non-human, which enhance that body’s power of acting” (Duff, 2014: 117). Methadone’s implementations potentiate instances of such affective flow.

After two years of planning, and much anticipation among would-be patients, methadone treatment was introduced in Kenya in December 2014, as part of national policy initiatives to prevent HIV

(Rhodes et al., 2015a). Methadone treatment is being implemented via specifically tailored clinics in Nairobi and in the Coast Province. The programme is sponsored by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), through the Center for Disease Control and USAID and with implementation support from the University of Maryland (USA) and the United Nations Office of Drugs and Crime (UNODC). The designing-up of methadone treatment in Kenya involved policy officials and clinicians making field-visits to treatment programmes held-up as best practice examples internationally (including in neighbouring Tanzania) in combination with in-country guidance received from teams of international experts, overseen by the University of Maryland and CDC, and reviews of international evidence of methadone treatment's harm reduction potential. The making of methadone treatment in Kenya may be viewed as an effect of 'translocal' assemblages in knowledge-making (McFarlane, 2011), incorporating multiple translations between various forms of knowledge and practice of methadone treatment. In these networks of knowledge translation, the methadone treatment programmes of neighbouring Tanzania are an important force, for they enact a virtual foundation of localised evidence-making, including in relation to the recovery potential of treatment (Ubuguyu et al., 2016; Tran et al., 2015). While the product of methadone treatment in Kenya might be traced as an effect of its multiple recent knowledge productions between science, policy and practice and among intervention engineers and technicians (Latour and Woolgar, 1986), its local making can also be traced through its material implementations in relation to the addicted body and among intervention users. As of now, there are approximately 600 people receiving methadone treatment in Nairobi (where this research took place). While the introduction of methadone treatment in Kenya is framed in policy and through international partnership as primarily a technology of HIV prevention, it is striking that this same intervention is primarily framed as a technology of addiction recovery and solution to the problem of addiction by people who use drugs (Rhodes et al., 2015a). The hope of recovery, and of desire for normalcy, feature strongly in would-be patients' enactments of methadone expectation (Rhodes et al., 2015a,b). Now, two years after methadone's implementation, I use the qualitative interview accounts produced by people in

receipt of methadone treatment to explore how an intervention's implementation constitutes its recovery potential.

Approach

The analyses here adopt an 'evidence-making intervention' approach (Rhodes et al., 2016). Rather than evidencing known interventions as responses to given policy problems, the approach taken seeks to ask how such evidence, intervention and problem came to be. This perspective draws first, on the study of how representations of evidence-based intervention are made through discourses of policy and science (Bacchi, 2009), and second, on the study of how intervention knowledge and effects are made through the material practices of their implementation (Latour, 2005; Law and Hassard, 2005). The focus is intervention objects and effects as *things in the making* through their materialisations.

This approach makes two assumptions. First, intervention objects and effects are constituted through the knowledges which enact them (Mol, 2002; Law, 2004). This troubles the imagined separation of evidence from practice as assumed in mainstream 'evidence-based intervention' approaches (Green, 2000). Second, rather than a single universe of evidence, a multiverse of evidence is elucidated, assuming evidence and intervention multiplicities (Mol, 2002; Bacchi, 2009). Interventions, populations, contexts and scientific knowledge about them are not held constant, since their transformative effects arise through their recursive interactions. An ontology of multiplicity troubles the emphasis implementation science places on aiding the translation of an intervention object from evidence into practice by accentuating the multiple and contingent transformations of an intervention as an effect of its knowledge-making practices (Wood et al., 1998). Whereas 'evidence-based intervention' approaches tend to imagine a stable intervention, with universal effect potential, the evidencing and constitution of interventions is treated as never fixed or stable but multiple,

contingent and local (Law, 2004). Taken together, interventions such as methadone treatment are fluid rather than fixed technologies which affect their capacities in relation to the assemblages of their situation (Law, 2004; Deleuze and Guattari, 1987).

Following Deleuze and Guattari (1987), an assemblage is made-up of the relations and flows between objects and the effects these produce through their interactions. This helps notice how particular assemblage relations produce potentials in relation to their affordances of recovery (Duff, 2016). Accordingly, the approach to empirical analysis here – which uses qualitative interview accounts – is attuned towards noticing affect, and more particularly, the capacity of objects and bodies to affect and to be affected through their encounters with other objects (Deleuze, 1992). A core related idea is of matter as a process of *becoming*. For Deleuze, becoming is a transformative effect of the in-between relations and coming together of connections in assemblages. Methadone's becoming is not fixed but affected by its particular assemblage relations.

Methods

This analysis is made through 30 qualitative interviews conducted with people in receipt of methadone treatment in Nairobi, Kenya. The broader study from which these analyses emanate explored participant accounts of their methadone treatment experience.¹ Prior to this study, and in the two years preceding methadone's implementation, an emerging narrative of addiction recovery hope linked to methadone's anticipated arrival had become noticeable (Rhodes et al., 2015a,b, 2016). This analysis is attuned to these enactments, and accordingly seeks to trace the making of recovery potential through methadone treatment implementation practices, especially at the interface of treatment delivery and its use. The study was undertaken with ethical approval from the University of Nairobi/Kenyatta National Hospital, London School of Hygiene and Tropical Medicine, and the University of California San Diego. All participants gave informed consent, and received a food parcel for their participation. All names used in this analysis are pseudonyms.

The data used for this analysis were generated by qualitative interviews conducted in a mix of Swahili and English by three researchers.² These interviews were audio-recorded with informed consent for subsequent verbatim transcription and translation. Participant selection proceeded purposively, including in relation to: age (with six aged 25 or under); gender (nine women); and reported HIV status (16 reporting positive). The study inclusion criteria specified a minimum age of 18 years (also the minimum age of methadone treatment entry at the time of the study), current engagement in methadone treatment, and a history of treatment of at least one month. Table 1 summarises the study participants.

Interviews were undertaken at a community-based drop-in centre for people who use drugs in Nairobi, which acted as a key referral point into methadone treatment. The city methadone clinic was purpose built to coincide with methadone's implementation in December 2014 and is situated in the grounds of a hospital. While the interview data is used to bring to life the materialisation of methadone treatment, the capacity of this analysis to 'emplace' methadone's materialisations in the space of the clinic is inevitably limited by its reliance on subjects' accounts produced outside of this space. Interview data also presents particular challenges when seeking to notice affective and material relations (Coleman and Ringrose, 2013). The addition of an ethnographic element in the space of the clinic and in the moment of intervention delivery would have been an ideal complement to tracing how interviews enact their materialisation of treatment effect. It is also important to note how the space of the community-based drop-in may materialise the interviews in particularised ways. The community-based outreach project proffers an interface between the world of illicit drug use and the drug dens and people who inject drugs who desire or need methadone treatment. It enacts, in various ways, a device of translation towards the promise of normalcy through access to methadone treatment. In particular, there is strong advocacy of access to

methadone treatment by the community project on behalf of its clients, including constituting treatment referral as a means towards realising recovery promise.

This analysis approaches interview data as relational to its situation of production, envisaging methadone's recovery-making as an enactment of accounting performance (Bacchi and Bonham, 2016). Interviews are thus treated not merely as texts representative of, or standing in for, practice, but as *objects of practice and performance* in the evidence-making of methadone intervention. Following Bacchi and Goodwin (2016: 32-36), this approach draws attention to "statements as 'things' that have material form, rather than simply some comment made in conversation", which "establish discourse in its 'ponderous, awesome materiality', bridging a symbolic-material division (Foucault 1972: 216)". This view of narrative as practice with material form and effect allows for analysis of phenomena as patterned networks of relations and events, and of the complex mechanisms at work in the production of objects. Treating discourse as 'things said' focuses analysis on how certain things are rendered 'sayable', with certain constitutive effects. The analysis is also attuned to noticing the interplay of human and non-human elements in descriptions of recovery potential assemblage (Fox and Alldred, 2017). Taken together, rather than treating things for what they are, or for what they are represented to be, the focus is also on what such knowledge-making practices can do (Deleuze and Guattari, 1987). Tracing the enactment of methadone treatment as recovery potential, the analysis notices three main materialisations: narrative enactments of methadone as recovery; enactments of methadone as recovery in relation to a multiverse of methadone knowledge; and enactments of recovery hope as an effect of methadone delivery practices.

Recovery potential

Methadone is enacted in interview accounts as a technology of drug withdrawal alleviation, enabling addiction recovery (“It clears withdrawals, and if you want to stop using drugs you will be able to stop”). In a context of repeated failed attempts to become drug-free through abstinence-oriented residential rehabilitation (see Rhodes et al., 2015b), methadone treatment is a hope for a recovered future: “Those who are taking it have changed. They are now clean. They are not injecting themselves. They do not have withdrawals” [Suleiman]; “Before I used to say like I will die soon, I won’t do anything. Like I have passed through the world. I came for nothing and I go for nothing, but now maybe I will do something” [Morris]. The recovery promise of methadone treatment extends beyond the physical management of drug withdrawals to a transformation of the self. Methadone is described as “clearing the mind” and “freeing” the self and body from its entanglement in a cycle of searching out street drugs to alleviate withdrawals. This opens up an altered way of being (“I didn’t know myself”; “I really changed”; “It makes me feel human”), with renewed future orientation and agency (“I think it can make me someone”; “I had lost hope in life”). Methadone promises freedom from addiction, and with this a future:

You feel your mind has cleared, because before I never used to think about anything good about my life. I was just thinking about how I will get money, how I am going to steal. But when you take methadone, it clears your mind. You feel you want to be clean, and you want to take a shower, and you also get an appetite... Taking stuff just messes up your life, it takes you to the cemetery. But methadone clears your mind, and you start making or shaping your life. [Pendo]

Fundamentally, methadone treatment promises *normalcy*: “I want to be like a normal person, to think the way a normal person thinks”; “I need to return to normal life and to be like other people”; “I changed back to a normal person, not an addict”. A key theme in this imagined state of normalcy is the restoration of social and familial relations: “I just want to start my family, like my wife and my children, so I want to work in a good job, so I can protect my family” [Morris]; “My family has started

to develop trust in me, even my mother. I have regained her trust. And even my dad” [Marvin]. The hope of re-inclusion through restoration of familial and social relations is a predominating theme:

Methadone has helped a lot. It has changed me. People, right now, they can see my progress. My body has changed. People are happier around me. They call. People surround me, like my mother, my brother, telling me the difference of what methadone has done... It has made me recover. My family are happy now I am always with them. I have got time for my child, for my wife. [Oscar]

It [methadone] has changed my life completely... People, they used to avoid me. They used to keep far from me. They wouldn't come close to me. Friends, good friends, they are gone... My family, they are so happy about methadone. So far, it has changed me. They are happy for the methadone because they tell me they can see the changes. I have become a good person. [Morris]

These narratives fuse together self-change with social acceptance. While the family is a core figure, this transformation extends beyond familial relations. Prominent in women's accounts, for example, is the self before methadone as abject and outcast. This contrasts with a new self-with-methadone as clean, ordered, attractive, and accepted. One instance is methadone's re-awakening of intimate and affective relations, including of the self as a sexual and desirable being, linked also to the hope of future partnerships and family life:

Before methadone, he would think that I am going to infect him with lice, because I had a lot of them, and I used to have a bad smell. But now, I can even hug a person. The smell is gone. I don't smell badly anymore... We met at the drug den. He told me he used to love me even then, but just because of the way I looked he couldn't stand being with me. I was skinny and I looked like an old women. But you see me now, with methadone, you are looking good, and you have added weight, now I am willing to accept you, and share my life with you. [Pendo]

While the enactment of methadone's recovery potential orientates to the future, beyond the recovery-in-the-making of the present, methadone's embodied effects are felt and observable in the short-term. The self-transformations linked to methadone are "unbelievable", defying the odds of expectation, and beyond comparison with previous addiction recovery efforts. Accounts invoke the "magic" of methadone, also positioning methadone treatment as "God's work" ("God has helped us, and brought for us methadone"). There is a strong sense of gratitude to the technology, sometimes fused with particular thanks to Kenya's President Uhuru: "Thank God and Uhuru for the way they have helped us. May Uhuru live long and serve as our president so that he can help many other people".

Recovery is a relational accomplishment

Let us consider how the narrative of methadone's recovery potential is enacted into experience. As with the accounts of Oscar and Morris above, these analyses emphasise that bearing witness to change is at the root of recovery's becoming. Recovery is constituted as an effect of others' bearing witness to, and acknowledging, bodily-material change. As Morris says of his sense of family re-inclusion: "My brother, when I started methadone, he saw me changing... He said you can come back home... My brother took me back because of the methadone". Self-change is materialised in relation to *others'* witnessing and remarking of it. As Pendo describes of the evidence-making of her recovery through community reaction: "Even women in the community started saying that they did not believe when they saw the changes in me. They even asked me whether I had a rich husband, and I tell them that God has helped me, and also something I am taking called methadone".

Methadone's effects are *seen to be believed*, both as a materialisation of one's own recovery as much as enabling others to realise theirs. Suleiman says that he "used to hear people talking about methadone" but that he "hadn't decided to stop taking stuff", but this changed when he "saw one of [his] friends who had joined methadone". Likewise, Morris's recovery was affected by bearing

witness to methadone's embodied effects: "I saw my friend change through methadone... We are seeing the changes... He changed completely. So, I had to ask him where I can get the medication".

Importantly, embodied change affects recovery capacity in others:

Everyone wanted to see what will happen after we take methadone, whether we are going to change... They get the urge to come and join methadone to be like me. They come for methadone because they saw one of their own change for the better. [Asha]

The enactment of recovery potential through bearing witness is subject to the context of the witnessing occasion. Two dimensions appear to shape the robustness of recovery's evidence-making: the qualitative nature of the change being witnessed; and those doing the witnessing. The more dramatic the change that is witnessed, the more convincing the case that recovery has become. As Marvin describes: "They get shocked with the change in me. They wonder what happened to this guy... They even ask my mother what has happened to me... They see I have changed". In this respect, accounts accentuate how once failed addicts, especially those most unruly and doubting of methadone, become key forces for potentiating recovery in others. As Asha comments above: "They come for methadone because they saw one of their own change for the better". And as previous methadone doubters, such as Jemima, recounted: "We have seen how you are looking good, so we realised that we were being lied to [about methadone's recovery potential]".

Moreover, those constituted as having the greatest capital in endorsing normalcy and in offering a gateway to social re-acceptance are the most critical in affording recovery's becoming. As noted, a primary element here is the family, with family members especially important resources of recovery potential. As Pendo says of her recovery: "My mother was very happy... She just hugged me and cried when she saw the change in me, and how I was looking good. Even today she sometimes cries

when she looks at me and sees how different I am from the way I used to be". Equally important, is that her once doubting sister endorses the witnessing of the transformations made, also accentuating these changes as beyond belief: "My sister lives in Mombasa with her family. I send them pictures and they don't believe me. They, and even myself, don't believe that I own a phone, that I can talk to them and send them my pictures".

Methadone is a moment towards recovery's making

An important dimension in the making of recovery's potential is that methadone treatment is constituted as *a moment towards* normalcy. Methadone is "not for life". Imagined normalcy is a state beyond methadone. Accounts present methadone treatment as having a "two year" end-point ("We were told two years"; "We should take it for two years").³ Normalcy, treatment's ultimate expectation, is being drug *and* methadone free, with treatment a "two year" count-down to drug-free normalcy: "For fourteen months I have taken methadone. Then the remaining six months they start reducing the dosage, and then you stop". To use methadone otherwise constitutes treatment as improper (see also below). Accordingly, there is active interest, and a sense of accomplishment, in having methadone doses *reduced*, with people sometimes agitating for smaller doses than their doctors recommend ("They have said that people should not reduce their methadone dosage, and you know, we are willing to stop taking it, and change our lives for the better").

Methadone danger, methadone doubt, and doing treatment well

Methadone treatment is treated here as an object constituted variably and momentarily through its narrative and material implementations. How then, does the predominant narrative of methadone as recovery potential juggle with alternative versions of methadone, and how are these multiple versions of methadone negotiated in practice?

While for some early adopters, methadone was a realisation of hope that had been two years in the making (Rhodes et al., 2016), for others whether to “sign-up” to methadone treatment was characterised by ambivalence. In this respect, accounts constitute methadone as an *experiment* surrounded by competing perspective. Accounts making methadone questionable or harmful circulated in the drug dens, especially among those electing not to become “clients” of methadone and among drug (heroin) dealers. Here, methadone is a danger, even a potential killer, and an experimental treatment not to be trusted: “They were saying these people are doing research with us... We are going to die... Some people have already died... You will get paralysed”. As Arthur outlines, methadone’s negative effects were multiple: “If you take it you will not be able to father a child, you will not be able to perform again, and this will make your wife run away. Others say that if you take it, you may become mad. And if you are old it will make your internal organs malfunction. And that you have to take methadone until you die. And if you discontinue, you will experience many problems”. These were methadones to be doubted or feared. To “join” methadone conferred an engagement with risk. Those joining-up without delay emphasised that they had nothing to lose, like Lilian: “Before I started methadone I still had problems. I didn’t have a place to live, so was sleeping outside. I had my children being cared for by my mother. I had a really bad life”.

In consequence, it was common for some to hesitate on their uptake of treatment opportunity. We see at play here a friction in ways of making methadone – as a promised good, as a risk of harm – which to some extent enact the differentiated spaces of the drug den and the methadone clinic. Those deliberating these oscillating sites of representation – indeed, those enacting themselves as travelling from the world of drugs to methadone-assisted recovery – exercise a leap of faith in who and what to believe. A heightened reflexivity surrounds signing-up to an experimental project and to *being* that experiment: “I heard people saying that if you took methadone you will die. I didn’t know what would happen, I was afraid”. Most manage this friction by adopting a ‘wait and see’ policy, where methadone’s effects can be seen to materialise in those experimenting:

I joined later because I wanted to see what was happening to those who went on it earlier. I joined a bit later, when I saw those who had joined earlier, how some had recovered. I saw some of them changed. They are now clean and healthy. [Arthur]

I didn't know how methadone was going to react with me, so I decided to first see those who are taking methadone. You know, at the base [drug den] when people joined methadone most people were saying when you take methadone it is bad, so we became afraid, so we decided to wait and see what happens to those who are taking it... After watching him for three or four months I decided to come to this place. [Suliman]

Again, methadone's recovery effects are seen (affected materially) to be believed. Bearing witness to embodied effect is a knowledge-practice which connects with, and helps moderate, that which is said or claimed: "People lie and say that methadone is killing... But if you follow doctors' advice it will heal your mind, and that is what I believe, and that is what I have seen". Pendo's account brings together the dimensions of bearing witness to dramatic change which characterises methadone's evidencing as recovery potential in the face of counter representations:

A friend of mine, we used to sleep at the base, and he started methadone before us. He used to inject a lot of stuff, he was a heavy junky. Then he joined methadone. I watched him for a week, two weeks, a month... The funny thing was that he stopped injecting and taking stuff. He used to inject about eight stuff per session, but even on the first day he started methadone he completely stopped... He used to tell us, 'Try it, you will see, it is a good thing'. I thought it was a joke. I started spying or checking out on him to know for sure, or check for real, he had stopped taking stuff and was on the methadone. I asked the woman who had rented us a place to sleep if she had ever seen this guy smoking or injecting himself, and she told me that even she is shocked because he is no longer the way he used to be. I wondered what happened, the way he used to love drugs like me. I decided to try it out.

Whereas stories about methadone (what is represented) may be doubted as unstable, embodied methadone (what is actualised) is firmer knowledge connecting materially and viscerally with those witnessing. These moments in evidence-making are also afforded relative security and longevity since the embodiment of methadone as a good is located among former methadone doubters of the drug world. As Jemima indicates: “They say bad things, but they also came and joined when they saw how others who are using it had changed and were looking good”. Methadone knowledge affected through bodily interaction appears firmer, and feels more ‘real’, than representational knowledge claims.

Messing with treatment

Questionable versions of methadone treatment continue to circulate even once people have signed-up as clients. A primary object of negotiation here concerns “mixing” (‘chakachua’ in Swahili); that is, whether and when methadone mixed with street drugs (especially heroin but also bhang)⁴ constitutes improper treatment. Would-be patients of methadone are told by treatment providers at their initiation that mixing confers potential harm (“If you mix methadone with heroin we were told it makes you paralysed, or you can even die”). Rumours circulated as to the dangers of mixing (“Mixing bhang and methadone may have some bad side-effects later in life, and I thought I may become mad”). Accounts work to link good treatment conduct with avoidance of mixing and a focus on dose reduction towards a drug-free state of normalcy:

I used to take 120ml, and they have been reducing me slowly. Now I am 70ml because I have been taking it for about one year. I want to continue like that until I get to zero. [Arthur]

I have been taking it for one year and three months, and I haven’t mixed with anything. And I am the first person to get [methadone] who has never mixed it with anything. I was the one leading. Even

now, they have started reducing it for me... Yes, they are reducing it for me so that I don't take heroin or methadone. I want to be just like any other human being who is not on drugs. [Pendo]

Those routinely mixing are derided as "junkies" by proper clients of treatment, for they remain entrapped by the relentless search for a high (despite methadone's effects making this difficult) rather than switching to a mission of recovery-making: "Methadone hasn't helped them, but it is because they were mixing with bhang and heroin and alcohol"; "Those who are mixing, it is because they are greedy... They just want to spend the whole day sedated. But for those who know the importance of taking methadone they do not mix, and they are making their life for the better". Moreover, it is these same junkies, intent on messing with treatment, who are constituted as the makers of methadone as ineffectual or dangerous: "The junkies, they are the ones who were saying that thirty six people had died after taking methadone". The primary exception to the rule that mixing denotes bad treatment conduct involved the early days of methadone dosing, where some recalibrated their dose with added heroin (and in two cases, diverted methadone) to enable the treatment to work, as therapeutically intended, to alleviate withdrawals: "They increased it to fifty, and that is when I started feeling good... I used to mix drugs every time I left the hospital...". Learning to use methadone well was also a process of adaptation to expectations of drug effect, and to a new life without heroin: "The first days when I started I was feeling like methadone is not enough, and later I realised that it is not that it is not enough, it was all about my mind and how I was thinking about it"; "You are confused. You don't know whether to belong to either the current [methadone] or the old life [before methadone]".

Here then, we see the constitution of methadone as a resource to recovery reproduced by a moral code of treatment conduct wherein doing treatment well avoids contamination from non-medical forms of substance use. Well-meaning good clients of methadone, whose accounts enact a mission of recovery, navigate this moral boundary through justification that their additional substance use is

momentary and therapeutically motivated, unlike junkie behaviour, thus neutralising any pejorative association. Accounts perform their recovery-making by separating the world of drugs from the world of therapy, yet 'chakachua' constitutes a flow of effect between them.

Rationing recovery hope and the methadone queue

The methadone of recovery potential also oscillates in relation to an emergence of rationed recovery hope in practice. Here, I consider methadone's implementation as a material dynamic in recovery's rationing, illustrated through the particular case of the methadone delivery queue (see also, Fraser, 2006).

Methadone is dispensed within a tightly guarded window of operation between 7am and 1pm. There is no lee-way, and the gate to the hospital site is closed by a guard exactly on time. Each client receives their daily supervised dose through a single dispensing window. They are assigned a number on their arrival at the gate which places them in the daily methadone queue. The queue is characterised by hustle and bustle, and there are hundreds waiting: "We are about 150 and they serve us using one window". The waiting can extend to hours. The anxiety generated by not making the time-cut is intense given the embodied fear of drug withdrawals. There are multiple accounts of people not making the dispensing cut-off in time: "It is one o'clock, and they will close the window when you are just standing there, and refuse to give you your medicine"; "It was one minute to midday [the weekend closing time], and they sent him to the gate to get a number, yet he was at the gate and he was told that the [dispensing is] over... When they came back it was exactly midday. They closed the window, and this guy just cried".

The waiting against the anticipation of an upsurge of drug withdrawals produced by the methadone queue connects back materially – through sensory memory – to scoring street drugs. It troubles the

recovering body by looping it back to a space from which it seeks detachment. As Lilian comments: “It is just like when you are using heroin, and you miss [your dose], your body suffers a lot... If they don’t give you your medicine [...] they take you back to a place where you don’t want to go back to, you go back to smoking or sniffing heroin so that you can manage”. The methadone queue is a liminal space. With methadone constituted primarily as a technology of drug withdrawal alleviation, the methadone queue risks interfering with the recovery work being done. If late, and the dispensing window closes, there is the possibility of returning to the drug den to stave off withdrawals: “When you leave the clinic you decide to go to the den and spend some time there. After all, they have refused to give me methadone”.

All participants talked of their concerns of being late for the methadone queue, or of making the queue on time but not making the dispensing cut off: “If you get there a bit late, with five minutes, they don’t give us methadone”; “You get there, like two minutes to time, and you are supposed to be given your medicine, but they don’t give you”. Some adopted the strategy of getting to the clinic as early as possible, often around 6am, an hour before the dispensing window is timed to open. For those with child care responsibilities, or with work, or who had to travel some distance by bus navigating Nairobi’s notorious traffic delays, getting to methadone on time resonates with the chaos and stress of a hustle. The queue itself becomes a disordered ordering, with arguments and sometimes violence ensuing between those queue-jumping and waiting.

Lateness is punishable. Not only is not making the dispensing window in time marked by the prospect of drug withdrawal, those late feel disciplined, and if late on three occasions, are removed from the treatment, risking relapse. Accessing methadone enacts discipline upon its consuming subjects. There is disquiet that methadone’s delivery operates an unequal contract between clients and clinic. A common story, for instance, was that some clinic staff would open the dispensing window late: “They themselves, sometimes they are late. We were there by seven-thirty at the gate,

and even by eight the doctor was not yet there”; “They tell us to report at eight, and they report at nine. And when you come late, even by one minute, they will tell you to go back. And methadone was supposed to come to help us!”. A recurring story was that certain doctors would force a situation of waiting, intensifying anxiety, while reading a newspaper or drinking coffee in view of those waiting. For instance:

At 6.30 you find around 100 clients have already arrived and registered their name at the counter. You find that the doctor comes in at around six but because it is a Saturday he won't open the window. He will start by reading the newspaper until it is seven o'clock. He opens the window at around ten minutes past even though there are so many of us. Some people they are hot tempered, are furious, because they are held up. They were to be somewhere else. They arrived early so that they could go and attend to other issues. [Asha]

The window is open and there is no doctor. If you peer in the window the doctor is in, and just seated either with the computer or reading the newspaper. We are many, and some of them want to go to work, others are taking care of their children, everyone has an issue to sort. They still take us as junkies. [Millie]

The waiting for methadone against the heightened sense of withdrawal potential, combined with a sense of discipline and of being less than deserving, enacts – daily – a ‘not yet’ and ‘less than’ recovery. The methadone queue is *less than* separated from the world of the drug den: “They still take us as junkies”. For some, the methadone clinic experience is *less than* care: “It is only one doctor who does not look down on people. He takes us as human beings. But the others... They look down on us”. These patients have a weak sense of care entitlement, epitomised when their dispensing time runs out: “We have to *beg* them so that they can give us methadone”. Waiting and gratitude combine, enacting patient patients rather than therapeutic citizens (Rhodes et al., 2013).

Discussion and conclusions

This analysis situates the object of methadone treatment as a fluid intervention. Methadone is multiple, open to negotiation, emerging from the discourses and practices which enact it. The becoming of methadone in Kenya is an effect of the social and material assemblages of its implementation. In exploring methadone's becoming, I have concentrated on how its intervening capacities recover potential. To do this, I have drawn upon the qualitative interview accounts of participants in Nairobi who are new to using methadone. I draw attention to three concluding remarks concerning methadone recovery as an effect of its narration, affect and delivery.

Narrative of methadone recovery

Methadone is overwhelmingly narrated as an object of recovery potential. This narrative affords methadone the promise of normalcy. A primary definition of such normalcy is social acceptance and social inclusion, especially through restoring familial relations. There is nothing particularly new in this version of addiction recovery narrative, and it appears translocal (Nettleton et al., 2013; Harris, 2015; McFarlane, 2011). It is possible that the hope incorporated into the substance of Kenya's methadone through these accounts is intensified by a situation of rationed alternative drug treatment opportunity, the force of anticipation generated by methadone's eagerly awaited arrival, and the immense gratitude that having this new technology affords (Rhodes et al., 2015a,b). But as with the narrative making of addiction recovery elsewhere (Keane, 2000; Valverde, 2002; Harris, 2015), this is a technological solution affording the promise of *freedom*; from addiction, to choose, to become part of normal life. This narrative is a form of governance for the normalising effects it energises among its human subjects (Rose, 1999; Vrecko, 2010). Alternatively, normalcy can be noted as an embodied desire rather than simply imposed (Mol, 2002). The analysis here emphasises that it is the desire for normalcy, to move beyond addiction, to imagine a state of 'more than' drug

use, which gives methadone its local constitution. This is worthy of note because other versions of methadone are possible, and methadone can be made otherwise.

There is striking similarity in the versions of methadone treatment made in Kenya to those made in other situations or places for pharmaceutically different opioid substitutes, such as buprenorphine in the U.S. (Harris, 2015). As we have seen, methadone is constituted to “clear the mind”, give “clarity” of thought, and “free” the self and body, accordingly enabling a new way of seeing and being. According to Harris (2015), all these same effects are claimed for buprenorphine in altogether different contexts (California), except that they are *not* claimed of methadone, which did not produce such clarity and freedom. Resonating with Gomart’s account of how the apparent same substance (methadone) produces fundamentally different materialised effects given the clinical trial relations and implementation practices producing them (2002), the substance of methadone is multiple, emergent according to local assemblages of need, desire and opportunity. Getting out of addiction as a pathway to normalcy is an enactment of Kenya’s methadone effect which is materialised, albeit to varying extent, through its implementations.

Different circulating bodies of methadone knowledge connect with each other. New users to methadone in Kenya resource methadone as a medicine of recovery. This version of methadone connects with that materially implemented as part of a culture and system of addiction treatment giving primacy to abstinence and the articulation of the normal as drug-free. It also finds connection with versions of methadone treatment enacted in neighbouring Tanzania, where methadone’s implementation also energises recovery hope (Ubuguyu et al., 2016). Those signing-up to methadone’s experiment give emphasis to methadone as a state of transit beyond drugs. Treatment is described as a count-down to accomplishing normalcy constituted as being drug- *and* methadone-free. Those mixing their methadone with drugs, or diverting from a mission of dose reduction, are messing with treatment as intended, and were sometimes derided for such junky-like behaviour. Yet

for all their flux, versions of methadone articulated elsewhere place considerably less expectation on being a resource for abstinence, instead anticipating normal life via a maintenance of drug substitution combined with HIV prevention and harm reduction (United Nations General Assembly, 2006; Degenhardt et al., 2010). The methadone in Kenya enabled by its assemblage relations at the interface of treatment delivery and treatment use is also in friction with the methadone performed in national policy representations (NASCO, 2013). Legitimised by HIV emergency, methadone enters Kenya as an experimental policy solution to the problem of HIV linked to drug injecting (Rhodes et al., 2015a). This articulation incorporates methadone treatment as part of globalised discourses of HIV concern and evidence-based HIV prevention (NASCO, 2013; Degenhardt et al., 2010; MacArthur et al., 2012). Methadone's introduction into Kenya as a technology of HIV prevention is enabled by a complex apparatus of global institutions and investments. We find then, that methadone is multiple. Each of its seemingly singular instantiations is an effect of passing connection in a multiverse of circulating bodies of methadone knowledge enacted locally (Mol, 2002; Law, 2004). Methadone treatment is far from a singular evidence-based intervention translated into multiple settings, but a local practice of emergent evidence-making interventions.

Affect in the multiverse of methadone knowledge

An important element in the assemblage relations affording methadone treatment its recovery potential is the affective flow produced through social interactions. Recovery is made through social interaction, with its embodied effects *seen to be believed*. Recovery's constitution extends beyond a sense of mere self-change for it is materialised through its witnessing and reaction by others. It is this transmission of communication, this movement and connection between bodies, that is evidence-making of recovery's becoming. Here, the recovering body is produced through an assemblage of social relations "of movement and rest" between interacting bodies (Deleuze and Guattari, 1987: 261). As these analyses show, not only is one's own recovery enacted through being affected by its interactions with significant others, but the recovering body also produces affects

potentiating others' recovery. This bearing witness to, and connecting with, embodied methadone effect is enacted in accounts as a critical and sustaining element of recovery's making. It is actualised through variable forms of social connection, from the passing remarks and noticing of others to social re-acceptance in familial and social networks. In each instance, these interactions produce a relational movement, a transition, bringing recovery into being. We are reminded that "every small element matters in these 'machinations' (Rose, 1998) of bodies and affects: facial expressions, body movements, use of language, eye contact" (Zembylas, 2007). It accentuates that it is through affect, and more particularly, the capacity of a body to affect and to be affected through its encounters with other bodies that the once 'addict body' is malleable to change. Affects constitute the body's "power of acting" (Deleuze, 1992). They involve a "transfer of power, capacities or action-potential between bodies" (Deleuze, 1988: 48-50; Duff, 2014: 106).

Recovery's becoming can therefore be seen as fundamentally translated through its material and affective implementations. I arrive at this interpretation in part because the analysis has highlighted how different knowledge forms resource methadone's recovery potential differently. While circulating stories about methadone (what is said and represented) conjured an atmosphere of uncertainty, as well as disquiet concerning the claimed harms of the methadone experiment, such knowledge was doubted when in friction with embodied methadone knowledge (what is actualised, witnessed and felt). Embodied methadone effects, transmitted materially and viscerally, seem to constitute a firmer, stickier, and more sustainable, knowledge; an evidence-making that is *lived* through the everyday of social interaction. This is evidence-making moving from the potential into the actual. Recovery, like any learning process, emerges through "practical engagement with lived-in environments" rather than through transmitted "propositional knowledge" linked to technological promise alone (Ingold, 2000: 168, 416). In this way, learning recovery is more practical than cognitive; it is a shift in perception that is "haptic – sensed, embodied, practised" (McFarlane, 2011:

21), which affords methadone its particular social transformations (such as enabling social acceptance through restoring familial and community relationships).

Again, this coming together of different bodies of knowledge (representational, embodied) and the versions of methadone they produce (methadone as a harmful experiment, methadone as a recovery hope) accentuates a methadone multiverse. A multiverse is the synchronicity and friction between multiple certain and uncertain elements in a practice or reasoning (James, 1956), including the contradictory claims which surround new technologies (Leibing et al., 2016). In their account of stem cell research, Leibing et al (2016) illustrate that certainty in relation to new biotechnologies is made-up of knowledge gaps, ambivalence and doubt (Adams et al., 2009), a situation which parallels methadone's experimentation in Kenya. There are two points here. First, methadone knowledge is produced out of the connections arising between its different, and sometimes competing, circulating bodies of knowledge. As we have seen, methadone doubt can be incorporated alongside a sense of embodied relative certainty. Second, if action is to be taken in a lived-in environment a platform of relative certainty must be enabled (Leibing et al., 2016). Here, the analyses underscore the relative weight of methadone's embodied effects. We see this, for instance, when one's repeated past recovery failures are cast by significant others as 'false promises' to doubt the proposition that this new medicine, methadone, will make a difference, and how pivotal methadone's embodied materialisation becomes to disrupting or transforming this knowledge proposition. Likewise, we can see how the affective connections made through embodied methadone knowledge communicate across, and thus open-up, the bodily boundaries between the methadone doubters and the methadone users who affect recovery potential. Embodied methadone moderates its propositional doubt.

Potentiality and actuality

Assemblages – the relations between objects that produce effects through their interactions – concentrate attention between the potential and actual (Duff, 2016; McFarlane, 2011). I have envisaged recovery potential linked to methadone treatment as a product of methadone’s representational and material implementations. Following Fraser (2006), I have highlighted how the apparatus of methadone’s delivery – illustrated by the methadone queue – enacts a rationing of recovery hope. Participants talked of ‘signing-up’ and ‘joining’ methadone, of signalling their recovery-making as a crossing to another side, of enacting a movement towards a new way of being in the world. This is methadone’s recovery *potential*, infused as we have seen with promise, hope and high expectation. The becoming of methadone’s recovery potential, however, is not straightforward. The material world is messy. We see oscillation, and collision, between the methadone represented and the methadone materialised. The methadone queue instantiates this friction. The enforced waiting against the anticipation of the upsurge of drug withdrawals, and the sense of discipline and weak entitlement to care, affects a sense of the methadone clinic as *less than* separated from the world of drugs. Practices of ‘chakachua’ – the messing of methadone treatment through its mixing with street drugs – also troubles a recovery reliant upon the performance of separation between the worlds of drugs and therapy. In different ways, the lived experience of methadone’s implementation loops back, including through embodied sensation, to a life with drugs. We see then, that this ‘methadone multiple’ – of potentiality, of actuality – is a liminality, a “living in two or more neighbouring worlds, worlds that overlap and coexist” (Mol and Law, 2002: 8). The methadone queue is “coexistence at a single moment” (Mol and Law, 2002: 8). This multiverse of methadone speaks of its process of becoming, of its “inclusion of older value systems and practices in the construction of the present” (Bloch, 1991; Leibing et al., 2016: 439), and of different epistemic cultures coexisting within a field (Knorr-Cetina, 2006).

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3. It is unclear how the notion of a ‘two year’ timeframe for drug-free recovery emerged as a device of methadone’s implementation, although it seems the case that this idea is shared among intervention providers and users alike.
4. Bhang marijuana, which is smoked.

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Table 1 Study participants

Pseudonym	Gender	Age	Reported HIV status	Income/Occupation
Rob	M	33	HIV +	Unemployed
Peter	M	20	HIV -	Student
Oscar	M	27	HIV -	Unemployed
Morris	M	36	HIV -	Disc Jockey
Marvin	M	24	HIV -	Student
Millie	F	42	HIV -	Peer Health Worker
Freedom	F	38	HIV -	Casual labour
Rahab	F	40	HIV -	Unemployed
Webster	M	34	HIV -	Unemployed
Fred	M	50	HIV +	Small business
Ken	M	34	HIV +	Small business
Yassin	M	38	HIV +	Florist
Evans	M	51	HIV -	Unemployed
Karanja	M	38	HIV -	Unemployed
Steve	M	42	HIV +	Cobbler
Philip	M	24	HIV -	Touting
Alfred	M	34	HIV +	Washing cars
Nesh	M	19	HIV +	Hustling
Eric	M	39	HIV -	Touting
Alan	M	45	HIV -	Casual labour
Andrew	M	30	HIV +	Casual labour
Winnie	F	21	HIV +	Unemployed
Drake	M	25	HIV +	Touting
Cathy	F	29	HIV -	Casual labour
Lilian	F	32	HIV -	Unemployed
Suleiman	M	34	HIV +	Unemployed
Asha	F	35	HIV +	Unemployed
Pendo	F	38	HIV +	Casual labour
Jemima	F	41	HIV +	Casual labour
Arthur	M	50	HIV -	Mechanic

RESEARCH HIGHLIGHTS

- Treats methadone treatment in Kenya as effects of narrative and material implementations
- Shows how qualitative interviews enact methadone treatment as recovery potential
- Explores how methadone's recovery potential is materialised in practice
- Envisages a 'methadone multiple' in an 'evidence-making intervention' approach