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SPECIAL ISSUE:
**OPIATE PHARMACOTHERAPY: TREATMENT, REGIMES,
CONSTRUCTIONS AND CONTROL**

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SPECIAL ISSUE: OPIATE PHARMACOTHERAPY: TREATMENT, REGIMES, CONSTRUCTIONS AND CONTROL
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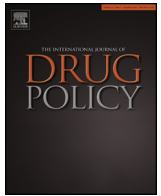
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Editorial

Opioid pharmacotherapy: Treatment, regimes, constructions and control

Welcome to the hall of mirrors

The terms ‘pharmacotherapy’, ‘substitution therapy’, ‘substitution treatment’, ‘agonist treatment’, ‘agonist pharmacotherapy’, and ‘agonist replacement therapy’ all refer to “the administration under medical supervision of a prescribed psychoactive substance, pharmacologically related to the one producing dependence, to people with substance dependence, for achieving defined treatment aims” (WHO/UNODC/UNAIDS, 2004). Various pharmacological agents are used in substitution programmes for illicit opioids (including methadone, buprenorphine and injectable diamorphine) and studies (including randomised trials and observational research) consistently show that opioid pharmacotherapy (OPT) is effective in the treatment of opioid dependence (Bell, 2012; NICE, 2007; WHO/UNODC/UNAIDS, 2004). Despite this, the policy and practice world of OPT often resembles a fairground hall of mirrors. This is because wherever one stands and in whichever direction one looks, unexpected, distorted and frequently troubling images of therapy stare back. OPT is a widely practised, well-evidenced treatment; yet it is also persistently controversial, politically divisive, and much maligned – even by those who use it.

Opioid pharmacotherapy through a social science lens

The social sciences, with their focus on understanding society and human behaviour, are much better at explaining the complex and contradictory nature of OPT than are the natural sciences. Whereas natural scientists tend to maintain that the world comprises ‘realities’ and ‘truths’ that can be studied objectively, social scientists recognise that research can never be truly objective and verifiable since phenomena are socially, culturally and historically relative. Furthermore, all knowledge is subjective, contingent and contested (Berger & Luckmann, 1966; Latour & Woolgar, 1979; Lyotard, 1984). Accordingly, our understanding of any form of medical treatment – including OPT – cannot be reduced to pre-given, immutable facts. Instead, medical knowledge is produced over time through exchanges between people within cultures, and different people in different social and spatial contexts experience treatments differently. Thus, we need to explore the ways that social interactions and context influence the delivery, perception and receipt of OPT in order to comprehend it better.

At a very basic level, we can begin to observe the complex nature of OPT by viewing it from different disciplinary standpoints (e.g. biomedicine, public health, criminology, sociology, anthropology, geopolitics) and from different stakeholder perspectives (e.g. policy maker, service provider, service user, lay public). When viewed

from diverse vantage points, OPT becomes, inter alia, a medical treatment; a method of harm reduction; an overdose prevention tactic; a crime reduction strategy; a public health measure; a social welfare intervention; an administrative system; a mode of social control; a dangerous drug of dependence; or some combination of all of the above. Furthermore, as Fraser and Valentine (2008) have argued in relation to methadone, OPT acts as *pharmakon*. That is, it is ambivalent and has no stable essence, being simultaneously cure and poison.

Significantly, most research on substitute prescribing prior to the 1990s focused on the perspectives of service providers and was quantitative (Neale, 1999a). In the 1990s, researchers, and particularly qualitative researchers, increasingly began to explore treatment clients’ views and experiences of OPT (e.g. Jones, Power, & Dale, 1994; Koester, Anderson, & Hoffer, 1999; Lovejoy et al., 1995; Murphy & Irwin, 1992; Neale, 1998a, 1999a, 1999b; Sheridan & Barber, 1996). This work linked to developments in other service areas where consumer rights, accountability, empowerment, choice and participation were better established. Additionally, it was argued that those who take prescribed drugs such as methadone often have valuable insights into their personal situations and a clear opinion about how these are likely to alter in the future. Accordingly, clients’ views and experiences constitute an important resource in the substitute prescribing process and treatment provision is likely to be more effective if service providers take consumer perspectives into account (Neale, 1999a).

For the most part, however, this early social science research on OPT was applied rather than theoretical. For example, it described heroin users’ diverse reasons and motivations for obtaining substitute drugs on prescription, recounted what they liked and disliked about treatment, and outlined their future goals and expectations. Since then, the social science literature on OPT has advanced significantly, both in terms of the volume of work undertaken and its theoretical sophistication. Thus, there has been a steady stream of international publications, using both qualitative and quantitative methods, and exploring the perspectives of service providers (e.g. Berg, Arnsten, Sacajiu, & Karasz, 2009; Eversman, 2010; Larance et al., 2011; Lin et al., 2010; McMurphy, Shea, Switzer, & Turner, 2006; Philbin & Zhang, 2010) and consumers (e.g. Anstice, Strike, & Brands, 2009; Conner & Rosen, 2008; Harris & McElrath, 2012; Lin, Wu, & Detels, 2011; Nyamathi et al., 2007; Radcliffe & Stevens, 2008; Smye, Browne, Varcoe, & Josewski, 2011; Treloar, Fraser, & Valentine, 2007). Although authors of these various publications have not always been especially good at linking their own findings to those of others, some common issues have emerged. In particular, these relate to the barriers individuals encounter when seeking OPT; the regulated and punitive nature

of methadone treatment regimes; and the stigmatizing impact of, and negative identity associated with, being a methadone client.

In studying methadone, one particularly lucrative source of ideas for social scientists has been the writings of the French theorist Foucault (1963, 1975). According to Foucault, medicine is part of a political programme designed to regulate health, illness and life more generally. Drawing upon his work, various academics have argued that methadone treatment is actually a regulatory technology employed by those in authority to discipline the unruly misuses of pleasure, monitor economically unproductive bodies, and normalise deviant members of society (Bennett, 2011; Bourgois, 2000; Fraser & Valentine, 2008; Friedman & Alicea, 2001; Keane, 2009; Neale, Nettleton, & Pickering, 2013; ten Have & Sporcken, 1985). Thus, methadone is offered to individuals as an inducement to comply with treatment and to conform to social norms. Yet, methadone clients routinely negotiate or challenge their prescription regimens, actively test the limits of treatment regulations, and attempt to maximise the benefits they receive from treatment (Holt, 2007; Ning, 2005). In other words, and consistent with Foucault's concept of resistance, patients strategically deploy a range of tactics to make treatment work for them within the context of their lives (Gomart, 2002a; Holt, 2007; Ning, 2005).

Introduction to this special issue

The idea for this special issue came from an international collaborative meeting entitled *The Social, Political and Cultural Construction of Methadone Maintenance Therapy in Contemporary Societies*, which was held in Vancouver in May 2011. The meeting was organised by Dr Amy Salmon (Vancouver, Canada), Dr Vicki Smye (Vancouver, Canada), Dr Tessa Parkes (Stirling, UK), Steph Gloyne (Vancouver, Canada), Nancy Lipsky (Vancouver, Canada) and Dr Polly Radcliffe (Kent, UK). It brought together academics from Australia, Canada, the US and the UK and was funded by the British Academy/Association of Commonwealth Universities Grants for International Collaboration and the Canadian Institutes of Health Research/Institute for Neurosciences, Mental Health and Addictions. The meeting included an open 'town hall' session organised in collaboration with the British Columbia Association for People on Methadone (BCAPOM). This proved to be a very powerful event that encouraged much cross talk between academic researchers and people receiving OPT, and also highlighted the importance of including the consumer voice within any publication that might subsequently be written from the meeting.

Articles that appear in this special issue and were presented in Vancouver include those by Keane, Strike et al., and Treloar & Valentine. Other articles, including the commentary by Crawford, have resulted from a call for submissions on opioid substitution treatment that the guest editors (Parkes, Radcliffe and Treloar) sent out in May 2012. A key aim of the call was to broaden the focus of the special issue so that it included countries not participating in the original Vancouver meeting. Although Crawford cannot, of course, speak for all people who receive OPT, his contribution provides privileged insight into the everyday experiences of life on methadone maintenance treatment (MMT). The final collection of papers now includes editorials, commentary, review, policy analyses and research reports, covering Australia, Canada, China, Denmark, England, Finland, Scotland and Nepal. Whilst some articles focus on methadone exclusively, others cover OPT more broadly.

The sources that the authors draw upon are diverse and incorporate, inter alia, the perspectives of people who use drugs, people who use services, policy advocates, service providers, policy makers and the general public. Some papers additionally provide a historical perspective (e.g. Ambekar, Rao, Pun, Kumar, & Kishore,

2013; Houborg, 2013; Keane, 2013; Meng & Burris, 2013; Selin, Hakkarainen, Partanen, Tammi, & Tigerstedt, 2013). Many of the multiple roles and functions of OPT are clearly captured – including OPT as drug treatment; aid to abstinence; method of harm reduction; human right; strategy for hepatitis C prevention; crime reduction intervention; facilitator and barrier to 'normality'; aid to parenting; enabler of paid employment; source of pain relief; and intoxicant. Rather than use this editorial to introduce each paper sequentially, I have taken the liberty of identifying a number of core themes and concepts that recur across the contributions. In so doing, I acknowledge first that these themes and concepts are not discrete but interconnect and overlap; and, second, that they are not the only important issues emerging from the special issue. Nonetheless, each powerfully conveys something of the complex and contradictory nature of OPT and therefore seems worthy of comment.

Themes and concepts

Social control and restrictive regimes

As already discussed, associations between OPT and the regulation and social control of drug users are well established. Yet, bringing such a diverse range of articles together in one journal issue poignantly highlights the pervasive and embedded nature of the disciplinary and surveillance functions of OPT. So we see references to rules, constraints, controls and punishments repeated across time and geography, from liberal democracies to more autocratic regimes. Furthermore, OPT's repressive functions appear to be tightly layered like rock strata. At one level, we observe overt laws enacted by the police and criminal justice system to ensure conformity (Meng & Burris, 2013). At another, lie core government policies, fed by moralism and ideology (Bernstein & Bennett, 2013; Wincup & Monaghan, 2013; Selin et al., 2013). In addition, there is a seam of structural violence that is socially produced, rations entitlement to healthcare and brings tangible harm and suffering to those who are already disadvantaged and marginalised (Treloar & Valentine, 2013).

At the level of service delivery, meanwhile, there are rules, bureaucracy and monitoring systems, such as urinalysis, restrictive take-away doses, and frequent and inflexible appointments (Chandler et al., 2013; Harris & Rhodes, 2013; Keane, 2013; Strike, Millson, Hopkins, & Smith, 2013; Treloar & Valentine, 2013). The indignities caused by some of these measures are graphically portrayed in Crawford's account of the pharmacotherapy clinic with its bullet-proof glass, doors with buzzers, humiliating hoops to jump through, and maze-like rules (Crawford, 2013). Perhaps unsurprisingly then, OPT clients often react by bending the regulations, diverting their doses, or resorting to street-acquired drugs to avoid withdrawal (Crawford, 2013; Harris & Rhodes, 2013; Strike et al., 2013). Such behaviours exemplify Foucauldian resistance to treatment constraints; yet they also indicate that OPT clients are taking care of themselves: managing and regulating their own drug taking behaviours as best they can (Crawford, 2013; Harris & Rhodes, 2013).

Breaking through the bullet-proof glass

The more unattractive, restrictive and punitive any treatment is, the less likely individuals are to want to access it. Negative treatment characteristics act as barriers to support and can also lead individuals to internalise messages of rationed entitlement (Treloar & Valentine, 2013). Given what we have already established about OPT, it would seem reasonable to assume that only those coerced into, or truly desperate for, assistance would subject

themselves to degrees of monitoring and surveillance that extend far beyond anything required in other areas of medicine. Yet the barriers to accessing OPT do not stop there. As the papers in this special issue illustrate, treatment entry can be further limited by such diverse factors as narrowly defined eligibility criteria, including requirements of abstinence (Meng & Burris, 2013; Strike et al., 2013); lack of service choice (Wincup & Monaghan, 2013; Treloar & Valentine, 2013); limited provision in primary care settings (Radcliffe & Parkes, 2013); and bureaucratic and administrative failures (Treloar & Valentine, 2013).

Furthermore, access to service provision can be hampered by negative community opinion fuelled by hostile media (Treloar & Valentine, 2013) and public prejudice manifested through 'Not In My Backyard'/NIMBYism (Bernstein & Bennett, 2013). Since this is so, how can we begin to break down the bullet-proof glass? Strike et al.'s account of low threshold MMT provides some welcome reflections on implementing non-punitive, flexible, and patient-centred approaches to treatment that can potentially increase service access and improve client retention (Strike et al., 2013). Meng and Burris (2013), meanwhile, highlight the importance of multi-sectoral cooperation, particularly the need to harmonise the goals, methods and cultures of those working in health and law enforcement. Lastly, Selin et al. (2013) reveal how administrative and technical changes in service delivery, such as the increased use of competitive tendering, can provide unexpected positive opportunities for change.

Intra-actions between the material and non-material

In their book *Substance and substitution: methadone subjects in liberal societies*, Fraser and Valentine (2008) seek to explain how methadone is simultaneously a material substance with biochemical properties, and a deeply social, cultural and political phenomenon. To this end, they draw upon science and technology studies and feminist science studies theory, including Karen Barad's notion of agential realism (Barad, 1998, 2001) and actor-network-theory (c.f. Gomart, 2002b, 2004; Latour, 2005; Valentine, 2007). In so doing, Fraser and Valentine reframe MMT as an assemblage of human and non-human actors made in its encounter with politics, culture and research. Thus, they argue that MMT is a co-construction – an intermingling and fluid intra-action – of both the material and non-material. In other words, methadone is a substance, but it cannot be understood without reference to laws, policies, treatment regulations, hostile media representations and public prejudice etc.

Such an analysis resonates very well with the contents of this special issue, in particular the contributions by Chandler et al. (2013) and Keane (2013). Thus, Chandler et al.'s Scottish study of parents' accounts of the impact of problem drug use and OPT on their parenting during the antenatal and postnatal periods explicitly highlights the material nature of OPT (including its status as substance and its embodied impact on mother and baby) and the wider structures surrounding participants' engagement in OPT (including prescribing practices and the stigma associated with being a drug-using parent). Meanwhile, Keane's paper reveals how medical discourse seeks to separate methadone into two distinct substances: methadone the painkiller and methadone the addiction treatment. Reflecting this, methadone clients are frequently classified as either *addicts* or *non-addicts* and *pain sufferers* or *non-pain sufferers*. In practice, however, this distinction cannot be maintained since methadone is used and experienced similarly by pain and MMT patients, with both groups experiencing embodied suffering and dependence. Here, Keane skilfully captures how methadone is simultaneously constituted by discourses, social structures, and its materiality as substance.

Regression to the binary

We have already established that OPT is a complex, controversial and contradictory treatment, with multiple roles and functions: it is simultaneously cure and poison, material and non-material. Despite this, writings and debates routinely reduce OPT to a series of overly simplistic binary oppositions. Thus, within this special issue we encounter abstinence contrasted with maintenance; prohibition with harm reduction; health with law enforcement; social problem with medical problem; criminal justice policy with health policy; analgesic with therapy; and normal with abnormal etc. This regression to the binary is clearly not a result of the analytical or conceptual limitations of the contributors. On the contrary, their papers all ably convey the dynamic multifaceted complexity of OPT – highlighting, for example, the conundrums of 'generous constraints' (Harris & Rhodes, 2013), entangled harm reduction and control policy (Selin et al., 2013), and the liminal positions of parents engaged in OPT (Chandler et al., 2013). Rather, the endurance – maybe even the indestructibility – of the binary is most likely explained by political, policy and popular discourses, which consistently eschew shades of grey in order to present issues in uncomplicated black and white terms.

Multiple stakeholders

'Stakeholder' is generally a term used to describe any person, group or organisation that has an interest or concern in, or can affect or be affected by, something (e.g. a policy, service, business or change in practice). An additional theme recurring across the papers in this special issue is the wide variety of stakeholders associated with OPT. These include, inter alia, the clients of services; consumer representatives; current drug users; ex drug users; the parents of clients; physician prescribers; non-medical treatment providers; health professionals; local community members; the general public; policy advocates; pressure groups; the police; the media; government officials; administrative decision makers; policy and law makers; and international funding bodies etc. Furthermore, we cannot assume that there is unanimity within stakeholder groups. On the contrary, the papers abound with examples of conflict, disagreement and resistance. Thus, professional opinions differ (Meng & Burris, 2013; Strike et al., 2013); current and ex-drug users adopt diverse ideological perspectives (Ambekar et al., 2013); and government departments struggle to find common ground (Ambekar et al., 2013; Selin et al., 2013).

Additionally, and as any stakeholder analysis or mapping exercise will confirm, not all stakeholders are equal, since some have more power or influence than others. This is certainly the case with OPT. Illustrating this, Crawford (2013) explains that consumers "need to move into the decision making power space in order to influence it. But the other stakeholders rarely if ever venture into our world – the space of oppression and punishment. . . we cannot ask them to come into our world and to be sick every morning or to pee into a jar before they can get their medication". Strike et al. (2013), meanwhile, illuminate the power differential between medical and non-medical staff; Radcliffe and Parkes (2013) note the limited influence of prescribing physicians within broader policy and practice systems; and Selin et al. (2013) describe how 'influential spokesmen' dominated Finnish policy. Other contributors emphasize the value of multi-sectoral co-operation, that includes OPT consumers, and the dangers of adopting a fragmented approach to OPT that undermines partnership working (Crawford, 2013; Meng & Burris, 2013; Wincup & Monaghan, 2013).

Intended and unintended outcomes

In the current era of evidence-based policy and practice, it is not surprising that the concept of outcomes also features prominently across the papers. Thus, there are multiple references to the positive drug, health, criminal justice, social, economic and legal impacts of OPT; these, after all, are the intended goals of policy and practice. In addition, the papers encourage us to look at treatment effects from a range of perspectives, particularly from the standpoint of clients themselves. In so doing, we see that OPT can have consequences that were most likely neither intended nor foreseen by service providers and policy makers. These relate to what happens when clients are unable to access treatment or are denied or miss their medication. In such situations, individuals might resort to illicit street drugs with all their attendant risks (Strike et al., 2013; Treloar & Valentine, 2013); human rights are violated (Bernstein & Bennett, 2013; Treloar & Valentine, 2013); and, ultimately, the overall goals of OPT can be undermined (Bernstein & Bennett, 2013; Treloar & Valentine, 2013).

The diversion of prescribed substitute drugs, usually associated with overdose and other harms, is one unintended treatment outcome featuring in several papers (Ambekar et al., 2013; Crawford, 2013; Harris & Rhodes, 2013; Treloar & Valentine, 2013). Importantly, and by considering diversion from the perspective of the OPT client, we see how an outcome which is predominantly perceived as negative may actually have positive functions. So, in their qualitative London-based study of 37 people who inject drugs, Harris and Rhodes found that methadone diversion played a prominent role in helping their participants to manage their drug use, prevent withdrawal, cement social relationships and protect against hepatitis C transmission. These findings are consistent with previous Australian research by Valentine (2007) who also reported that methadone sharing is not inevitably risky or dangerous. Indeed, Valentine deployed the term 'lay carer' to convey how clients "behave outside prescribed rules whilst being scrupulously careful about following different, informal codes of responsible treatment: looking after others and themselves, keeping doses safe".

Stigma and identity

Finally, we turn briefly to the concepts of stigma and identity (c.f. Bernstein & Bennett, 2013; Crawford, 2013; Harris & Rhodes, 2013; Keane, 2013; Wincup & Monaghan, 2013; Radcliffe & Parkes, 2013; Treloar & Valentine, 2013). Although not new ideas when discussing drug users and those in treatment, their pervasiveness in this special issue renders them too important to ignore. As long ago as 1992, Murphy and Irwin reported on the management of stigma by methadone maintenance clients in the US. Their data were gathered between 1980 and 1989 and highlighted the marginal identity of being a methadone client: not quite junkie, not quite conventional (Murphy & Irwin, 1992). Murphy and Irwin concluded that "methadone patients were in a kind of identity limbo; a holding pattern between two extremely different social worlds. They were trying to effect an identity transformation; however, in many circumstances they were still associated with and defined by their 'dirty secret'". This limbo state mirrors exactly the findings on drug using parents identified around a quarter of a century later in Scotland by Chandler et al. (2013). As the latter researchers explain, the OPT parent inhabits a 'liminal position'. Engagement with OPT labeled them as a 'drug user' and bound them to services that impacted negatively on family life and made 'normality' difficult (c.f. Wincup & Monaghan, 2013; Neale, 1998b; Radcliffe & Stevens, 2008; Radcliffe, 2011).

Looking to the future

In 1978, Paxton et al. concluded: "Our argument is that there are disadvantages as well as advantages in methadone maintenance, and that the advantages are not as clear as some writers have claimed. Moreover, the effects that can sometimes be demonstrated (e.g. reduced crime) tend to be to the advantage of society rather than of the drug-taking individual. We would urge a careful look at both the advantages and disadvantages before embarking on prescribing" (Paxton, Mullin, & Beattie, 1978). Thirty-five years later it is difficult to disagree. What next then for the social science of OPT? Do we, for example, need more research, more policy analyses, more commentaries or more theory? Although we have travelled a long way in our understanding of the treatment of opioid dependence, we can never afford to be complacent. Types of drugs, patterns of drug use, policies, politics and socio-economic environments are constantly changing. Without doubt, there will always be a need for more social science research on OPT. Nonetheless, now might still be a good time to pause and take stock, particularly as there appears to be some evidence of recurrent findings and possibly even some data and theoretical saturation within the field.

To conclude, we could look to new theories and concepts or even to new ways of advancing some of the existing, well-rehearsed ideas about OPT. However, my preference is to end this editorial by focusing on some very practical next steps. Whilst there is no obvious pathway out of the perplexing OPT hall of mirrors, there are actions that we might take to help us better navigate our way through the distorted and troubling images and into a place where we see clearer and more useful representations of substitution treatment. First, it would be helpful to have some high quality reviews of the social science literature on OPT that would enable us to consolidate what we already know, prevent us from reinventing the wheel, and give sensible direction for future analyses. Second, we need to think carefully about how we can best translate the now very sophisticated academic understandings of OPT that we have into language and terms that are easily understood by the many other stakeholders operating in the field. As social scientists, we are keen to explore OPT from a range of perspectives, but we must also find ways of making our frequently complex ideas and empirical findings accessible to multiple audiences, including opioid users, the media and the wider public. Indeed, if we are really to capitalize on our hard-won knowledge of OPT, it is perhaps time that we too came out from behind the bullet-proof glass.

Conflict of interest

The author has no conflict of interest.

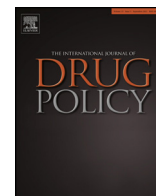
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Editorial

The politics of providing opioid pharmacotherapy

Introduction

People using opioid pharmacotherapy (OPT, methadone and buprenorphine medications used for maintenance purposes) have recently provided accounts of the stigma that is often part of the treatment experience (Anstice, Strike, & Brands, 2009; Harris & McElrath, 2012; Strike, Millson, Hopkins, & Smith, 2013), as well as the restrictive and punitive practices (Chandler et al., 2013; Crawford, 2013), and structural violence (Treloar & Valentine, 2013), inherent within the treatment systems they encounter. The views of treatment providers about their social and political location and agency within OPT systems have not, we believe, been adequately examined from a critical perspective. While Neale, in her editorial for this special issue (2013), refers to research on providers' perspectives, such studies have tended to focus on specific clinical aspects of OPT rather than locating providers more explicitly within the contexts of what many understand to be an inherently controversial and contested area of health care.

Physicians have spoken out for some time about the recurring political anxiety linked to OPT, and the polarised and often ideologically-driven discussions that commonly fail to engage meaningfully with either the new or old science on the effectiveness of this treatment, or with the practitioner 'art' of OPT in its many guises (see Ford, 2010, 2012; McNamara, 2012; Robertson & Burrowes, 2010; Robertson, 2012; Wodak, 2002). However, the impact has received little attention.

We have therefore considered the papers in this special issue for the ways that they pay attention to the different political, social and cultural contexts of OPT in the countries they are describing. We aim to discern the impact such heterogeneous contexts (China and Nepal are featured as well as European, North American and Australian examples) have on the development and 'mainstreaming' of OPT, access to treatment and treatment systems, regimes and practices. We hope that this editorial goes some way towards addressing the absence of explicit provider perspectives in this compilation.

Locating providers in the development and 'mainstreaming' of OPT

Physicians, because of their irreplaceable role as prescribers of the controlled drugs involved in OPT, are usually central in all analyses of OPT provision and will therefore receive the majority of attention from us here. Historically, physicians have been at the forefront of the development of treatments for opiate dependency (Berridge, 2012; Courtwright, 1982/2001) and have, alongside

people who use drugs (PWUDs), been the targets of government regulation via drug policy. Following publication of the second Braine Committee Report in 1965, the UK government for example responded to opiate dependency as a 'social disease' (Ministry of Health, 1965; Mold, 2004, 2008), putting in place a public health matrix of care and control (Stimson & Oppenheimer, 1982) that drew on specialist services, administrative reporting structures and treatment strategies designed to both regulate prescribing and limit the impact of addiction amongst a wider public (see Monaghan, 2012).

In response to the explosion of heroin use in the 1980s in British cities, a small number of pioneering GPs (General Practitioners) provided sterile injecting equipment (Ashton & Seymour, 2010; Robertson & Richardson, 2007). Faced with similar health emergencies elsewhere, individual physicians have taken harm reduction action in order to save the lives of injecting drug users (MacNamara, 2005; Rosenberg, 2010). While in some jurisdictions national health policies have changed to include such harm reduction practices, this is by no means universal. For example, while harm reduction would become part of the UK Conservative government's HIV prevention strategy in 1987, in Finland, as Selin et al. (2013) describe in their paper in this special issue, private physicians' prescribing of substitute medication to opiate dependent patients resulted in their prosecution by the authorities. This action was part of what the authors describe as a criminal justice-driven definition of drug use as a crime to be rooted out.

The papers in this compilation show that while physicians have power in their relationships with patients, as prescribers of controlled drugs and as gate keepers to certain services, for example, they may not have other forms of influence in the wider policy and practice systems that they are part of. Houborg's historical paper (2013) describes the ways that administrators and senior physicians involved in Denmark's established abstinence-focused drug treatment tried to restrict the provision of substitute prescribing by controlling GPs. Guidelines were put in place in the 1970s to try to prevent OPT coming to Denmark 'through the back door' by limiting the prescription of methadone to detoxification only and by removing authorisation to prescribe controlled drugs from particular GPs working in this way. He outlines the ways that doctors were involved in this political and 'epistemological' policy work as central actors, some for the treatment status quo (restricting OPT) and some as *proponents for change* in the establishment of OPT as a mainstream treatment option.

Houborg (2013) examines the ways that successive national reports attempted to dismiss OPT as a viable treatment method, in part by arguing that it would 'contribute to reproducing the drug problem rather than solving it, because drug users would

become less motivated for drug free treatment' (e73–e80). Part of the political dilemma in the Danish situation seemed to be the differing opinions concerning the degree to which doctors should be allowed to be autonomous in relation to their medical practice. So, on the one hand, committees were set up to authorise very exceptional long-term methadone treatment and yet [Houborg \(2013\)](#) states that in fact these committees had no such authority to prevent general practitioners from prescribing methadone for drug treatment. It should also be noted that, in this particular time and place, lay people – significantly parents of people who used drugs – were instrumental in lobbying for changes to both the way that drug problems were understood and to what treatments should be available for them. This paper illustrates the innovation and experimentation that Danish doctors engaged in to try to meet the needs of their patients in a variety of settings, including prisons, and to provide evidence that this form of treatment was effective and led to better outcomes than the prevailing 'social treatment' model. Like [Selin et al. \(2013\)](#), this paper paints an illuminating picture of the intimate inter-relationships between national drug policy and dominant ideological beliefs about the nature of drug use, social progress and reform.

The politics of providing access to OPT

Restricted access to OPT treatment takes many forms. As [Bernstein and Bennett \(2013\)](#) highlight in their paper in this issue, access to OPT may be limited by any number of factors, including government control measures or the lack of funding, physicians and pharmacists to carry out an effective program. Their particular analysis, however, explores the ways that zoning laws have been deployed in Canada to effectively make illegal the establishment of OPT services in towns and certain areas within towns. [Bernstein and Bennett \(2013\)](#) suggest that municipal governments in Canada may feel emboldened to implement zoning laws as a means of preventing the delivery of OPT via clinics and dispensing pharmacies not only as a result of the failure of central government to enforce health care legislation but, in addition, as a result of the failure of service user movements to engage with municipal drug politics. It is unclear what role providers of treatment services might also play in contesting such zoning laws on behalf of PWUD.

As well as promoting and pioneering harm reduction treatment in ways we have outlined above, physicians also have the ability to restrict access to such treatment. Drawing on models we are more familiar with, the GP in the UK, and family practitioner in Canada and Australia, is organised as a small business contracted to the state. In the case of the UK, where coverage of GP prescribing is relatively high, although more than half of a sample of GPs surveyed in England and Wales reported having seen opioid dependent patients in the previous four weeks ([Strang et al., 2005](#)), demand for opioid prescribing is nevertheless thought to have outstripped supply. Indeed, the fact that GPs in the UK can choose not to provide substance misuse treatment (something that remains outside of the list of services that GPs are contractually obliged to provide through their main contract) limits the scope for drug users to access OPT in primary care settings and, therefore, to be treated in the context of their other health needs. OPT is also something family physicians can opt in or out of in Australia and Canada with additional training required before being able to become an approved prescriber ([Frei, 2010](#); [Luce & Strike, 2011](#)). There are many factors that work to dissuade physicians from taking on this aspect of clinical practice. As Keane describes in her paper in this issue, medical discourse distinguishes between patients who are prescribed methadone for pain relief and those prescribed methadone to treat opioid dependency; the 'addiction' of the latter marking them out as potentially

troublesome patients in a primary care setting provides one such disincentive.

Personal and societal stigma towards drug users is therefore another significant factor in physicians choosing not to become involved in OPT ([Luce & Strike, 2011](#)). Sometimes colleagues who share GP practices prevent a willing GP from getting involved ([Parkes, 2010](#)). The range of other work that physicians working in general practice are called to do can also make OPT appear to be an additional burden ([Parkes, 2010](#)). Choosing to prescribe can be perceived as having tangible negative implications and risks, especially in some settings such as rural areas where there may be few opportunities for support, specialist expertise and clinical cover. Fragmented funding streams and differing payment models may also make OPT more or less financially attractive ([Luce & Strike, 2011](#)). In Canada, for example, the financial reimbursement for family practitioners to provide methadone in some provinces is lower than for other aspects of family practice making it more difficult to recruit family physicians to this area of work ([Luce & Strike, 2011](#); [Parkes, 2010](#)). Further disincentives include the peer-based audits that exist in some jurisdictions such as Ontario and British Columbia in Canada ([Luce & Strike, 2011](#); [Parkes, 2010](#)). Prescribing of buprenorphine, for example, does not always have the same regulations associated with it ([Ontario Council of Pharmacists, 2012](#)), emphasising the extent to which particular forms of medical practice are targeted for regulation ([Keane, 2013](#)).

Moving from the individual choices of physicians to the choices made by groups of providers in specialist clinic settings for OPT it is clear that rationing access to treatment can occur via the use of waiting lists and access thresholds. In Nepal, access issues are created by the dependence of treatment services on external funding agencies resulting in a failure to scale-up OPT services ([Ambekar, Rao, Pun, Kumar, & Kishore, 2013](#)) with a consequent scarcity of services that are made available only for injecting drug users. Such thresholds for access to services create perverse incentives to inject in order to access drug treatment services locating OPT within an HIV prevention, rather than a drug treatment, strategy. Access can also be negatively impacted, as Strike et al. argue in this issue, by clinic policies that insist on abstinence from all other drugs as criteria for accessing methadone. These authors also describe social and cultural aspects of low threshold OPT clinic environments that were off-putting:

"...while this environment of acceptance helped some clients feel welcome, comfortable and encouraged to remain in treatment, for others, this environment was troubling and interfered with their desire to get away from the drug scene" (e57–e60).

The discomfort described here connects with research in UK drug treatment settings by [Radcliffe and Stevens \(2008\)](#) where clients were deterred from engaging with treatment services they identified as designed for 'junkies'.

The politics of treatment systems and regimes

National and local guidelines for physicians and other professionals providing OPT are one important way in which drug policies get translated into practices on the ground. Although research has indicated compliance with dosing guidelines can be poor ([Nosyk, Marsh, Sun, Schechter, & Anis, 2010](#); [Strang et al., 2005](#)), guidelines can nonetheless exert significant pressure on providers to work in particular ways with those receiving services and can strongly influence the ways that OPT is operationalised ([Fraser & Valentine, 2008](#)). Ideological tensions between, for example, harm reduction-orientated and abstinence-orientated approaches, are likely to manifest in treatment guidelines. Some guidelines

on OPT are more directive than others given that many will be local or provincial rather than national. Where guidelines for OPT exist they may also, as Strike et al. argue in this issue, be open to interpretation by individual service providers with the clinical judgement being exercised on prescribing decisions leading to significant variation in practices. These authors highlight that in the treatment services where they conducted research there was not always agreement between the professional groups or across the treatment programmes regarding specific OPT practices. Tensions between physician and non-physician staff members, particularly around clinic practices where guidelines may be open to interpretation, such as urine drug testing or missed appointments, seemed to reflect differences in individual accountability, including legal accountability, in Canadian governance structures for OPT.

Drawing on the Australian setting, Crawford suggests in his commentary (2013) that guidelines for OPT are a source of friction between clients and service providers and may be misrepresented in ways that benefit service providers and negatively impact those using services. He links this friction to an underlying resentment that he believes underpins the provision of OPT in Australia, amongst government and some service providers, and consequently impacts on the quality of service delivery, systems and processes of care. In another Australian analysis, Treloar and Valentine (2013) also point to structural problems in OPT that lead to the failure of actors to implement policy in a way that serves the interests of marginalised populations. In their view OPT has failed to gain legitimacy as a mainstream and essential treatment in wider healthcare systems leading to 'rationed entitlement' and institutional regulations, policies and practices that bring tangible harm and considerable suffering to a chronically disadvantaged and marginalised group.

Reinforcing these views of the restrictive nature of OPT, Keane highlights the ways that methadone is prescribed and patients managed within addictions treatment compared to methadone prescribed purely for pain management. Her analysis illustrates the ways in which the methadone prescribed for pain and the methadone prescribed for addiction is kept separate through policy on medications, physician training and licensing and physician practice guidance in order to maintain the distinction between pain treatment (and pain patients) and addictions treatment (and addictions patients).

"...when we look at methadone through the perspective of official guidelines we see two groups of patients being treated by different specialists for different conditions in different settings and under different management regimes. These differences act in part to protect the status of pain patients as legitimate patients and not 'junkies'. While chronic pain is subject to stigmatization and de-legitimation as a 'diagnostically uncertain' condition, the stigma attached to MMT is of a different order because of its association with addiction" (e18–e24).

Keane shows how this makes no sense in the context of chronic pain where many people receiving OPT also have chronic pain problems. Analysing clinical case study examples where real patients are being treated for both pain and addiction reveals the 'broader tensions surrounding the medical use of opiates and the determination of the correct parameters for their prescription' (e18–e24).

In Chandler et al.'s paper on parenting and OPT in Scotland, providing 'clean' urine drug tests was a method of demonstrating commitment to being responsible parents; these tests becoming markers of stability as parents attempted to comply with strict treatment regimes. If parents struggled to keep appointments the consequences were portrayed as severe. Participants also highlighted negative impacts of OPT on their attempts to maintain a 'normal family life' through the substances of OPT, the

structures of the services entailed by OPT and the impact of the wider stigmatising discourses regarding drug-using parents. Participants reported concealing illicit drug use from services, relapsing following attempts to reduce OST dosage and become abstinent, and to reduce rapidly during pregnancy.

Moving to a very different geographic example, Meng and Burris systematic review (this issue) reveals that in China, mandatory registration of drug-using patients, mandatory drug treatment and compulsory detoxification deter drug users from accessing or adhering to harm reduction services. Indeed, various forms of cooperation were reported to exist between public security departments and MMT clinics. In Chinese drug law, drug treatment providers, including MMT clinics, must, for example, regularly report patients' information to the police-administered drug user monitoring system. Strict compliance with the law entails frequent exchange of information between clinics and the police, so efficient bureaucratic cooperation facilitates patient enrolment as well as withdrawal due to relapse or other drug use. Police presence in and around the clinic was seen by some clinics as positive and by others as interference. There would seem to be little scope for either treatment providers or service users to challenge such regimes of control, or indeed for research that might reveal such a challenge.

A significant change in treatment systems in England and Wales is the rise of the concept of 'full' and 'new' recovery. The notion of 'full' recovery was introduced in the 2010 Drug Strategy (HM Government, 2010) and elaborated in a policy 'roadmap' document published in 2012 (Interministerial Group on Drugs). In the policy 'road map', substitute prescribing is conceived as a 'bridge' to recovery, focusing on the *expectation* upon the drug user to engage with recovery activities (Interministerial Group on Drugs, 2012). According to Wardle (2012), there has been growing emphasis on recovery in the UK as a whole as an organising principle over the past five years which he describes as moving from 'challenge to orthodoxy'. As Wincup and Monaghan (2013) and Harris and Rhodes (2013) outline in their analyses in this issue, the concept of 'new recovery' places a more or less implicit emphasis upon moving providers away from the policies of harm reduction and moving patients away from maintenance on OPT (see also Stevens, 2011).

Harris and Rhodes (2013) argue that the governing lexicon of expectation upon the drug user to recover targets the production of a responsabilised, autonomous citizen. This construction of the drug user detracts from the previous bio-medical focus of drug dependency as a 'chronically relapsing condition', thereby challenging both the medical model of addiction as disease, and harm reduction as its response. Within this discourse opioid substitutes such as methadone and buprenorphine represent further drugs of dependence. As Harris and Rhodes describe in their analysis of users' narratives, diversion of methadone, something urine testing and supervised consumption of opioid substitutes are designed to prevent, may be a strategy used by service users both to manage their own withdrawal symptoms and to assist others with withdrawal in the event that a prescribed dose is missed. Drug users, it is indicated, are frequently already responsible managers of their own OPT dosage whether or not such management involves compliance with the systems that are designed to regulate use of opioid substitutes. While 'new' and 'full' recovery policies evoke freedom, choice and opportunity for drug users, as several of the papers in this collection suggest, the notion of 'choice' and 'freedom' in drug treatment should be seen in terms of complex interplays of power, structure and agency (Chandler et al., 2013; Crawford, 2013; Harris & Rhodes, 2013; Keane, 2013; Meng & Burris, 2013; Neale, 2013; Treloar & Valentine, 2013).

As Selin et al. (2013) describe, the problematisation of OPT as perpetuating addiction was a feature of drug policy in Finland that was superseded in the late 1990s by a more holistic and pragmatic approach to drug treatment. In his paper describing the 'politics

of knowledge' in Danish drug policy, Houborg (2013) emphasises the long legacy to the ideological battleground of OPT where even provision in the 1990s continued to be impacted by the restrictive philosophy of those earlier decades with 'regular use of urine tests, quarantines for using illegal drugs and standardised methadone doses' (e73–e80). As noted above, the major issue seems to be the belief that provision of OPT contributes to *reproducing drug problems* rather than solving them. The intransigence of such beliefs can be seen across the many geographical contexts described in the papers in this Special Issue. The recent call in autumn 2012 for yet another review into the use of opiate replacement therapies in Scotland is testament to this (Alderson, 2012). The resulting publication restates, as previous reports have done, the central place of OPT within modern day substance misuse treatment systems in Scotland (Scottish Drug Strategy Delivery Commission, 2013). It does this, however, by placing OPT in a context that involves wider systems of health care and support delivering a full set of treatment options and emphasises that prescription services alone are not the answer. Crucially, the review places opioid dependency in its social context by drawing attention to the part played by social exclusion, health inequalities and stigma towards people who use drugs and highlights that indefinite or long-term OPT for some people "should not be considered a failure" (105).

Conclusion

The papers in this Special Issue illustrate how the integration of substitute prescribing into national drug strategies and health care policies has been considerably uneven internationally where access to such services often remains problematic, even where national policy and best practice guidance recommend it. The analyses we highlight in this editorial emphasise that drug treatment policy is a contested and negotiated space in which advocates for harm reduction policies and practices appear at times to take one step forwards and two steps back. The papers have ably illustrated how entitlement to best practice treatment for PWUDs may be institutionally challenged and 'rolled back', even in the context of methadone and buprenorphine having the status as essential medicines with the World Health Organisation (World Health Organisation, 2005) and optimised OPT being understood globally to be the 'gold standard' of addictions treatment (World Health Organisation, 2009). Stakeholders in this 'politics of knowledge', including service users who continue to choose OPT and their allies, must therefore compete for discursive participation and influence. It may, as Bernstein and Bennett (2013) suggest, be incumbent upon service user movements to actively engage in the local and national politics of drug treatment and drug policy. We would argue that, following the example of the pioneers in harm reduction referred to at the beginning of this editorial, many of whom continue to take a political role nationally and internationally, providers of drug treatment must also engage politically.

The papers in this issue demonstrate that the role of the treatment provider is never a neutral one. Whether they are choosing to provide OPT to patients in general practice, to advocate for the entitlement of PWUDs to a holistic range of treatment services, or interpreting guidelines so as to make prescribing services more or less accessible to a broad range of PWUDs, providers are ineluctably positioned in relation to a politics of drug treatment. There are obvious questions that arise from this collection concerning how providers of drug treatment in authoritarian regimes may resist the systems of surveillance and correction upon drug users. Yet there are equally important questions concerning how treatment providers in liberal democracies may learn from and engage drug users in the sorts of prescribing services they may need and how, in the face of an increasingly abstinence-focused politics of drug

treatment in England and potentially also elsewhere, providers are able to continue to make the case for OPT.

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Conflict of interest statement

We hereby declare that the manuscript titled 'The politics of providing opioid pharmacotherapy' has been authored by us in our individual capacities. We declare no conflict of interest with any other agency/organisation whatsoever.

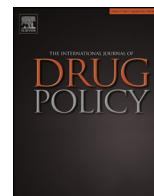
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Editorial

Examining structural violence in opioid pharmacotherapy treatment in Australia: Sweating the “small stuff” in a liberal paradise

A journal editor recently commented to us that analyses of structural obstacles to the delivery of harm reduction programs in Australia was “fairly small stuff” at the “relatively easy end of things” in comparison to the gross abuses of human rights experienced in other countries. While it is undoubtedly true that Australians who use drugs are not summarily executed, imprisoned in enforced labour camps or subject to torture, we argue that it remains imperative to analyse the structural barriers to harm reduction and opioid pharmacotherapy treatment (OPT) that persist, even in what some consider the relatively liberal paradise of Australia.

Australia boasts very low rates of HIV among people who inject drugs (PWID) (Iversen & Maher, 2012), OPT is publicly subsidised and the National Drug Strategy recognises harm reduction as one of the three pillars of harm minimisation (along with supply and demand reduction) (Ministerial Council on Drug Strategy, 2011). Needle and Syringe Programs are legal and run by and as health services. Drug user organisations are funded by government and a safer injecting facility has been established, protected and now enabled by law.

With such seemingly strong mechanisms to promote the health and protect the rights of PWID and those who receive OPT, the journal editor noted above could be correct in suggesting that there is little benefit in examining the structural barriers governing the provision of OPT in Australia. By implication, such analysis could be considered as illegitimate when considered against the gross violations and violence against PWID in other countries. There is a limited truth to this (brutal) logic. Violence (of varying kinds) against PWID is often illegal, but invariably unacceptable and immoral (Barrett, Lines, Schleifer, Elliott, & Bewley-Taylor, 2008; Gallahue & Lines, 2010; Lines, Barrett, & Gallahue, 2010; Wolfe & Cohen, 2010). And it is to this last point of morality, that we turn to argue that analysis in Australia, and other countries with similar protections, is crucial. It is in these states that the structural roots of transgressions against the provision of OPT and the rights of its clients may run so close to Western social and culture mores as to be invisible and hence unrecognised and perpetuated.

In our privileged position as researchers, policy advocates and colleagues of people who use OPT, we regularly witness instances where the structural regulation of OPT has brought possible or actual harm to the lives of people who have been legally prescribed this medication. We have a large catalogue of examples to draw from and mention a few here. Some are startling, some are mundane and some make us ashamed that we cannot do better as a prosperous country. However, to ensure that we too do not become blind to the impact of structural factors on OPT, we emphasise

the utility of the concept of structural violence for exploring the systemic problems of OPT delivery in Australia.

Structural violence is rooted in the “normative fabric of social and political life” and is described as “generally invisible because it is part of the routine grounds of everyday life and transformed into expressions of moral worth” (Scheper-Hughes & Bourgois, 2004, p. 4). As a result, structural violence is not regarded as deviant or out of place but “to the contrary is defined as virtuous action in the service of generally applauded conventional social, economic and political norms” (Scheper-Hughes & Bourgois, 2004, p. 5). Structural violence, thought to be underpinned by the key elements of poverty, physical violence, and the lack of access to health services (Beckerleg & Lewando Hundt, 2005), is also considered as existing on a continuum that also involves everyday, symbolic, and intimate dimensions (Bourgois & Schonberg, 2009; Shannon et al., 2008). Everyday violence is defined as the social production of indifference in the face of institutionalised brutalities (Scheper-Hughes, 1996). These routinised and legitimised rituals of bureaucracies (Bourgois & Schonberg, 2009) are in turn socially produced, fed by moralism and secondary to the goal of the health service. Moralism also underpins notions of symbolic violence. The link between normative values and stigma is well established (Goffman, 1968) and there is a significant body of literature examining the undermining effect that the experience of stigma has on health care decisions, health care seeking and health outcomes (Scambler, 2006). When we examine symbolic violence, we take a step beyond stigma. The internalisation of these embedded categories of good and bad, worthy and unworthy, has been termed symbolic violence following Bourdieu (Bourdieu & Wacquant, 1992; Parker & Aggleton, 2003; Rhodes et al., 2007). A similar concept, oppression illness, has been described as the internalisation or embracing of prejudice and stereotype (Singer, 2004). Although we will concentrate on some aspects of violence, the structural and the everyday, we echo the warning that violence is a slippery concept to define and operationalise (Scheper-Hughes & Bourgois, 2004).

Where do we start in examining the structurally produced risks and harms associated with OPT delivery in Australia? Perhaps we start in the sterile environs of an airport departure lounge and with the deep disappointment that comes with news of a delayed flight. For non-OPT using subjects such experiences are frustrating and irritating and perhaps inconvenient. For someone on OPT, who has complied with Australian regulations by travelling only with their prescribed dose, the outcomes can be so much more. This incident occurred in a developing country where OPT was not legal. Our OPT-client colleague was forced to consider highly risky alternatives in order to manage their medical needs. One ‘solution’ included the

purchase of heroin and injecting equipment on the streets of an unfamiliar city in the middle of the night. What could we ask of our colleague: to go into withdrawals in the most unaccommodating of situations or jeopardise years of struggle maintaining a life free of illicit drug use to cover a medication gap of less than a day?

In structural violence terms, we understand this policy decision, that is, to restrict OPT doses with no extra for contingency, as aligned with social convention. Although at least half the Australian population supports the continued operation of OPT (Australian Institute of Health and Welfare, 2008), OPT remains an easy political and media target (Elliott & Chapman, 2000; Fraser, 2006; McArthur, 1999). The maligning of OPT in political and media circles fails to recognise OPT clients as citizens with rights to the “highest attainable standard” of health (UN Committee on Economic Social and Cultural Rights (CESCR), 2000). It fails to recognise OPT as a legitimate part of the health system and as an essential medication. While the restriction of take-away doses is in part driven by the fear of diversion of OPT for illicit use (Bourgois, 2000; Fraser & valentine, 2008), the institutionalised regulations, or social controls (Harris & McElrath, 2012; Keane, 2009), surrounding its dispensing creates situations where the needs of individuals are not met, their health is imperilled and the overall goals of the OPT program are undermined.

The second example of structural violence relates not to the everyday annoyances of travel, but the prison system. Jasmine’s story was collected from a previous study examining how people with a recent hepatitis C diagnosis believe they acquired the infection (Deacon et al., 2009). Jasmine links OPT policies and procedures for those in short-term detention to the acquisition of hepatitis C. Despite being a OPT client, Jasmine was not provided with her medication over the three days of her detention. On release, Jasmine injected prescribed methadone that had been previously used (and contaminated with blood) by her partner.

In Jasmine’s case there is no record of her experience and subsequent hepatitis C infection. Without the collection of this information in our study, her case would have remained invisible. The data systems available to us to monitor the health and longer term outcomes of people in prison or detention are not sufficiently sophisticated to capture an experience such as Jasmine’s. Moreover, our broader study demonstrated the ongoing nature of multiple risks and possibilities for hepatitis C transmission and the difficulty in attributing acquisition of hepatitis C to any one event (or indeed to one risk within one event) (Deacon et al., 2009). Hence, the risk of contracting hepatitis C inherent in Jasmine’s story may well be discredited as she may have been exposed to other risks around the time of this period of detention. This then allows the prison and detention systems to eschew any responsibility for their role in creating the circumstances that lead Jasmine to take this risk immediately upon release.

What plays out here is also the interface between structural and everyday violence. The corrections system failed to provide a prescribed medication to a detainee. However, the adoption of policies governing the provision of equipment for the injection of methadone in turn restricted the options available to Jasmine regarding her choice of equipment. In New South Wales, where this study was conducted, large bore syringes and the winged infusion sets used to inject methadone are no longer distributed by publicly funded Needle and Syringe Programs as this practice was deemed at odds with the harm reduction principles of both the OPT program and the Needle and Syringe Program (Hopwood et al., 2003). Hence, the limited availability of the specialised equipment required by Jasmine for the injection of methadone may have necessitated the reuse of her partner’s injecting equipment. Again, only the serendipitous recruitment of Jasmine to our qualitative study resulted in data that enabled us to track the cascade of interrelated factors that Jasmine subsequently attributed to her

acquisition of hepatitis C. There are no data collection systems that track the outcomes of OPT provision to detainees (or lack thereof), the impact of the removal of winged infusion sets, or the interplay between these.

We began by citing the argument of a journal editor that analysis of structural issues in Australia was “small stuff”. Positioning the experiences of Australian people on OPT as frivolous and unimportant undermines their rights as citizens and renders them as invisible. The ability of such groups to claim their rights becomes more complicated when such efforts occur in a large, messy and internally contradictory field such as OPT (Bourgois, 2003; valentine, 2011) and when OPT clients internalise messages of a rationed entitlement to such claims (as would be suggested using a symbolic violence lens). We would like to emulate the pressure brought to bear on other countries to change their policies (Wolfe & Cohen, 2010). Although the stakes may not be so drastic or immediately life-threatening, we are nonetheless referring to policies and practices that bring tangible harm and considerable suffering to a chronically disadvantaged and marginalised group. However, unlike the gross violence and injustice associated with the death penalty for drug offences there are no international agencies charged with monitoring Australia’s actions in this arena; the harms and sufferings rendered in Australia go largely unrecorded.

The positive health, social, economic and legal outcomes associated with OPT are well established. Yet, even in Australia, OPT remains at the margins of legitimate health care and access remains subject to onerous and inflexible regulation at the whim of prison authorities in some cases, and negative community opinion fed by hostile media in others. To ignore the experience of Australian OPT clients and the structural issues that produce harm, is to deny these people rights to an essential medicine and to provide a free pass to the Australian health, legal and media systems.

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Conflict of interest

The authors have no conflict of interest to declare for this manuscript.

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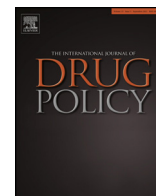
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Commentary

Shouting through bullet-proof glass: Some reflections on pharmacotherapy provision in one Australian clinic[☆]Sione Crawford^{*}

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ABSTRACT

The Opioid Substitution Treatment Program in New South Wales and Australia has a serious impact on the day to day lives of many people. The program and those consumers who rely upon it are seen with ambivalence by many in the wider community, and many consumers are discriminated against. It seems, to those of us who are engaged in it, that the system itself is confusing and sometimes arbitrary, and that a range of priorities other than clinical need dominate our experience of treatment. These pressures can manifest for us consumers as a punitive and unresponsive treatment experience that, rather than assisting us to live our lives, actually places barriers in our way and ties us up in knots that will take a long time to unravel.

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I am engaged as a client in the Opioid Substitution Treatment (OST) program here in Australia and have also worked in policy advocacy for drug user organisations and currently am involved in consumer representation work. In these roles I've been involved in and witnessed first-hand the processes that govern the pharmacotherapy system here and also feel the impact of these processes as a consumer. This is a quite unique perspective in this field as, unlike many other fields of health care, consumer engagement is not common. The OST system here in Australia is state-based and although there are differences in delivery across the states there are also similar issues that we all grapple with.

The history of the Opioid Substitution Treatment program in Australia has been complex and convoluted. I am going to try and tease out a number of observations from my experience in the consumer, policy and service provision contexts. A number of strands of reasoning and need have become entangled to turn the system into something of a stuck knot. There are a number of different clinical models; there are competing policy agendas and there is some confusion amongst some sections of society about just what pharmacotherapy or OST is "meant" to do. Those engaged in the system and users of illicit drugs in general are problematised as either criminal, diseased or both. I cannot completely disentangle these strands here but do want to provide an account of how this

mess can impact upon the people for whom the system is supposed to be providing for.

A necessary program, not a loved program

From a consumer perspective, the state of pharmacotherapy treatment and of the opioid substitution treatment system that I am involved in appears punitive, contradictory and sometimes arbitrary. On the other hand I would also be debilitated if it were taken away or even made more difficult to access. It is one of the key features of this system that many of its consumers are often unwilling or at least highly ambivalent participants. It is also quite apparent that much of society also sees it with ambivalence (McArthur, 2013; Sikora, 2007).

When discussing the issues faced by consumers with policy makers and even clinicians, one is constantly reminded that the "program" is politically unpopular and something of a lightning rod for negative publicity (Devine, 2009). It, like the public needle and syringe program, are continually misunderstood, stigmatised and barely tolerated – much like the people for whom they are provided (Lowe, 2011). If they were not such stunning public health successes they would probably be disbanded. This is a direct reflection of how injecting drug use in particular is (mis)understood (Parliament of New South Wales, 30 May 2000). We, along with paedophiles and terrorists, are one of the few sections of society it is almost universally acceptable to discriminate against and stigmatise publicly. It is hardly a surprise then that these programs designed to protect our health are seen with ambivalence through to hostility by the public (Fraser, 2006b) and that as part of the community many people engaged in treatment reflect and even amplify these negative opinions about the program themselves. We who

[☆] This metaphor underpins the paper. Bullet-proof or shatter-proof glass is less common in Australia than many other jurisdictions but is used commonly in OST settings. Communication is difficult with this barrier and even shouting does not guarantee understanding.

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are engaged in OST are often the harshest critics of users and of the program (Fraser and Valentine, 2008). This can lead to a self-stigmatisation that is too often perpetuated by services that seem resentfully provided by our government and even some service providers. The fact is that drug use is not understood by the wider community or even, it sometimes seems, by many of those involved in drug treatment. More conservative elements characterise us as weak willed and more liberal elements see us through a prism of disease. Regardless of whether we are seen as immoral or sick we are understood as a problem to be solved. Much drug treatment (as opposed to harm reduction) holds as axiomatic the principle that we should want to stop using drugs illicitly and that any substitution program is a step along on that way (Waterstreet, 2011). Realistic clinicians may understand that for some a lifelong pharmacotherapy program is realistic but few would say out loud that many people just don't want to stop using. The dominant narrative is that we are trapped in a cycle of drug use or we are weak. The concept that some drug use might actually be pleasurable – even (or especially) when one is physically dependent is just not given any air-time.

The belief that long-term medication is a failure

The public discourse around OST is often, like that around illicit drug use, rooted in the assumption that it must be bad. That methadone can only lead to being a zombie and that abstinence is the only valid ultimate goal (Waterstreet, 2011). I agree that we need far better pathways through pharmacotherapy but I cannot abide the idea that being on this “medication” long-term is in any way giving up. If, as a medical model might hold, opioid substitution is a medication, I have to ask whether someone being on any other medication – such as insulin – long term is also “giving up” or given up on by a clinician who accepts they might need this medication long term.

Lack of public support from policy-makers

Our services suffer from this confusion and lack of leadership in the political or policy sphere. For a treatment that ostensibly works when evaluated according to any psychosocial measures, it is woefully underfunded and seems to only attract attention negatively. Recently a campaign involving posters and cards throughout clinics was undertaken to remind we ‘methadonians’ that our medication is dangerous and that it should be stored out of children's reach. Fine, but it is in response to a small number of poisonings that did not result – thankfully – in a death. On the other hand thousands of children are poisoned by a range of substances in the home each year (Cripps and Steel, 2006). That does not make the newspaper with screaming headlines to distribute bleach differently. (Masters, 2006)

Our policy makers seem to be having to spend much of their time justifying the program rather than making it better for those of us who rely upon it.

This ambivalence at best and hostility oftentimes when drug use, drug users and substitution treatment is discussed in public forums must influence the way those of us who are engaged in the pharmacotherapy see the program and services, ourselves, and others engaged in the program. The daily humiliation and grind of being on “the program”.

The “methadone clinic” dosing queue is ubiquitous and the grumbling and complaining which occurs stands as testament to the ambivalence with which those who are in the program see it (Fraser, 2006a).

For those unaware of this phenomenon, let me paint you a picture of the program in New South Wales, Australia. The

specialised pharmacotherapy clinic is a standard feature of the local OST terrain, with around half attending these specialist clinics. I, like around 30% of the State's pharmacotherapy consumers, attend a private clinic where we pay between 60 and 70 dollars a week for our doses, attend a doctor every two to four weeks and undertake “random” urinalysis which seem to fall regularly weekly or fortnightly. These factors are all cause for frustration. We know that people in the public system or those seeing GPs do not have the same level of cost or surveillance. We pay money like a customer but are generally treated like a naughty patient.

These factors hang over the queue like a cloud about to break. The queue itself can be anything from one or two people to twenty or more at opening times or when something is going wrong up ahead in the queue. Delays caused by faulty computers or dosing equipment or problems like a client turning up to find their script expired or problems with the record of their payment or dosing, or take away doses not prepared are all common. The dosing staff, pathologists and receptionist are ensconced behind bullet-proof glass – not common outside banks in Australia, where gun crime is not endemic. This all has a slight panopticon feel to it. The dosing point itself is behind a locked door which used to buzz open when it was your turn. Thankfully the buzzer has gone. The queue wends its way past the pathologist, who has a long list of names in front of them. Usual practice is to shuffle up to the urine window and shout your last name through the glass. If they know you and your name is down you one acutely feels the annoyance and grumbling building behind. Usually you have been part of similar grumbling at some point. If there is a long queue your heart falls as you realise it. You look ahead down the line when you join it. Is it moving slowly or quickly? Which staff member is dosing? Are they the one for whom the computer always seems to fail? You ask the person ahead of you, “what's happening?” and 5 or so people turn around and join in: “they've fucked it” or “they won't dose this poor cunt” or “dunno they're talking shit up there” or “dunno there's always something”. And because there is always something, people are incredibly quick to anger. Frustration boils close to the surface and something like being called out for a urine test for the third time in 3 weeks just raises the temperature to boiling-over point and before you know it there is someone yelling and being issued a warning for shouting at staff. It is not easy to communicate with people behind thickened bullet proof glass without shouting, mind you.

Dosing is of course the point of all of this. If all is routine then fine – you get your dose and maybe a take away and you are free for 24 or 48 h. When (not if) something goes wrong it is not so simple. This is where holdups begin and when it is you and there is a long line behind you one acutely feels the annoyance and grumbling building behind. Usually you have been part of similar grumbling at some point. If there is a long queue your heart falls as you realise it. You look ahead down the line when you join it. Is it moving slowly or quickly? Which staff member is dosing? Are they the one for whom the computer always seems to fail? You ask the person ahead of you, “what's happening?” and 5 or so people turn around and join in: “they've fucked it” or “they won't dose this poor cunt” or “dunno they're talking shit up there” or “dunno there's always something”. And because there is always something, people are incredibly quick to anger. Frustration boils close to the surface and something like being called out for a urine test for the third time in 3 weeks just raises the temperature to boiling-over point and before you know it there is someone yelling and being issued a warning for shouting at staff. It is not easy to communicate with people behind thickened bullet proof glass without shouting, mind you.

Most of us would not be there if we felt we had a choice. Any feature of the clinic is fair game for a whinge or complaint and without doubt the strange fact that we pay a substantial amount of money – as I discuss further below – for a service but feel like we have very few rights is the number one complaint. Very close behind is a sense that the system is set up poorly and is ineffective. The clinic itself does not seem to be part of any structure and as such people do not know to whom it is accountable beyond a vague sense that the government is behind it all.

There are no consumer engagement approaches at the clinic. However as a consumer representative from an organisation involved in strategic committees and the like my role is to straddle the margins between consumer, service providers and policy makers. It is a unique position. I come to it as a consumer and am expected to understand and take into account the different “stakeholders” involved in this mess.

We as consumers do need to move into the decision making power space in order to influence it. But the other stakeholders

rarely if ever venture into our world – the space of oppression and punishment. We are expected to behave and be professional and to not nod off on the treatment “they” have, through a lack of options, channelled us into but we cannot ask them to come into our world and to be sick every morning or to pee into a jar before they can get their medication.

In a similar way users and consumers are expected to conform to practices and medical approaches that have been developed without consumer input and which seem designed to control thousands of subjects perceived to be dishonest and untrustworthy.

Guidelines and rules, not therapeutic relationships

The program is loosely governed by a set of clinical guidelines which are the occasion of many misunderstandings and cause of friction between clients and service providers. It is not uncommon at our clinic for pieces of white paper to appear on a wall with reference to some claimed guideline. Usually these will be used as justification for some new rule or other. One instance (of many over the years) claimed “Clients may not return to the clinic after they have dosed for any reason. This is a Dept. of Health rule.” It isn't. It is a reaction to a phenomenon that comes about when you charge for OST and also won't allow credit. The circumstance comes about like this: a supervised on-site dose (of methadone) is \$8 (or roughly \$8.18 US). A take-away dose attracts a surcharge of AU\$3 so an unsupervised dose is AU\$11. (When this surcharge raised from two to three dollars, oil prices were the reason, I was told..) One must pay back any debt (up to 2 doses only) before picking up a take-away. So if you are due to drink a dose and a take away dose you will need to pay \$19. You cannot take credit of course as you must pay back debt before taking a take away. If you are not well off and don't have \$19 at the start of the day but do have \$8 you might want to come in get your supervised dose – so that you do not go into withdrawal – and then go away to raise the \$11 and return to pay for your take-away dose. But if you are not allowed back to the clinic after dosing you have to give up your take away dose and return to the clinic the following day for a supervised dose. Of course the clinic isn't open on the weekend so if it is a weekend dose you must go to a partner clinic 2 km away to dose on Saturday and Sunday. Maze-like rules such as these are not unusual. Of course the counterparts to rules are punishments for not following rules and when rules *appear* arbitrary, then so too can the consequences, contributing to a continuing sense of injustice.

Terming a clinic rule a Health Department rule is dishonest but even the actual guidelines have the capacity to be misused. We sometimes say that when the clinic needs to invoke a guideline then the guidelines are rules but when consumers question something and refer to the guidelines we are told that they are only guidelines, not rules.

The lack of clarity and muddle-headedness around the guidelines is not helped by the guidelines themselves. A quote from the guidelines:

“Attention should be focussed on getting patients to be active partners in their treatment program and evaluation. (e.g. in providing urine samples).”

Providing a urine sample does not equal being an active partner. It is a terrible example to use to illustrate partnerships. At my clinic we undertake urinalysis not because our prescriber feels it is clinically indicated but because your time is due. I have heard in the queue – many times – someone saying, “but I just did one last week, I'm not doing another – I haven't even seen my doctor since the last one” or “I've been coming here 8 years doing clean urines every time and I still have to do these? Get fucked!” I have returned

from a number of weeks away from the clinic travelling – technically not engaged in their program but dosing from a chemist – and had urine tests to “catch up” on. The pathology forms had dates on them for when I wasn't even in the city. Undertaking a test with a long past date seems pointless.

Urinalysis is clearly undertaken in general because users are not trusted. But far from improving therapeutic relationships or active partnerships they become just another humiliating hoop to jump through to get to your medication, along with scraping up money or getting to the clinic on time or before the clinic shuts for the morning fifteen minute staff break.

Further, in my experience it is more difficult to get the clinic or service to be involved as active partners in my treatment than it would be to get me to be. I don't have a case worker so any issues either have to be taken up with my doctor, or, if it is with the clinic itself, with the manager.

One of the reasons given for being unable to return to the clinic in the example used earlier is that it helps stop diversion. Diversion – the passing on of takeaway doses to anyone they are not prescribed for or using them in a manner not prescribed – injecting them – seems to be something of an obsession with people in the sector across this jurisdiction. Diversion of doses is an absolute contraindication to receiving unsupervised doses in the guidelines and yet there is no mention here of engaging in active partnerships with patients to find solutions to why one might be diverting. It seems active partnership relates mainly to convincing clients to do something distasteful such as continual urine samples. Instead punishments, such as removal of take away doses and ultimately expulsion from the program, are the accepted method for responding to diversion.

Take away doses are critical for maintaining some semblance of normality in one's life. The rigidity of many clinic opening hours make it very difficult for many to make it to work on time, for instance, and take away doses mean that one only has to negotiate the clinic and its hours three times a week. Sometimes diversion occurs because of inflexibility, but the answer for diversion is nearly always a ramping up of supervision and this very rigidity.

Diversion is a great example of the system contributing greatly to a problem which it then expects the individual to solve. There are various misconceptions and assumptions made about diversion. Most fundamentally misunderstand the motivations behind diversion and are focused on absolute worst case scenario outcomes.

Certainly in a system where it can cost up to 80 Australian Dollars a week – around a third of a basic weekly unemployment benefit – it is not surprising that diversion for monetary gain occurs. Too many people need to sell a dose or two to afford the other five!

In a system where in some areas of the state there are either long waiting lists or no service provision, it is not surprising that there is a market for black market methadone. In a system where one partner in a relationship may be able to get on a program while another cannot, it is not surprising that a person might share their take away doses with their loved one. Most of us will do anything we can to ensure our lover does not go into withdrawal involuntarily.

In a system which has minimal medicated detox facilities and waiting lists at those that do it is not surprising people might purchase methadone to use for their own detox regime.

In a system in which flexibility is almost non-existent it is not a surprise to me that some people run their own substitution program by purchasing their methadone or buprenorphine off someone other than a clinic or chemist so that they can get to work on time regularly or work unusual or changeable hours.

The least-worst option

Many of us still engaged in the OST program continue primarily for lack of options. The program as it stands is a least bad

option for those of us who need a modicum of stability. A program which, I am told, began life in Australia as a harm reduction is now quite focused on achieving abstinence. This is simply not a goal that everyone wants to aim for. The prevalence of pharmacotherapy injection and continued illicit drug use is still understood only through the prism of aberrance or naughtiness, not choice or pleasure. Instead I contend that it should be seen as a prime reason for the trial and introduction of injectable pharmacotherapy. Unfortunately the responses to activity such as injection of doses is to make it even more unsafe. For instance some jurisdictions in Australia use volume expansion – methadone doses typically between 5 ml and 20 ml in volume have water or flavoured cordial added to dissuade injection. 200 ml doses may make some people think twice about injecting but there will still be people willing to do it.

Pharmacotherapy does not work for everyone and it works ineffectively for too many more. Far too often the program is less flexible than a good dealer. A good dealer who you know well will be more likely to provide credit and to be available to pick up from outside of work hours.

The mess that we find our programs in are the result of a number of strands and issues that have become entangled over time. These include structural, clinical, political, and philosophical strands that now seem inextricable.

People who use drugs are problematised and pathologised and squeezed into a medical model that emphatically does not fit all. An incomplete understanding of the purpose of opioid substitution is layered over an even worse understanding of illicit drug use by the public and too many politicians. Self-stigmatisation and internalised discrimination felt by many users and amplified by certain philosophies leads to many users being their own worse critics and settling for services because they feel they don't deserve better. Frustration and anger over years of incomplete and inflexible services too often boils over into misdirected rage at the clinic staff (how can you rage at a set of guidelines, for instance?) which in turn leads to further justification for punitive policies and clinic spaces that resemble corrective service spaces with buzzing doors and bullet-proof glass. This further alienates service providers and clients who can barely communicate without raising voices just to be heard. Guidelines are misrepresented by services and misunderstood by clients and seem not to provide any clear parameters around consumer engagement. And yet – what option do we as users and consumers have but to continue? This is not something we can walk away from easily. We know that not many people really care and as we watch the new recovery movement (White, 2008, AIVL, 2012) infiltrate our services those of us aware of the implications are afraid that things are about to get even worse.

There is a dissonance between the recovery narrative of the “addict” whose life follows the downward spiral and for whom recovery through treatment must follow if they are to be a whole person again and the user whose narrative is complex and whose relationship with drug use and substitution programs is nuanced and requires more than treatment for a disease and a shoehorning into a system set up around notions of addiction, illness, discipline and punishment.

Some people want to stop using and stop pharmacotherapy. Some people don't want to stop using or injecting and will engage

in treatment only as a harm reduction strategy. Some people don't know what they want right now but know that they are sick of it. Only with effective consumer engagement and possibly even more importantly an understanding that not all drug use is a disease needing a cure can a pharmacotherapy system begin to be effective for more people.

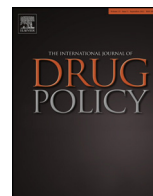
The system here needs a dose of reality and needs to be assessed honestly in partnership with consumers who are able to be honest about what they need and want from treatment without fear of punishment. This means not just that consumers are given a token place on a committee where they are outnumbered 15 to 1 by clinicians but also a systematic opportunity to participate in the development of their service and their own treatment. These are things taken for granted elsewhere in the health system. If we are to be treated as patients we could at least have some consistent patient rights. We may then be able to better contribute to disentangling this knot.

Conflict of interest statement

I have no conflicts of interest to declare as of the submission date for the above paper.

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Editors' Choice

Categorising methadone: Addiction and analgesia



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ABSTRACT

While methadone was first developed as an analgesic, and used for this purpose before it was adopted as a therapy for drug dependence, it is this latter use which has saturated its identity. Most of the literature and commentary on methadone discusses it in the context of methadone maintenance therapy (MMT). But one of the effects of the liberalization of opiate prescription for chronic pain which took place in the 1990s was the re-emergence of methadone as a painkiller. This article examines the relationship between methadone the painkiller and methadone the addiction treatment as it is constituted in recent medical research literature and treatment guidelines. It highlights the way medical discourse separates methadone into two substances with different effects depending on the problem that is being treated. Central to this separation is the classification of patients into addicts and non-addicts; and pain sufferers and non-pain sufferers. The article argues that despite this work of making and maintaining distinctions, the similarities in the way methadone is used and acts in these different medical contexts complicates these categories. The difficulties of keeping the 'two methadones' separate becomes most apparent in cases of MMT patients also being treated for chronic pain.

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Introduction

On its drug education website targeted at teenagers, the US National Institute on Drug Abuse divides opiates into two contrasting categories:

'[Opiates are] powerful painkillers, they are sometimes prescribed to control severe diarrhea and they can also be found in cough medicine. Maybe you've heard of drugs called Vicodin, morphine or codeine. . . When used properly for medical purposes, they can be very helpful. Opiates used without a doctor's prescription or in ways other than how they are prescribed, can be dangerous and addictive. Heroin is another example of an opiate, but it isn't used as a medicine—it's used to get high.' (National Institute on Drug Abuse, 2009)

This statement reflects the long history of medical discourse and practice on opiates which works hard to establish and maintain the differences between the beneficial and therapeutic use of these substances, and the dangers of their illicit abuse. The boundaries between the medical and illicit are reinforced through several overlapping distinctions which frequently appear in both expert and popular accounts of opiates, but are also materialized in regulatory

systems and institutional structures. Firstly, as the NIDA passage demonstrates, a distinction is made between types of drugs: morphine, codeine and Vicodin are helpful medicines, whereas heroin is not a medicine and is therefore dangerous and addictive. Secondly, the context of use is distinguished: proper use requires medical prescription, while the absence of medical authority produces addiction and harm. Thirdly, the types of drug and the context of use are linked to different effects. Prescribed opiates like morphine produce analgesia (also digestive relief and cough suppression) while illicit opiates produce euphoria and addiction. Finally, (although this step is not taken in the NIDA passage), the distinctions between drugs, contexts and effects are incorporated into identity categories in which the status of 'patient' and 'addict' describes not only the circumstances and forms of drug use but designates a type of person (Bell & Salmon, 2009).

However, the relationship between medical and illicit opiate use has always been more complicated than the NIDA website suggests (Acker, 2004). Because of its status as a substitute opiate for heroin, methadone blurs the distinction between good medication and addictive drug in a particularly intriguing and irresolvable way (and its absence from the NIDA passage is therefore not surprising). Its use as a substitution treatment for drug dependency places it in a unique position in relation to addiction. As Fraser and valentine state, methadone in the context of maintenance therapy is produced as a paradoxical substance with a double identity, it is both 'not heroin and like heroin'; and it is both addictive and a treatment for addiction (2008, p. 55, original emphasis). As a substance that replaces heroin and is consumed

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by heroin addicts, methadone is stigmatised and constructed in public discourse as dangerous and disorderly (Fraser & Valentine, 2008). On the other hand, methadone is recognized in medicine and national drug policies as an effective treatment which produces stability and normality in its users (World Health Organization, 2009).

The substantial increase in the use of methadone as a prescription analgesic over the past decade and a half has added another dimension to the categorization of methadone and its status as a problematic but useful drug (Trescot et al., 2008). In this context methadone has been described as ‘a new old drug’, as it was originally developed as an analgesic in the 1930s before it was adopted as a therapy for drug dependence (Trafton & Ramani, 2009). Its renaissance as a painkiller was one of the effects of the liberalization of opiate prescription for chronic pain which took place in the 1990s (Fishman et al., 2002; Fredheim et al., 2008). The US Centers for Disease Control and Prevention reported that 4 million methadone prescriptions for pain were written in 2012. Retail sales of methadone increased by more than 1000% from 1997 to 2006 (Trescot et al., 2008, p. S13).

This article examines the relationship between methadone the painkiller and methadone the addiction treatment, within the contemporary landscape of liberalized opiate prescription. The article highlights the way medical discourse separates methadone into two substances with different effects depending on the problem that is being treated. Central to this separation is the classification of patients into addicts and non-addicts; and pain sufferers and non-pain sufferers. The article argues that despite this work of making and maintaining distinctions, the similarities in the way methadone is used and acts in these different medical contexts complicates these categories.

The separation of methadone into two substances which act either on addiction or pain is further undermined by the phenomenon of prescription painkiller abuse which has become a highly visible drug problem, particularly in the United States (Fischer & Rehm, 2007). Over the past decade and a half, in the wake of increased prescription rates, opiate medications, including those mentioned in the NIDA passage quoted earlier, have been linked with increasing rates of dependence and overdose (Compton & Volkow, 2006; Quintero, 2012). Concerns about painkiller abuse have prompted a return to a discourse of addiction which identifies addictiveness as an inherent property of all opiates, whatever their context of use.

Approach

My discussion is based primarily on the critical analysis of recent medical literature about (1) opiate treatment of chronic pain and (2) methadone prescription. It is in this literature that the challenge of managing methadone’s different identities and effects is addressed in a detailed and systematic way. I adopt an interpretive approach informed by Foucauldian discourse analysis in which discourses are understood as regulated and systematic ways of thinking, talking and writing about a topic (Foucault, 1971, 1984). Crucially, discourse is productive – it constructs objects and subjects (such as methadone and pain patients) and determines the boundaries of what can be recognised as knowledge about them. Thus, the knowledge that medical discourse produces about substances and substances users can be analysed not so much in relation to its accuracy, but in terms of the meanings it produces, the qualities it attributes to different entities and the kinds of problems it constructs as targets of intervention. The discursive approach I have taken imposes certain limitations on my analysis. It is based on a reading of texts, and therefore does not engage with the specific practices and encounters that take place in treatment programs

and clinics. It also does not provide an account of the unique social and political contexts produced by different health, political and legal systems and the impact these have on the governance and use of opiates.

The main sources for my discussion are articles published in prominent pain medicine and addiction medicine journals between 2000 and 2012. These articles were identified and gathered using PubMed and Google Scholar. The articles gathered were reviewed, and those which provided insight into the relationship between methadone the analgesic and methadone the opiate substitute were read and analysed in depth. The sample of literature analysed is thus not necessarily representative or comprehensive, given the volume of material published on the treatment of chronic pain and the medical use of methadone. In addition to the journal articles, treatment guidelines for methadone maintenance therapy and opiate prescription for pain were also reviewed. The guidelines included in the study came from the United States, Australia, Canada, the United Kingdom and the European Commission. These guidelines were chosen because of accessibility and because these countries all have well-established MMT programs. The focus was on common discourses and practices rather than a comparative analysis between the countries.

The article begins by outlining the properties of methadone highlighted in recent medical discourse. Methadone is presented in the literature as a drug which is valued for its uniqueness but also viewed as problematic because of its distinctiveness. The article then moves to a broader discussion of the challenges of classifying patients in the context of medical opiate use. This discussion highlights the difference between MMT and pain treatment, but argues that new concerns about painkiller abuse have produced a more complex and less clear-cut model of overlapping varieties of opiate use. The clinical, political and ontological complexities of separating methadone for pain from methadone for addiction become most vividly apparent in the cases of MMT patients who also require treatment for chronic pain. The final section of the article analyses a published account of treating such cases.

The special properties of methadone

In the 1980s, pain specialists and patient advocates began to argue for the more liberal use of opiates as a humane and rational response to the widespread suffering produced by poorly treated chronic pain (Keane & Hamill, 2010; Meldrum, 2003). By 2000, bodies such as the American Pain Society and the American Academy of Pain Medicine had published consensus statements supporting the use of opioid therapy in chronic pain patients (Portenoy, 2000). Pharmaceutical companies also played an important role in promoting the use of opioids. Purdue Pharma mounted a particularly aggressive marketing campaign for Oxycontin (a sustained-release oxycodone preparation) between 1996 and 2001 (Van Zee, 2009). As well as increasing the circulation and public profile of short acting opiates such as oxycodone, the liberalization of opiate prescription for pain had a significant impact on the identity and uses of methadone. Articles began appearing in pain medicine journals constituting methadone as a useful and indeed superior painkiller because of a range of ‘attractive’ and ‘unique’ features both pharmacological and extra-pharmacological (Fredheim et al., 2008; Peng et al., 2008; Trafton & Ramani, 2009).

According to some of these authors, methadone’s stigmatised status had led to its underutilisation as an analgesic (Shah & Diwan, 2010). In this literature, methadone is frequently described as unlike other opiates and unusual in its pharmacodynamics, bringing both advantages and disadvantages to its use (Fishman et al., 2002). Compared to other opiates, it has a long half-life and

thus has long-lasting effects. It has high bioavailability making it suitable for oral administration. Unlike other opiates, it acts at multiple receptor sites and therefore seems to be effective for difficult to treat neuropathic pain. Unlike other opiates it does not produce neurotoxicity. It is also much cheaper than other sustained-release opiates such as oxycodone making it appealing to insurance companies and health care funders (Fishman et al., 2002; Fredheim et al., 2008).

These characteristics have promoted the use of methadone for chronic pain, but it has been adopted primarily as a 'second line' medication. That is, patients who commenced opiate treatment with faster acting drugs but are suffering severe side effects or uncontrolled pain due to tolerance are switched to methadone (Fredheim et al., 2008). Hence in its performance as an analgesic, methadone is a replacement for an original substance which has failed and become intolerable, a similar role to the one it plays in MMT. In some ways, its role as a substitute analgesic produces a similar dilemma to its role as a substance which is both like and unlike heroin. It is its difference from other painkillers which makes it valuable – its unique pharmacodynamics means it can help patients who no longer respond to other drugs. But this difference, described in the medical literature as a characteristic instability and unpredictability, also makes it a risky drug which requires cautious and expert handling. Converting a particular dose of morphine to an equivalent dose of methadone is complex, and there are few 'proven ratios' to guide clinicians (Fishman et al., 2002). Part of the difficulty is that individuals have highly variable responses to methadone, and it also interacts with many other medications. Its long half-life which provides the convenience of daily dosing also means it can accumulate in the body and produce dangerous cardiac and respiratory effects.

However, it is noteworthy that the discourse of complexity and unpredictability which surrounds methadone as an analgesic is much less prominent in discussions of MMT, although the risk of potential toxicity is acknowledged. Rather, in the context of MMT, methadone is constituted as safe with a 'steady' long-term action which contrasts with the disruptive 'highs and lows' of short-acting opiates (Leavitt, 2004). As a treatment which can restore stability to addicts and reduce the mortality associated with heroin use, the methadone of MMT (when used correctly) is identified as less risky and much more clearly 'harm reducing' than methadone the painkiller.

Alongside the difficulties of working with a drug which is valued for its difference but also problematic because of it, the use of methadone in the pain clinic produces another set of challenges. As I and others have argued, pain medicine constructs and relies on a categorical distinction between the opiate use of drug addicts and the opiate use of well-treated pain patients in order to support and protect its clinical practice (Bell & Salmon, 2009; Keane & Hamill, 2010). While both patient groups may be dependent on opiates to maintain normal functioning, pain medicine stresses that only the former exhibit the pathological and compulsive drug-seeking symptomatic of addiction. Mapped onto the pain patient/addict divide is a distinction between the analgesic and psychoactive/euphoric properties of opiate drugs. Pain patients and addicts are said to experience opiate drugs differently because one group is seeking medical pain relief, the other recreational mood-alteration and pleasure (Littlejohn et al., 2004). Indeed one of the explanations traditionally given for the apparently low rates of addiction among pain patients is that they rarely feel elation or euphoria after the administration of opiates (Portenoy, 1996).

While the rise of prescription painkiller misuse has prompted a move away from such reassuring statements about the immunity of legitimate opiate users from illegitimate effects, the notion that the medical use of psychoactive drugs is a clear-cut category which is

fundamentally different from illicit use is still prominent. For example, in the recently released DSM-5, symptoms of withdrawal and tolerance (representing physiological dependence) are explicitly excluded as symptoms of addiction when they occur in the context of medical treatment (O'Brien, 2010). However methadone as a substance which is both a prescription analgesic and a maintenance treatment for addiction complicates these distinctions. The spectre of 'medically maintained addiction' which haunts pain medicine becomes particularly threatening when the analgesic medication has a well-established identity as a substance 'like heroin' which is consumed by addicts.

Medical opiates and patient classification

Contemporary drug control policy places methadone and other opiates under strict legislative control. For example, in the United States methadone is a schedule II controlled substance, that is, a substance that has a 'high potential for abuse', and whose abuse can lead to 'severe psychological or physical dependence' (US Department of Justice, n.d.). Thus it is the addictive potential of methadone and other medically utilised opiates which classifies them as individually and socially dangerous drugs. In the drug control legislation, addictiveness is a property internal to particular substances and the prevention of drug use and addiction is based on strictly limiting access to such substances.

In contrast, in the pain clinic, opiate drugs are vital therapeutic tools. Rather than drug use producing physical, psychological and social harm, it is drug use which contributes to normal functioning in the presence of disabling pain. However the problem of opiate addiction, especially the potential for iatrogenic addiction resulting from the treatment of chronic pain remains a central concern, especially now that prescription painkillers have become so strongly associated with recreational abuse (Quintero, 2012). In contrast to the regulatory discourse of drug control, pain management tends to focus on addiction as a property of individuals rather than a property of substances. It carefully separates the physiological and neural changes of long-term drug use from the psychological condition of 'true addiction' which is characterised by aberrant behaviour, craving and loss of control (Passik & Kirsh, 2004). Thus the key to preventing and managing addiction is successfully identifying problem patients rather than prohibiting problem substances. Problem patients are those who are deceptively trying to acquire prescriptions for opiates because of addiction, but also those who are genuinely seeking pain relief but are pre-disposed to drug use and therefore more likely to become addicted (Gourlay et al., 2005).

The subjective nature of pain makes classifying patients according to their pain status challenging. Despite tools such as MRI and sonography, the existence of pain cannot be proved or disproved by a physician. Pain medicine has adopted the maxim that 'pain is what a patient says it is' but this means it is impossible to classify patients according to the validity of their pain-related symptoms (Fishman, 2007). Instead, guidelines for responsible opioid analgesic prescription (including the prescription of methadone) are focused on scrutinising patients for the risk of substance abuse and addiction. The guidelines stress the need for an extensive evaluation of each patient including a comprehensive physical exam, a psychological assessment for risk of addictive disorder, thorough inquiry into personal and family history of substance use and the use of screening tools and questionnaires (Chou et al., 2009). According to a US handbook on responsible prescribing, the physician must combine empathy with 'constant vigilance' and 'probing aggressively in search of the truth', recognizing that 'deception and abuse' is always a possibility when treatments involve controlled substances (Fishman, 2007, p. 22).

The challenge of identifying risky patients has led to a model of 'universal precautions' in pain medicine (Gourlay et al., 2005). This model is adapted from infectious disease control in which all patients are initially treated with precaution in order to reduce risk of transmission. Universal precautions in pain medicine similarly require all patients to be carefully evaluated and regularly reviewed for the existence of addictive disorders. The evaluation involves triage according to risk profile: (1) uncomplicated patients (the majority): with no psychopathology and no past or current history of substance use disorders; (2) patients who are not actively addicted but represent an increased risk due to past substance abuse, family history of substance abuse or concurrent psychiatric disorder; and (3) patients with an active addictive disorder or major untreated psychiatric illness. This last category of patients 'pose significant risk to both themselves and to the practitioners' and require specialist management (Gourlay et al., 2005, p. 111).

However patients outside the uncomplicated category are not necessary precluded from opiate treatment. According to the authors of the universal precautions model, a patient recovering from opioid addiction may be appropriately prescribed an opiate for the treatment of pain as long as there are 'tightly set limits' (Gourlay et al., 2005, p. 108). However, they add that 'active untreated addiction' may be an 'absolute contraindication to the ongoing prescription of controlled substances including opioids' (Gourlay et al., 2005, p. 109). In order to receive treatment for his or her pain, the addicted patient must also accept treatment for his or her addiction.

In the context of pain medicine then, the responsible prescription of methadone can only take place after a rigorous screening for the presence of, or potential for, addiction and substance abuse. A history of substance abuse or 'aberrant drug-related behaviours' in a patient receiving methadone are red flags which may preclude further prescribing of the substance. In this context, methadone and other opiates are therapeutic only in the absence of addiction. Indeed, critics of long-term opiate therapy for pain have begun to highlight negative effects such as hyperalgesia (increased pain) and anhedonia which can occur when pain patients develop 'complex persistent dependence', a condition which is not frank addiction, but almost as problematic (Ballantyne et al., 2012, p. 1343).

In a methadone maintenance treatment program, rigorous screening is also required before patients can commence treatment. But in this context, addiction is a condition of methadone prescription: methadone is only therapeutic in the presence of pre-existing addiction. In the regulations governing MMT in New South Wales (Australia) for example, 'opiate dependence' as defined by the DSM-IV must be diagnosed (New South Wales Department of Health, 2006). Evidence of opiate dependence is gathered firstly through a drug use history, including a 'typical day' history. Discussing the patient's typical day enables the practitioner to identify diagnostic criteria for addiction: How do you feel when you wake up? (those dependent on drugs will report feeling sick); When does drug use first take place? (another indicator of dependence); How do you spend your day? (this can reveal the priority drug seeking and drug use has over other activities) (2006, p. 19). A physical examination which looks for signs of opiate intoxication or withdrawal and a urine test are also carried out. Other forms of corroborating evidence include experiences of overdose, arrests for drug offences and prior treatment for drug dependence (2006, p. 19). Access to methadone as a treatment for addiction requires that the patient is screened in a similar way to access to methadone as a pain medication, but positive evidence of addiction is a condition of supply in one context, and a contraindication to supply in another.

Thus when we look at methadone through the perspective of official guidelines, we see two groups of patients, being treated by different specialists for different conditions in different settings and under different management regimes. These differences act in part

to protect the status of pain patients as legitimate patients and not 'junkies'. While chronic pain is subject to stigmatisation and de-legitimation as a 'diagnostically uncertain' condition (Glenton, 2003), the stigma attached to MMT is of a different order because of its association with addiction. As some of the other articles in this special issue outline, MMT patients are subject to particularly rigorous and punitive forms of surveillance and discipline which reflect an assumption of untrustworthiness (see also Fraser, 2006). When combined with the need to separate the treatment of pain from the treatment of addiction, the tendency to distrust MMT patients can lead to an under-treatment of pain (Blinderman et al., 2009; Sehgal et al., 2012). More broadly, the need to identify and address pain and addiction as separate conditions seems contrary to the embodied experience of suffering, in which different symptoms (pain, withdrawal, craving, anxiety, etc.) may be merged into a mystifying and diffuse sense of anguish (Honkasalo, 1998; Karasz et al., 2004).

But there are also similarities in the uses of methadone, which challenge the distinctions between MMT and pain treatment. Both pain patients and addicts maintained on methadone are likely to be physiologically dependent on the substance, in that they will experience withdrawal if doses are reduced or missed. In chronic pain patients, dependence has been widely regarded as an expected and normal result of treatment (Ballantyne, 2007; Jovey et al., 2003). In MMT programs, dependence on methadone is not just expected, it is the basis of therapeutic effectiveness. The goal of treatment is stabilization, in which tolerance develops to a steady dose of the drug, minimizing the effects of withdrawal and intoxication and blocking the effects of heroin (Centers for Disease Control and Prevention, 2012; World Health Organization, 2009). In addition, the effectiveness of treatment for both groups of patients is measured in terms of normalization of lifestyle (Fishman, 2007). Pain and addiction are conditions, which are damaging because they come to dominate a person's life and prevent participation in normal activities. Improvements in daily functioning, especially the ability to work, fulfil responsibilities and participate in family life are the signs of a well-treated, stable and adherent patient.

The clear-cut distinctions between pain patients and addicts have also become more blurred due to the shift towards a more critical and restricted view of the safety and efficacy of long-term opiates for chronic pain. Recently published guidelines and reviews on opiate treatment for pain reflect a return to an emphasis on the inherent addictive potential of all opiates and a rethinking of the categories of addiction and non-addiction (Chou et al., 2009; Manchikanti et al., 2010). The view that addiction in pain patients was very rare, prevalent in the 1990s, has been questioned and instead new guidelines stress the need to balance the risk of opioid abuse with the benefit of pain relief (Trescot et al., 2008). This new vigilance includes a re-assessment of the meaning of 'aberrant' drug-seeking behaviour in pain patients. The concept of pseudoaddiction, developed in pain medicine in the 1990s, allowed 'aberrant' behaviours including deception and illicit drug use to be interpreted as symptoms of under-treatment rather than addiction when they occurred in pain patients (American Pain Society, 2007). However, the value of the concept of pseudoaddiction has recently been questioned (Passik et al., 2011). In the context of current pain management, characterized by much more liberal opiate prescription, experts argue that 'aberrant behaviors' in pain patients must be carefully assessed and not simply attributed to under-treatment (Chou et al., 2009).

While the current discourse of 'opioid misuse' and 'aberrant drug-related behaviours' which has emerged from rising awareness of prescription analgesic abuse still separates the problems found in the pain clinic from the disorder of addiction, it produces a more complex model of overlapping varieties of medical, non-medical and illicit drug use. For example, in one article written by a prominent pain specialist, the possible reasons for prescription

opioid misuse include 'self-medication of symptoms, elective use to produce reward or euphoria, compulsive use because of addiction, and diversion for profit' (Savage, 2009, p. 378). These reasons cut across any simple medical/illicit divide and suggest that legitimate pain patients may be addicted, and addicts may be self-medicating for pain. Indeed there seems to be increasing recognition that separating pain patients from addicted patients is complicated by the fact that the two groups seem to have considerable overlap.

In fact, despite their currency, the difficulties of distinguishing between deserving pain sufferers and undeserving addicts, and determining the correct boundaries of medical use, are not new problems. In the United States, political conflict over high levels of narcotic prescription in the early 20th century produced legislative attempts to distinguish between medical users and criminal addicts. The Harrison Act, passed in 1915, restricted the prescription of narcotics to a 'normal dose' with the aim of prohibiting addiction maintenance (Musto, 1999, p. 122). However, an exception to the policy allowed the elderly or incurably ill (including those suffering from intractable pain) to be maintained if the drug was 'necessary to sustain life' (Baumohl, 2004, p. 227; Musto & Ramos, 1981). In practice, the heroin and morphine maintenance clinics that operated in several states in the early 1920s treated both patients with painful chronic conditions and street addicts under the classification of 'incurable' addiction (Musto, 1999).

One patient, two methadones

As I have outlined above, some pain medicine literature suggests that pain and addiction should not be seen as a dichotomy because pain patients sometimes have concurrent addictive disorders and self-medication for pain has been identified as a possible contributing factor in illicit drug use (Gourlay et al., 2005; Savage et al., 2008). The limited research that has been done on pain among MMT patients has found that chronic pain, including severe pain, is common in this population (Blinderman et al., 2009; Ilgen et al., 2006). The literature also suggests that the tendency to classify opiate use and opiate users according to distinct categories of pain and addiction can be an obstacle to the holistic and ethical treatment of such patients. Researchers who have investigated levels of pain in MMT patients have recommended that 'substance abuse programs need to develop comprehensive and structured pain management programs' because prevalence is so high (Rosenblum et al., 2003, p. 2370). Another small study found that 'chronic pain has a severe impact on the lives of methadone patients, interfering with work and family life, obstructing the fulfilment of social obligations, and isolating patients from others' (Karasz et al., 2004, p. 523). In this description, pain is similar to addiction in its impact on patient's ability to live a 'normal' life.

The final section of this article examines case reports published by a team of New York based pain specialists in 2008 in order to illustrate the difficulties of separating methadone into two substances, methadone for addiction from methadone for pain. These cases highlight the overlap between the different effects of methadone and the different reasons for use. In the journal *Pain Medicine*, Cruciani et al. discuss four patients who are enrolled in an MMT program (MMTP) and are also being treated for severe and persistent pain. They focus on the 'complex management' issues which arise when these patients wish to withdraw from the MMTP because they are also receiving methadone from their pain doctors.

The first patient was receiving a daily 80 mg dose of methadone from an MMTP, but also buying methadone from the street in order to control his pain (Cruciani et al., 2008, p. 360). His illegal methadone use was judged to reflect an element of pseudoaddiction (drug-seeking caused by under-treatment), thus he was

prescribed an additional 40 mg of methadone by the pain specialist. He was 'progressing well' when remanded to jail for 6 months for a parole breach. During his jail time he withdrew from methadone, but his pain continued and on his release he returned to the pain clinic. He told the pain specialists that he did not intend to return to the MMTP: he was not using drugs nor experiencing craving and the program was intrusive and difficult to follow. With input from the patient's MMTP counsellor, the pain specialists decided that his major problem was now pain rather than addiction. Therefore they resumed the prescription of methadone for pain (120 mg a day) without requiring MMTP attendance. His dose increased to 220 mg a day when his pain worsened. He is described by the authors as a model patient with excellent medical adherence, no signs of aberrant drug behaviour and 'sustained improvement' in his ability to function (Cruciani et al., 2008, p. 360).

In a similar case, a woman who had been on the MMTP for 10 years with a maintenance dose of 110 mg and no illicit drug use was also being treated at a pain clinic for knee pain with a twice daily dose of 30 mg methadone (Cruciani et al., 2008, p. 362). She asked to be discharged from the MMTP saying she no longer needed their services and she felt stigmatised by her attendance. As in the first case, her main problem was judged to be the need for pain relief and the MMTP and pain clinic staff decided that she could stop MMTP attendance. However, it was recognized that her pain would increase as the MMTP methadone was discontinued, so her pain doctors agreed to rapidly increase her dose if necessary. Her dose was in fact increased to 60 mg three times daily. Two years later, worsening pain meant a further increase in her dose, but according to the authors she is able to maintain functioning and has had no problems with illicit drug use or aberrant behaviour.

What is noteworthy is that at the start of each case two methadones are being prescribed to these patients. One, which I will call methadone *A*, is a treatment to control craving in drug addicts. It requires adherence to a strict regime of surveillance, daily attendance at a clinic and brings with it the stigma of opiate addiction. The other, which I will call methadone *P*, is an analgesic which allows a more normalized medical identity as a chronic pain patient and a less disruptive medical regime. However despite these institutional and medical differences, the effects of the two medications are experienced by the patients as a singular phenomenon. Once they are consumed by the same person, methadone *A* and methadone *P* cannot be kept separate as two unrelated medications, and this is recognized by the patients and the clinicians. However, the two disorders that are being treated remain distinct and the judgement is made that in these cases one disorder (addiction/craving) has ceased to be a problem. Thus methadone *A* is discontinued but methadone *P* is increased so that the overall dose of the drug remains the same (or higher) than when the patient was receiving treatment for both craving and pain. While the good outcome in both cases can be interpreted as a sign that the patient had indeed recovered from addiction and no longer needed the MMTP, it is also possible to suggest that the crucial element in their success is the continuation of a stable dose of methadone adequate to support their overall functioning.

In contrast to these two model patients, the two other patients who request an increase in their pain-related methadone prescription in order to leave their MMT programs are refused. One is a woman who is on a long-term MMT dose of 130 mg a day and a pain dose of 100 mg a day due to HIV and anti-retroviral therapy related neuropathy. She demonstrates 'good adherence' and behaviour at both clinics but her request to leave the MMTP is declined, apparently because of concerns about the amount of 'substitution' involved. The authors state that a dose of 130 mg 'would be unlikely to be justified as pain therapy' and 'We explained to the patient that our purview was pain treatment alone' (Cruciani et al., 2008, p. 363). In this case, the doctors' decision highlights

the regulatory demand that methadone *A* and methadone *P* be kept separate. The pain physicians are not licensed to prescribe methadone *A*, and above a certain dose, methadone *P* becomes an obvious substitute for methadone *A* – in fact becomes indistinguishable from methadone *A*. Thus the two separate sources of methadone must be continued.

The final patient is a man who was receiving oxycodone for cluster headaches as well as receiving an MMT dose of 40 mg. He is described as ‘engaged in his treatments’ but ‘inconsistent with follow-up appointments’ (Cruciani et al., 2008, p. 362). He requested an increase in his opiate dose for pain, because he wished to decrease and eventually cease his methadone. While he does end up reducing his methadone with the support of the MMTP staff, and his oxycodone dose is increased as his pain worsens, he is required to stay on the MMTP, despite a minimal dose of just 5 mg methadone a day. This is because of ‘the possibility that he might change his opioid dose unless there was a high level of structure and monitoring, and the concern that we would be treating addiction and not pain if we agreed to his request’ (2008, p. 361). This is a complicated case in which the concern is that oxycodone, prescribed for pain, may be being used as a substitute for methadone, prescribed for addiction. But it reflects the same regulatory demand as the previous case, that pain medication should not be used to treat addiction. It also seems in this case that the structure and surveillance of the MMTP is as important as the effects of the methadone itself in maintaining the patient’s stability.

These cases demonstrate the difficulty of keeping methadone the analgesic separate from methadone the addiction therapy when chronic pain is such a common complaint among MMT patients. The pain specialists highlight the tensions that occur when such patients feel their opiate pain treatment meets their needs for control of craving, as well as pain relief. They note on one hand that ‘it is true that opioids for pain might prevent craving’ but on the other hand, pain practitioners are not licensed to provide pharmacotherapy for addiction and the programs are focused on different problems. They argue that the patient must be educated about the reasons for the differences between the two practices and the importance of attending both (Cruciani et al., 2008, p. 364). The boundaries between pain and addiction and between fields of medical expertise and practice require the maintenance of pharmaceutical and clinical distinctions that from the perspective of patients may seem contrived and burdensome.

Conclusion

Medical discourse and practice has emphasized the differences between the beneficial medical use of opiates and their illicit and addictive use. As is seen in the NIDA website discussed at the start of this article, this distinction between good medicine and addictive drug is often mapped onto an opposition between analgesic effects and euphoric/rewarding effects, the latter being linked with the development of compulsive use. However, methadone, as a drug which is used in substitution therapy for illicit opiate addiction, blurs these distinctions. It is both like and unlike heroin, it is both addictive and a treatment for addiction. It is stigmatised through its association with addicts but it is valued for its ability to produce normality and stability.

The substantial increase in the use of methadone to treat chronic pain in recent years has added another dimension to the complex identity of methadone. In official guidelines and in much addiction and pain literature, methadone is constructed as two separate substances, one for the treatment of pain and one for the treatment of addiction. This separation reflects and reproduces the moralized classification of opiate users into deserving pain patients and undeserving addicts. The latter have been subject to particularly rigorous

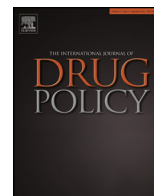
and punitive forms of surveillance as presumably untrustworthy subjects.

However, the similarities between the different uses of methadone and the intermingling of its effects undermine such clear-cut classifications. For example, both pain patients and MMT patients are likely to be dependent on methadone and the goal for both is a normalization of lifestyle. This article has argued that liberalized opiate prescription has made the distinctions between the different uses and users of methadone more difficult to maintain. The rise of prescription painkiller abuse as a high profile public health problem has promoted a new vigilance about opiate use even among those identified as genuine pain patients. Categories such as ‘opioid misuse’, ‘problematic opioid use’ and ‘aberrant drug-related behaviours’ are now discussed alongside the more extreme pathology of addiction. Such categories of problematic use blur the medical/illicit divide and suggest a continuum of uses and misuses which can occur among all users. The recognition that chronic pain, including severe pain, is prevalent among MMT patients also undermines any understanding of pain and addiction as mutually exclusive. Perhaps most importantly, the experiences of suffering reported by these patients are not easily divisible into separate categories of disorder.

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The role of the Chinese police in methadone maintenance therapy: A literature review



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ABSTRACT

Background: The behavior of police is an important factor in drug users' access to preventive and therapeutic health services. In China, opiate users must be registered and approved by police before accessing methadone maintenance treatment (MMT).

Methods: We conducted a literature review to identify studies reporting original data about the influence of Chinese drug policing activities on MMT access and outcomes. Searches were conducted in PubMed, the Law Journal Library of HeinOnline, the Social Science Citation Index and China Academic Journals of CNKI for empirical studies conducted in China and published in academic journals between 2005 and April 2012.

Results: The initial literature search retrieved 276 records, of which 85 were included in the review and 191 were excluded. The majority of the included papers were single-clinic observational studies. These studies reported that: (1) fear of incarceration deterred users from initiating and continuing MMT; (2) the rates of MMT referral by police were considerably lower than those by drug user peers and by community and the media; (3) police sending users to compulsory detoxification (DETOX) and reeducation through labor (RTL) centers contributed to higher rates of MMT patient dropout; (4) arrests in and around MMT clinics were not uncommon; (5) cooperation between local police and public health agencies was difficult to achieve; and (6) a limited number of trial programs were conducted to refer detainees in DETOX to MMT clinics after release, but the outcomes were not promising.

Conclusion: Reviewed studies report drug policing practices that appear to be impeding MMT access and reducing successful treatment outcomes. Research focusing on the nature, prevalence and severity of these effects is urgently needed. Health and public security officials in China should review and reform policies and practices of registering, monitoring, and incarcerating drug users.

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Background

China has strict drug control laws, including mandatory registration with police, mandatory testing of suspected drug users, a fine of up to 2000 Yuan for use, detention of up to 15 days, mandatory community drug treatment (CDT, she qu jie du) for up to three years, and compulsory detoxification (DETOX, qiang shi ge li jie du) for up to two years with a possible one year extension. These controls are classified as administrative regulations, rather than criminal laws. Police, rather than judges, have the authority to impose these sanctions, without the procedural safeguards that, at least in theory, protect criminal defendants from arbitrary or unjustified punishments. Official statistics shows that by the end of 2011, there were about 36,000 users in CDT, 40,000 in community drug rehabilitation

and 227,000 in DETOX (Office of China National Narcotics Control Commission, 2012).

Upon a first arrest, users are subject to a fine and short-term detention. They may also be ordered by police to undergo CDT, which is administered by governments at urban sub-district or rural town level. Users are required to sign a CDT agreement with their local government and are then assigned to a specific working team for drug treatment. Members of such a working team include local government officials, police, social workers, users' family members and medical professionals. The working teams are supposed to provide users with counseling and assistance with drug addiction treatment, psychological recovery, behavioral correction and compliance with legal requirements. Users are obligated to report to the government, often weekly or bi-weekly, a wide range of personal and medical information including the status of family relationships, their health and their drug treatment; they are also obliged to undergo drug testing. They are not allowed to leave their local area without government permission. Users refusing to undergo CDT,

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seriously violating a CDT agreement, or reusing drugs after CDT are subject to DETOX. Those released from DETOX may be mandated by police to community drug rehabilitation (she qu kang fu) for up to three years, which is also administered by governments at urban sub-district or rural town level. Like participants in CDT, they sign an agreement with their local governments. In practice, agreements of community drug rehabilitation are the same as those of CDT. In the past, drug users were also subject to reeducation through labor (RTL, lao dong jiao yang), for terms of one to three years. However, since 2008 RTL has been rarely imposed on drug users (Biddulph & Xie, 2011).

China introduced methadone maintenance treatment (MMT) in 2004 and rapidly scaled it up as a primary tool for reducing drug dependency and HIV (Sullivan & Wu, 2007). By September 2011, there were 716 MMT clinics across China, and the accumulated number of MMT patients was 332,996, including 132,879 active patients (The Ministry of Health of PRC, Joint United Nations Programme on HIV/AIDS, & The World Health Organization, 2011). China also introduced a multi-sectoral cooperative mechanism for HIV prevention. The mechanism requires relevant government organizations, such as the health departments and public security authorities, to collaborate for HIV prevention and treatment (Sullivan & Wu, 2007). To reduce drug-related harms, a change was made to Chinese drug law in 2008. Drug users were exempted from administrative punishments for their non-criminal drug use offences if they voluntarily accessed drug treatment from qualified medical organizations.

In China, not all opiate users can access MMT. Applicants for MMT must meet the following criteria: (1) opiate dependent with more than one failed attempt at drug treatment; (2) at least 20 years of age; (3) a permanent local resident or a temporary resident who has lived in the area where the applicable MMT clinic is located for at least 6 months with a temporary resident permit; and (4) have legal capacity of decision-making. The age requirement is waived for individuals living with HIV/AIDS (The Ministry of Health of the PRC, the Ministry of Public Security of the PRC, & The State Food and Drug Administration, 2006). MMT is voluntary, not mandatory. Applicants who are accepted must sign an informed consent document. Patients are prohibited from drug use and subjected to mandatory drug testing while in MMT (The Ministry of Health of the PRC et al., 2006).

Internationally, police activity has been shown to have an important effect on injection behavior and access to preventive health services (Burris et al., 2004; Kerr, Small, & Wood, 2005). A few studies have suggested that laws and law enforcement practices can influence opiate users' access to and success in MMT (Weatherburn & Lind, 2001; Weatherburn et al., 1999). Two qualitative studies of MMT barriers and facilitators in the English-language literature suggest that this may also be the case in China (Lin, Wu, & Detels, 2011; Philbin & Zhang, 2010), but most of the relevant literature is available only in Chinese. This study fills a gap between English-language and Chinese-language research on MMT and Chinese drug law. The study shows that Chinese drug policing practices of registering, monitoring and incarcerating can have a negative effect on drug users' access to and outcomes in MMT programs.

Methods

In April, 2012, we conducted searches in four databases: PubMed, the Social Science Citation Index (SSCI), the Law Journal Library (LJL) of HeinOnline, and China Academic Journals (CAJ) Full Text Database of China National Knowledge Infrastructure. PubMed and SSCI were chosen because of their overall breadth and inclusion of medical and social science articles. LJL of HeinOnline was used to search for MMT-related law journal articles. The three databases

were searched to identify studies in English. CAJ was used to search for studies published in China. The search terms were "China," "methadone" ("mei sha tong"), and "police" ("gong an"). Results were screened by title and abstract of all identified documents in English. Full text screening was performed on the selected documents in English and all Chinese articles identified by keyword search. Screening of titles, abstracts and full text and translation from Chinese to English were conducted by one author (JM). Reference lists of selected eligible studies were searched manually for additional potential journal articles.

Empirical studies were eligible for inclusion if they were (1) published in academic journals from 2005 to 2012; (2) conducted in the mainland of China; and (3) provided original data about the influences of policing activities on MMT. Studies that reported original findings about the relation of police activities to MMT access or program operation were included even if the role or impact of police was not the outcome measure or primary topic of the study. Otherwise eligible studies were excluded if they provided repetitive data reported in other papers by the same authors. "Policing" in this study refers to police activities to enforce Chinese drug law, including incarcerating drug users and sending them to DETOX or RTL.

The initial search returned five articles in SSCI, five in PubMed, and 26 in LJL of HeinOnline. Of the ten articles in SSCI and PubMed, four were duplicates, one was published in 1995, and one was not an empirical study conducted in the mainland China. Four studies in SSCI and PubMed met the eligibility criteria and were included in this review. Title and abstract screening of the 26 articles in LJL of HeinOnline found none of them to be empirical MMT-related studies conducted in the mainland China.

The initial search in CAJ of CNKI retrieved 240 articles published between 2005 and 2012. After screening in full-text of the 240 articles, we included 81 articles in this review and excluded 159 papers. Of the excluded 159 articles, one provided very similar data presented in another article by the same authors, four were not academic journal articles, 35 were non-empirical studies, and 119 were empirical studies but had no original data about drug policing and MMT programs. A total of 85 journal articles met the inclusion criteria and were included in this review (Appendix A).

We reviewed the studies qualitatively to identify, extract, and thematically organize data reporting drug policing practices in relation to MMT programs. A Microsoft Excel spreadsheet was created for recording basic study characteristics (site, study period, design, population, etc.) and data reported on police and MMT enrolment; police and MMT referral; policing in and around MMT clinics; police and DETOX, RTL and MMT dropout rates; perceptions of drug users of and experiences with police; operation of public security departments and MMT clinics; and cooperation of police, DETOX centers and MMT clinics. Data were extracted by one author (JM). For referral mode and treatment withdrawal, reported rates were checked or rates calculated using reported data. The results were reviewed by both authors and organized into seven topic areas: police approval of MMT enrollment, MMT referral by police, arrests in and/or around MMT clinics, drug users' fear of incarceration related to MMT, MMT curtailed by confinement in DETOX or RTL, cooperation of public security departments and MMT clinics, and cooperation between DETOX and RTL centers and MMT clinics.

Results

A total of 85 journal articles, 4 in English and 81 in Chinese, were included in this review. Of the 85 included studies, one was conducted in 23 administrative divisions at provincial level, most of which were unnamed by the authors. The geographic coverage of



Fig. 1. Geographic coverage of 84 reviewed studies.

84 reviewed studies is shown in Fig. 1. Most of the reviewed articles were MMT clinic-based observational studies investigating barriers and facilitators of MMT access, characteristics of MMT patients, reasons for MMT dropout, and the effect of MMT on patients' health. No studies identified in the search were designed to quantitatively assess the effects of policing on MMT program access or operation. Data about policing and MMT were reported within these studies. There was only one qualitative study with a focus on the interaction between police and MMT (Wang, Ma, Li, & Fang, 2006). Nonetheless, the data reported in these studies, describing behavior in clinics throughout China over many years, illuminates the role of police in MMT access and success, as well as the relationship between police agencies and providers of MMT.

Police approval of MMT enrollment

Five studies conducted in Guangxi, Zhejiang, Jiangxi, Sichuan, Gansu, and Yunnan between 2005 and 2009 described police interventions in MMT enrolment (Table 1). MMT clinics submitted all application documents to local police departments for examination and approval (Feng & Yu, 2011; Lin et al., 2011; Lu, Zhao, & Wang, 2009; Mao, Li, Gong, & Mou, 2011). For opiate users who were not permanent local residents, lack of a temporary resident permit was a barrier to entry in MMT (Mao et al., 2011). Opiate users unregistered with police were ineligible for MMT (Yunnan Police Academy, 2009). All these reported practices are consistent with Chinese drug law and MMT policy.

MMT referral by police

Twenty studies conducted in 2005–2011 in eight provinces (Anhui, Guangdong, Henan, Jiangsu, Sichuan, Fujian, Hunan, and Yunnan), three cities (Beijing, Chongqing, and Shanghai), and two autonomous regions (Xinjiang and Guangxi) described the rates of three main modes of MMT referral, including referral by drug user peers, by community and the media, and by police (Fig. 2). Although police referred a substantial proportion of patients in one site, this was the exception. Overall, these studies reported that police referred 0–67% (mean: 10%) of patients to MMT, compared to 6–75% (mean: 47%) referred by drug user peers and 8–59% (mean: 30%) referred by community and the media.

Arrests in and/or around MMT clinics

Ten studies conducted between 2006 and 2011 reported that arrests in and/or around MMT clinics were a barrier for accessing MMT (Table 1). Nine of the ten studies were conducted in eight provincial administrative areas: Jiangxi (Lin et al., 2011), Zhejiang (Lin et al., 2011), Sichuan (Mao et al., 2011), Yunnan (Philbin & Zhang, 2010; Yang, Li, et al., 2008), Guangdong (Yang, Lin, et al., 2008), Xinjiang (Shen, Du, & Fang, 2009), Guangxi (Cohen & Amon, 2008) and Beijing (Du et al., 2009; Shen & Wu, 2012). One study was conducted across China (Ma, Liang, Yu, Hong, & Xu, 2009). In four studies, MMT patients and health workers reported that meeting an arrest quota filling empty slots in DETOX and RTL facilities were

Table 1
Findings of the reviewed studies.

Study	Study period and study setting	Findings: police intervention in MMT enrolment; arrests in and/or around MMT clinics; drug users' fear of incarceration related to MMT; cooperation between police departments and MMT clinics
Shen and Wu (2012)	Apr–Oct. 2011 The MMT Clinic in Haidian District, Beijing	<i>Arrests in and/or around MMT clinics:</i> MMT patients said police in Haidian District of Beijing conducted arrests in MMT clinics. <i>Drug users' fear of incarceration related to MMT:</i> 61% (98) of 162 active MMT patients and 37% (44) of 120 non-MMT patient drug users stated fear of incarceration as the principal impeding factor for accessing MMT. <i>Cooperation between police departments and MMT clinics:</i> MMT clinicians in Haidian District stated that the most challenging factor for MMT programs was the lack of cooperation with police departments. Although police officers conducted arrests in MMT clinics, they were often reluctant to handle offences reported by MMT clinicians, such as patients threatening MMT workers.
Feng and Yu (2011)	2011 1 MMT clinic in Liuzhou city, Guangxi	<i>Police intervention in MMT enrollment:</i> MMT application procedure: drug users who are permanent residents in Liuzhou city apply for MMT → take a physical examination → applicants submit relevant application documents to MMT clinics → MMT clinics submit all documents to drug control offices in local public security departments for approval → applicants accepted into MMT.
Jiang et al. (2011)	Mar. 2009 Unreported number of MMT clinics in Shanghai	<i>Drug users' fear of incarceration related to MMT:</i> MMT patients stated that, due to information sharing between police and other organizations including MMT clinics, some of their heroin-using friends, especially those unregistered by police, were afraid of being tracked and incarcerated by police if they enrolled in MMT. MMT patients said they were worried about regular drug testing by MMT clinicians and irregular drug testing by police because a positive testing result, which might result from some substances other than illegal drugs, could lead to incarceration.
Lin et al. (2011)	Feb–Jun. 2008 Zhejiang and Jiangxi	<i>Police intervention in MMT enrolment:</i> 36.7% of 30 drug user interviewees stated that, to gain entry into the treatment, participants had to provide proof of previous failed detoxification treatment to get approval from the local police department, but users' lifestyles and unstable living arrangements often caused them to lose their treatment records. Investigation by the police department was reported by more than 1/3 of the participants as a deterrent to treatment entry, especially for those who were not already registered with police as opiate users. The opiate users' primary concern was that they would be registered formally and monitored by the police from then on. <i>Arrests in and/or around MMT clinics:</i> 1 MMT patient said police conducted arrests around MMT clinics. <i>Drug users' fear of incarceration related to MMT:</i> Most of the 30 participants in the study stated the intervention of police as a significant disincentive for MMT. In some areas, police constantly patrolled outside MMT clinics and vicinity and approached persons they thought "suspicious." Those who occasionally use heroin would be identified and placed in a mandatory residential compulsory rehabilitation center for detoxification, which became a primary reason for discontinuing maintenance treatment. In addition, news of other opiate users being arrested also discouraged other clients from continuing MMT.
Mao et al. (2011)	Apr. 2009 A total of 38 MMT clinics in Sichuan by Mar. 2009.	<i>Police intervention in MMT enrolment:</i> All of the 38 MMT clinics reported that patients must be approved by police before they started MMT and that requiring a temporary residency permit for non-local residents was a barrier for patients. <i>Arrests in and/or around MMT clinics:</i> Of 38 clinics, 7 reported that local police conducted arrests in or around MMT clinics to fill a drug arrest quota. <i>Cooperation between police departments and MMT clinics:</i> Of 38 MMT clinics, 31 stated that local police were cooperative and seven reported that local police were uncooperatively conducting arrests in and around MMT clinics.
Qin et al. (2011)	Jun–Jul. 2009 47 MMT clinics operating in Hunan province for at least 1 year by 6/2009.	<i>Cooperation between police departments and MMT clinics:</i> Of 47 MMT clinics, 39 established a multi-sector MMT working team with local police. Of these 39, 10 did not have a multi-sector meeting in 2008. Of the 47 MMT clinics, 28 rated the cooperation with police as good, 18 as average, and 1 as not good.
Tong et al. (2011)	Aug. 2007–Oct. 2008 1 DETOX center, 1 RTL center and 1 MMT clinic in Hunan province	<i>Drug users' fear of incarceration related to MMT:</i> In the pre-intervention survey, 73 of 200 detainees from both the DETOX center and the RTL center expressed reluctance to access MMT because of the fear of incarceration.
Philbin and Zhang (2010)	Feb–Jun. 2008, Kunming city, Yunnan	<i>Arrests in and/or around MMT clinics:</i> 1 drug user interviewee reported police conducting arrests around MMT clinics. <i>Drug users' fear of incarceration related to MMT:</i> 1 MMT patient interviewee said that police conducted arrests around MMT clinics and that many drug users did not access MMT for fear of being arrested and sent to DETOX.
Song (2011)	2010 MMT Clinic in Jinshan Hospital, Nanjing city, Jiangsu	<i>Cooperation between police departments and MMT clinics:</i> Local police officers conducted regular patrols of the MMT Clinic in Jinshan Hospital to maintain order and safety and to reduce offences. Later, the clinic set up a police room.
Wu et al. (2010)	Mar–Dec. 2008	<i>Drug users' fear of incarceration related to MMT:</i> 90% of the registered drug users in Kaiping city of Guangdong did not access MMT. MMT patients said that fear of incarceration was a reason for not accessing MMT.

Table 1 (Continued)

Study	Study period and study setting	Findings: police intervention in MMT enrolment; arrests in and/or around MMT clinics; drug users' fear of incarceration related to MMT; cooperation between police departments and MMT clinics
	MMT Clinic in Kaiping city, Guangdong	
Li (2010)	Not reported	<i>Drug users' fear of incarceration related to MMT:</i> Of the 222 patients in the MMT clinic, 110 identified fear of incarceration as a main deterring factor for MMT. Of the 74 patients in the 2 voluntary detoxification centers, 56 identified fear of incarceration as a major deterring factor for MMT.
Zhou et al. (2010)	1 MMT clinic in Changsha city, Hunan and 2 voluntary detoxification centers in Changsha city of Hunan 2010	<i>Cooperation between police departments and MMT clinics:</i> Health workers educated police on MMT, helped to develop guidelines on MMT and policing, and reached agreements with police about MMT referral and surveillance of MMT patients. Police did not conduct arrests around MMT clinics, but helped conduct drug testing of patients and helped supervise patients. They also made MMT referrals.
Dong et al. (2009)	MMT clinics in Liuzhou city, Guangxi Oct–Nov. 2005	<i>Cooperation between police departments and MMT clinics:</i> The efficiency of MMT enrollment was largely determined by local police. In 1 MMT clinic, the local police were supportive and approved MMT application cases in 1 to 2 days. In another, it could take from 1 to 18 months because 1 police officer was prejudiced against MMT.
Du et al. (2009)	MMT Clinic in the Skin Care Center of Xichang City, and the MMT Clinic of the Center for Disease Control in Shizhong District, Leshan city, Sichuan Dec. 2007–Sep. 2008 Beijing	<i>Arrests in and/or around MMT clinics:</i> MMT patient interviewees stated police conducted arrests in and around MMT clinics to fill an arrest quota. <i>Drug users' fear of incarceration related to MMT:</i> MMT patient interviewees stated that, due to the arrests in and around MMT clinics, drug users did not dare to access MMT and MMT patients dropped out.
Lu et al. (2009)	2009 MMT Clinic in Qilihe District of Lanzhou city, Gansu	<i>Police intervention in MMT enrollment:</i> The MMT application procedure: applicants complete application and informed consent forms → applicants collect relevant supportive documents (including a copy of Chinese national identity card, a copy of resident document, and a photo of applicants) and submit them to MMT clinic → clinic submits documents to Qilihe Public Security Department for approval → applicants admitted into MMT. <i>Cooperation between police departments and MMT clinics:</i> Local police did not conduct arrests in the MMT Clinic
Ma et al. (2009)	2007 334 MMT clinics in 23 administrative divisions at provincial level	<i>Arrests in and/or around MMT clinics:</i> To meet drug arrest quotas and to fill slots in DETOX centers, some police officers made arrests in MMT clinics. <i>Cooperation between police departments and MMT clinics:</i> Intersectoral cooperation at national and provincial levels was satisfactory, but not at local level. Local police made arrests in MMT clinics to meet drug arrest quotas and to promote DETOX occupancy rates, which impeded MMT programs. Driven by financial incentives, some police departments discouraged drug users from accessing MMT. Some public health departments negotiated with local police many times to solve such conflicts, but the negotiation was unsatisfactory
Shen et al. (2009)	Aug. 2005–Aug. 2008 The MMT Clinic of the Fourth People's Hospital in Urumqi city, Xinjiang	<i>Arrests in and/or around MMT clinics:</i> Police officers arrested MMT patients near MMT clinics.
Xu and Wu (2009)	2008 MMT Clinic of the Center for Disease Control in Ma'anshan city, Hunan	<i>Cooperation between police departments and MMT clinics:</i> Police were cooperative. Within 20 days from the date of MMT enrollment, patients with a positive drug report were exempted from punishment if there was no evidence of continued drug use.
Yunnan Police Academy (2009)	2008 Yunnan	<i>Police intervention in MMT enrollment:</i> Drug users unregistered with police were ineligible for MMT. <i>Drug users' fear of incarceration related to MMT:</i> Drug users did not enroll in MMT for fear of incarceration. MMT patients worried about being incarcerated while in MMT. <i>Cooperation between police departments and MMT clinics:</i> Almost all of the Yunnan-based MMT clinics (number of clinics not reported) in this research stated that there was insufficient cooperation between police and public health agencies. Police interventions were needed to curb offences in MMT clinics. However, police were reluctant to intervene due to understaffing and lack of resources.
Cohen and Amon (2008)	Not reported Baise city and Nanning city, Guangxi	<i>Arrests in and/or around MMT clinics:</i> Almost all of the 39 injecting drug user interviewees reported that police routinely conducted surveillance of pharmacies and methadone clinics and some reported having been arrested when seeking to buy clean needles or access methadone.
Li et al. (2008)	2007–2008	<i>Cooperation between police departments and MMT clinics:</i> The clinic and the District Public Security Department made an agreement in 2007, stating that the police department could get funding assistance from the clinic for their cooperative activities such as MMT referral, attending MMT meetings, educating patients on law, and assisting in supervising patients. The incentive mechanism was reportedly very effective. 1 year later, the client retention rate increased from 56.27% to 76.36%; and the annual number of patients increased from 176 to 267.

Table 1 (Continued)

Study	Study period and study setting	Findings: police intervention in MMT enrolment; arrests in and/or around MMT clinics; drug users' fear of incarceration related to MMT; cooperation between police departments and MMT clinics
	Dashuying MMT Clinic of the Drug Dependence Institute, Kunming city, Yunnan	
Yang, Lin, et al. (2008)	Jun–Nov. 2007 Ten cities (Jieyang, Shantou, Shanwei, Yangjiang, Maoming, Zhanjiang, Huizhou, Shenzheng, Dongguan, and Zhongshan) of Guangdong	<i>Arrests in and/or around MMT clinics:</i> In some parts of Guangdong province, local police officers often conducted arrests around MMT clinics to fill a drug arrest quota.
Yang, Li, et al. (2008)	Mar–Apr. 2006 Kunming city, Dali prefecture, and Honghe prefecture in Yunnan.	<i>Arrests in and/or around MMT clinics:</i> There were incidents of police going to MMT sites to arrest drug users who had been admitted to MMT programs.
Mo (2008)	Not reported MMT Clinic of the Center for Disease Control in Liujiang county, Guangxi	<i>Cooperation between police departments and MMT clinics:</i> The Center for Disease Control in Liujiang county, often held multi-sector MMT meetings with local police departments. Police were supportive.
Xin et al. (2008)	2007 Thai and Jingpo Autonomous Prefecture, Yunnan	<i>Drug users' fear of incarceration related to MMT:</i> Many (number not reported) drug users moved to villages or mountain areas to avoid RTL.
Xue et al. (2008)	May 2005–Jun. 2007 Five MMT clinics in Shanghai	<i>Drug users' fear of incarceration related to MMT:</i> Police arrest of drug users intensified their fear of incarceration and drove them away from MMT. Social workers had to relocate drug users to avoid DETOX and RTL before MMT enrollment. <i>Cooperation between police departments and MMT clinics:</i> In order to reduce the negative influence of policing on MMT programs, the Shanghai Bureau of Public Security introduced a policy that, during the periods of health examination and initial orientation to MMT, police would not detain or arrest opiate users with a positive urine test.
Huang and Zhu (2007)	Not reported MMT Clinic in the Skin Disease Center of Liuzhou city, Guangxi	<i>Cooperation between police departments and MMT clinics:</i> The Center for Disease Control in Liuzhou city often held multi-sector meetings with the local police. The local police were supportive.
Wu et al. (2007)	Jan–Aug. 2006 MMT Clinic in Tianxin District of Changsha City and 1 unknown MMT clinic in Hunan	<i>Cooperation between police departments and MMT clinics:</i> Police officers in Tianxin District participated in a funded intervention program for MMT patients.
Chen et al. (2006)	Dec. 2005–Jan. 2006 Xichang city, Sichuan	<i>Cooperation between police departments and MMT clinics:</i> MMT patients who were found for the first time to use drugs were not put into DETOX. Instead, they were disciplined by MMT clinics. Patients found to use drugs for the second time were subjected to DETOX.
Wang et al. (2006)	2006 Gejiu city, Yunnan	<i>Cooperation between police departments and MMT clinics:</i> Police were supportive. They did not conduct arrests in and around MMT clinics. MMT patients were protected by police. However, if they were found to use or possess drugs, they would be transferred into DETOX or RTL.

major reasons for police action (Du et al., 2009; Ma et al., 2009; Mao et al., 2011; Yang, Lin, et al., 2008).

Drug users' fear of incarceration related to MMT

Twelve studies conducted between 2005 and 2011 reported drug users' fear of incarceration as a deterring factor for entry and retention in MMT (Table 1). These studies were conducted in Zhejiang (Lin et al., 2011), Jiangxi (Lin et al., 2011), Hunan (Li, 2010; Tong, Fu, Wu, Zhu, & Wang, 2011), Guangdong (Wu, Deng, Wu, & Fang, 2010), Yunnan (Philbin & Zhang, 2010; Xin, Sun, Gan, Li, & Duan, 2008; Yunnan Police Academy, 2009), Guangxi (Cohen & Amon, 2008), Beijing (Du et al., 2009; Shen & Wu, 2012) and Shanghai (Jiang et al., 2011; Xue et al., 2008). Because MMT patients must be drug users registered with police and police collect registered drug users' information from other government organizations, enrolling in MMT increases drug users' fear of incarceration (Jiang et al., 2011). MMT clinicians test patients for drugs, and police detain suspected drug users in the community, including MMT

patients, for involuntary drug tests. MMT patients who have positive drug tests in the clinic or in police custody may be sent into DETOX or RTL (Jiang et al., 2011; Lin et al., 2011). Fear of incarceration in DETOX and RTL drove drug users underground and away from MMT (Xin et al., 2008; Xue et al., 2008). Arrests in and around MMT clinics increased drug users' fear of incarceration and deterred them from accessing and continuing MMT (Du et al., 2009; Lin et al., 2011; Philbin & Zhang, 2010).

MMT curtailed by confinement in DETOX or RTL

Twenty-three studies conducted between 2005 and 2010 in 10 provinces (Hubei, Jiangsu, Zhejiang, Yunnan, Hunan, Guangdong, Sichuan, Shanxi, Anhui, and Guizhou), two autonomous regions (Xinjiang and Guangxi), and two cities (Beijing and Shanghai), reported that 17–79% (mean: 43%) of patients discontinued MMT, of whom 1–70% (mean: 30%) were sent into DETOX and RTL centers because they used drugs (Fig. 3). In some parts of China, MMT clinicians reported drug-using patients to local police with a view to

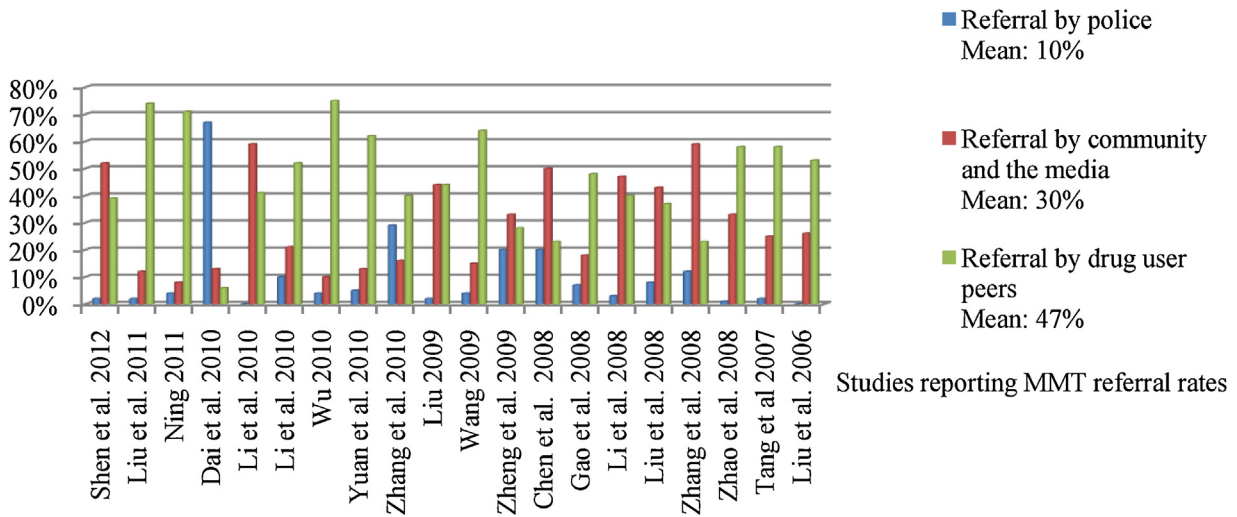


Fig. 2. MMT referral rates.

sending them into DETOX or RTL (Feng, Wei, Wei, Bai, & Shan, 2007; Long et al., 2006). Regardless of whether the impetus for transfer comes from a police or MMT program drug test, the authority to issue the administrative sanction belongs to the police, not clinic staff, making this a treatment outcome ultimately attributable to police action.

Cooperation of public security departments and MMT clinics

Seventeen studies conducted between 2005 and 2011 described various forms of cooperation between public security departments and MMT clinics (Table 1). Of the 17 studies, one was conducted across China (Ma et al., 2009) and the other 16 covered six provinces (Yunnan, Sichuan, Hunan, Guangxi, Gansu, and Jiangsu) and two cities (Beijing and Shanghai).

The studies were not entirely consistent in how cooperative behavior was defined by the researchers or respondents. In this group of studies, MMT clinic staff characterized police as cooperative when they exhibited any of the following behavior: (1) did not conduct arrests in and/or around MMT clinics (Lu et al., 2009; Mao

et al., 2011; Wang et al., 2006; Zhou, Feng, & Bai, 2010); (2) helped to ensure the safety and order in MMT clinics (Song, 2011); (3) assisted in supervising patients and referred opiate users to MMT (Li, Zhang, & Zhang, 2008; Zhou et al., 2010); (4) introduced tolerant policing policies by not arresting drug using patients within a specific period (Chen et al., 2006; Xu & Wu, 2009; Xue et al., 2008); (5) had a multi-sector MMT working team with MMT clinics (Qin et al., 2011); (6) had good communication with MMT clinics and attended multi-sector meetings on MMT (Huang & Zhu, 2007; Li et al., 2008; Mo, 2008); and (7) collaborated with MMT clinics to develop programs, to seek funding for MMT programs and to implement funded MMT programs (Wu et al., 2007). Local police were described as not cooperative by respondents reporting these behaviors: (1) conducting arrests in and/or MMT clinics (Ma et al., 2009); (2) inefficiently handling MMT application cases (Dong, Li, & Mao, 2009); (3) exhibiting reluctant to ensure the safety and order of MMT clinics (Shen & Wu, 2012; Yunnan Police Academy, 2009); (4) not joining a multi-sector MMT working team with MMT clinics (Qin et al., 2011); and (5) not meeting with MMT clinics (Qin et al., 2011). A good relationship with the police at the level of



Fig. 3. MMT curtailed by confinement in DETOX or RTL.

multi-sectoral cooperation, and for administrative purposes, was generally valued. Views differed on whether police involvement with patients in or around the clinic was a good or bad thing.

Cooperation between DETOX and MMT: education and referral

Three studies conducted in three provinces (Gansu, Hunan, and Yunnan) between 2007 and 2009 reported on DETOX centers that had tried to help detainees to access MMT in case of a relapse after release. The centers educated detainees on MMT and gave them MMT referral cards. From July 2007 to June 2008, the DETOX Center in Kaiyuan City, Yunnan, delivered MMT referral cards to 787 detainees, of whom 15% (121) enrolled in MMT after release (Wang, Lin, Chang, Song, & Wang, 2010). Similarly, between August 2007 and October 2008, two DETOX centers in Hunan referred 200 detainees to a MMT clinic and 23% (46) enrolled in MMT (Tong et al., 2011).

Discussion

To our knowledge, this research presents the first review of English and Chinese literature empirical studies to explore the role of Chinese police in MMT programs. Although only one study actually focused on the impact of policing on MMT access and treatment, this large set of studies provides considerable qualitative support to the hypothesis that police behavior is an important factor in MMT success.

The studies uniformly reported that participants in MMT had to be approved by police and that opiate users unregistered with police were ineligible for accessing MMT. Such practices conform to the Chinese drug laws that authorize public security police to administer a real-time drug user monitoring system (xi du ren yuan dong tai guan kong), mandatory testing and registration of drug users by national ID card number (The Ministry of Public Security of the PRC, 2009; The Standing Committee of the National People's Congress of the PRC, 2007; The State Council of the PRC, 2011). Such practices are also consistent with Chinese MMT policies. According to the *Implementation protocol for community-based methadone maintenance treatment for opiate addicts* (The Ministry of Health of the PRC et al., 2006), MMT applicants who have undergone DETOX and RTL must be approved by local police. The Protocol does not explicitly require police approval for applicants without a DETOX or RTL record, but the reviewed studies reported that in practice all applicants for MMT were approved by police, regardless of whether or not they had DETOX or RTL records.

Reported police referral to MMT was rarely reported. According to Chinese drug law, opiate users are exempt from administrative punishments for their non-criminal drug use offences if they willingly undertake MMT. If they do not, they may be subjected to legal punishments. Studies in Australia found that avoiding more trouble with police was an important or very important reason for heroin addicts to enter MMT (Weatherburn & Lind, 2001; Weatherburn et al., 1999). It is possible that in some of those instances of MMT referral by police, users' decision was coerced by fear of DETOX or RTL. Efforts by DETOX staff to educate detainees about the future option of MMT are associated, in the studies reported here, with substantial uptake. Routine referral by DETOX programs, which are firmly located within the public security apparatus, would be an important indicator of support for MMT, but as far as we can document is not a regular practice.

The police role in approving entry to MMT, their registration and monitoring system of drug users, and police activities in undertaking investigations, drug tests and arrests in and around MMT clinics scare some users away from seeking MMT. In Chinese drug law, drug treatment providers, including MMT clinics, must

regularly report patients' information to the police-administered drug user monitoring system (The Ministry of Public Security of the PRC, 2009). The system can automatically alert police of users' actions and locations when they use their ID cards in activities that are mandatorily reportable to police, including checking into hotels, purchasing air tickets, and accessing MMT. Instances have been reported of police arriving to conduct drug tests within hours after users checked into hotels (Beijing Aizhixing Health Institute, 2012).

Police enforcement of drug laws, through arrests and drug tests, was reported in the studies we reviewed as a major source of treatment withdrawal for MMT patients who relapse or use other drugs while in MMT. There are mixed reports of how cooperative police are with MMT programs, and of what behavior is deemed cooperative. Strict compliance with the law entails frequent exchange of information between clinics and the police, so efficient bureaucratic cooperation facilitates patient enrollment – and withdrawal due to relapse or other drug use. Police presence in and around the clinic is seen by some clinics as positive, and by others as unnecessary interference. Additionally, the cooperation between DETOX and RTL centers and MMT clinics is very limited and not promising for promoting MMT access.

The “risk environments” framework identifies drug laws and the manner of their enforcement as important contextual factors that can exacerbate the inherent risks of drug use and reduce access to and efficacy of harm reduction and treatment programs (Degenhardt et al., 2010; Milloy et al., 2012; Rhodes, 2002, 2009; Rhodes & Simic, 2005; Strathdee et al., 2010). International studies have shown that anti-drug policing can deter opiate users from accessing and adhering to harm reduction services (Burris, 2009, 2011; Burris et al., 2004; Davis, Burris, Kraut-Becher, Lynch, & Metzger, 2005; DeBeck et al., 2008; Degenhardt et al., 2010; Miller et al., 2008; Pollini et al., 2007; Strathdee et al., 2010, 2008). International studies have also suggested that police training that combines occupational safety and harm reduction knowledge can help to reduce unjustified police interference with harm reduction services and thus facilitate better coordination between policing and HIV prevention (Beletsky, Agrawal, et al., 2011; Beletsky, Grau, White, Bowman, & Heimer, 2011). For example, police in Rhodes Island, United States were trained about syringe access programs and needle stick injuries. Before training, only 8.6% of respondents agreed that they would not confiscate syringes unless drugs were present. After training, the rate increased to 65.8% (Beletsky, Agrawal, et al., 2011). This encouraging outcome indicates that police training in MMT programs might reduce the conflicts between policing practices and MMT programs.

Our findings are consistent with findings elsewhere. In China, a police role for treatment entry is an obvious barrier that is unnecessary from a public health perspective. Likewise, law enforcement activity in and around MMT clinics is an avoidable barrier. The concept of multi-sectoral cooperation generally, and cooperation between health and law enforcement in particular, is salutary, but the reviewed studies suggest that much more needs to be done to harmonize goals, methods and cultures, and to emphasize a public health approach to drug use and drug treatment. Training of police on drug harm reduction is needed to change policing practices that harm population health. The unreviewed, unappealable confinement of drug users in DETOX or RTL programs with questionable treatment availability and methods raises obvious human rights concerns, quite apart from their inefficacy from a health perspective.

Opioid relapse or other drug use are predictable treatment events in MMT and should be managed clinically rather than by police removing people from treatment. However, the Chinese government is said to strongly believe that its approach is necessary to maintain public order and contain HIV. According to Yi Wu, the

former Director of the State Council AIDS Working Committee Office of China, cracking down on illegal behaviours such as drug use and prostitution must be persistently and thoroughly carried out to stop and clean up these “ugly social phenomena” and to reduce the social harms caused by “evil habits” (Wu, 2004). China needs to reconsider its HIV policy and drug law to remove legal barriers to successes of MMT programs.

In addition to these substantive findings and recommendations, this review shows that the important question of the impact of laws and law enforcement practices on MMT access and success in China has received virtually no focused attention in the research literature. Not only has this topic received little attention, but none of the reviewed studies reported ethics approval from an ethics review committee, which is not required under Chinese law but is under prevailing international standards of research (Amon, 2012). In reporting these results, we considered that ethical approval may have occurred but not been reported, that there is no explicit indication that participation was coerced, that none of the interviews and surveys appeared to pose a risk of further harm to respondents, and that reporting of barriers to treatment created by laws and law enforcement could ultimately lead to changes that benefit drug users and MMT patients. Given the limitation of these studies and the strong evidence base internationally, future public health law research on policing and MMT is urgently needed.

Limitations

Although large in number, most studies in this review rely on small or convenience samples from settings scattered throughout China. The findings may not be generalized to other parts of China in which the anti-drug policing environments and MMT practice may differ from the 19 areas with reported data. Much of the data presented consists of opinions or self-reported behavior, rather than systematic observation by researchers.

Conclusion

Despite Chinese drug law providing that drug users are exempt from administrative punishments for their non-criminal drug use offences if they voluntarily undertake drug treatment, existing studies showed that drug laws and their enforcement can deter opiate users from accessing and successfully utilizing MMT. Research focusing on the nature, prevalence and severity of these effects is urgently needed. In the meantime, health and public security officials in China should review and reform policies and practices of registering, monitoring and incarcerating drug users.

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Appendix A. Supplementary data

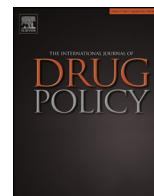
Supplementary data associated with this article can be found, in the online version, at <http://dx.doi.org/10.1016/j.drugpo.2013.03.010>.

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Substance, structure and stigma: Parents in the UK accounting for opioid substitution therapy during the antenatal and postnatal periods



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ABSTRACT

Background: Parenting and pregnancy in the context of drug use is a contentious topic, high on the policy agenda. Providing effective support to parents who are opioid dependent, through early intervention, access to drug treatment and parenting skills training, is a priority. However, little is known about opioid dependent parents' experiences and understanding of parenting support during the antenatal and postnatal periods. This paper focuses on the position and impact of opioid substitution therapy (OST) in the accounts of parents who were expecting, or who had recently had, a baby in the UK.

Methods: Semi-structured qualitative interviews were held with a purposive sample of 19 opioid dependent service users (14 female, 5 male). Longitudinal data was collected across the antenatal and postnatal (up to 1 year) periods, with participants interviewed up to three times. Forty-five interviews were analysed thematically, using a constant comparison method, underpinned by a sociologically informed narrative approach.

Results: Participants' accounts of drug treatment were clearly oriented towards demonstrating that they were doing 'the best thing' for their baby. For some, OST was framed as a route to what was seen as a 'normal' family life; for others, OST was a barrier to such normality. Challenges related to: the physiological effects of opioid dependence; structural constraints associated with treatment regimes; and the impact of negative societal views about drug-using parents.

Conclusion: Parents' accounts of OST can be seen as a response to socio-cultural ideals of a 'good', drug-free parent. Reflecting the liminal position parents engaged in OST found themselves in, their narratives entailed reconciling their status as a 'drug-using parent' with a view of an 'ideal parent' who was abstinent.

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Introduction

Parental drug misuse is recognised as an important concern with regard to child welfare (ACMD, 2003; HM Government, 2010; The Scottish Government, 2008). Policy in the UK recommends parenting interventions – particularly those that involve early intervention, access to drug treatment and 'whole family' approaches (Cabinet Office, 2008; HM Government, 2010). However, with some exceptions, evidence remains scarce regarding how effective parenting interventions are for substance using

mothers and fathers in the UK (Forrester et al., 2008; Niccols et al., 2012; Templeton, 2012). Similarly, little is known regarding parents' views of substance use services more broadly, and how they might support or hinder their parenting practices. In particular, what constitutes 'parenting support' is rarely examined from the perspective of drug-using parents themselves.

This paper contributes to a growing literature discussing the role of Opioid Substitution Therapy (OST) in the context of parenthood (Banwell & Bammer, 2006; Banwell, 2003; Leppo, 2012; Radcliffe, 2011; Richter & Bammer, 2000). Our approach maintains the importance of wider social contexts and processes in mediating the ability of drug-using parents to be 'good-enough' (Rhodes, Bernays, & Houmoller, 2010). Such contexts include the provision and use of health and social care services. With some

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exceptions (Lund et al., 2012; Rhodes et al., 2010), many existing studies have focused upon the accounts of mothers. These have highlighted the problems encountered when attempting to maintain an identity as a 'good mother' in the face of wider societal views which frame any drug use (including OST) as incompatible with mothering (Reid, Greaves, & Poole, 2008). OST represents a possible strategy for drug-using mothers to reduce potential harm to children (Hogan & Higgins, 2001; Richter & Bammer, 2000). However, work by Banwell (2003) has demonstrated the intensely ambivalent nature of OST for mothers: while OST was in some cases described as helping women to engage in 'normal' family life; conversely it tied the user to a stigmatised, deviant identity. Further, participants highlighted ways in which OST obstructed their daily lives: through troubling bodily symptoms such as excessive sweating or fatigue; to having to organise life around daily prescription collection.

The management of illicit drug use around parenting has been explored in a number of studies. These highlight a range of strategies through which parents seek to minimise harm to children (Hogan, 2003; Klee, 1998; Rhodes et al., 2010; Richter & Bammer, 2000). As well as entering drug-treatment, this can include attempting to hide drug use from children; ensuring that children's basic needs are met before attending to drug use; and using different types of drugs (e.g. cannabis) to manage withdrawal symptoms and continue to provide care. Such studies emphasise the morally charged character of parental accounts of drug use. This is evident in Rhodes et al. (2010) accounts of drug-using parents regarding the harm or damage drug use might pose to children. Participants in the study were largely current users of illicit drugs, and their accounts addressed harm in different ways: accepting, qualifying or resisting the extent to which their own drug use had caused harm to their children. Frequently participants 'shifted between' these different types of accounts, and Rhodes et al. suggested there is a need for services to facilitate opportunities for drug-using parents to talk about parenting and family life, and for the creation of wider 'enabling environments' to encourage earlier help seeking, so that harm reduction approaches could focus upon families and relationships, rather than individual drug users (2010: pp. 1496–1497).

The time around the birth of a baby is frequently framed as a 'crucial' point at which interventions may be particularly efficacious, and when substance using mothers in particular might be particularly motivated to 'turn around' their lives (Hall & van Teijlingen, 2006; Klee, Jackson, & Lewis, 2002; Radcliffe, 2011). However, longitudinal research that is able to examine these changes over time has been limited. Studies that have used longitudinal approaches have highlighted the importance of social support (both from services and interpersonal networks) in shaping substance use and parenthood trajectories (Klee et al., 2002; Lund et al., 2012; Radcliffe, 2011). Research carried out by Skinner, Haggerty, Fleming, Catalano, & Gainey (2010) in the US that used long-term follow up reported poor outcomes for drug dependent parents and their children. These findings highlight the complex and enduring contexts of disadvantage in which much drug dependence occurs, with Skinner et al. reporting that of the 130 families they located after 12 years, 24% of the drug dependent parents had died; and of those still surviving, 52% were unemployed and 54% had been incarcerated in the previous 10 years. They concluded that both parents and children would likely require extra support in order to attempt to counter such negative outcomes.

The research reported upon here examined the ways in which drug-dependent parents accounted for their experiences of both parenting and parenting support, with a focus on the antenatal and postnatal periods. In particular we examined the narratives parents generated regarding the impact of problem drug use, including use of OST, on parenting.

Methods

This study was carried out in Scotland, and comprised a qualitative exploration of service user and service provider accounts of the provision of parenting support for drug-using parents during the antenatal and postnatal periods. This paper reports on the service user data only. Service users were recruited through NHS services in South East Scotland, a location incorporating several densely populated urban centres with surrounding rural areas. We aimed to recruit participants during their or their partners', pregnancy, with the first of three longitudinal interviews planned at around week 28 of the pregnancy. Subsequent interviews were planned at 2–3 months and 6–9 months postnatal. The timing of the interviews was designed to coincide with times where services might be expected to alter or intensify. Additionally, carrying out repeat interviews with participants across approximately one year enabled analysis of the ways in which narratives might alter over time in response to changing parenting needs and often rapidly changing life circumstances (e.g. the birth of a child; child protection involvement; a relapse). A purposive sampling strategy was used, designed to maximise diversity within the sample and the comparative potential of the data. We sought to include male and female participants, both younger (under 25) and older (over 25) parents; first-time and experienced parents; injectors and non-injectors, and those with different patterns of service use.

Recruitment and sample

Although recruitment was challenging, we interviewed nineteen service users, five men and fourteen women (not couples, therefore participants were from different families). While we had hoped to use snowball sampling to recruit parents who were not using services, this approach was unsuccessful, resulting in our sample being comprised only of people engaged in OST, although some were recent attenders. Of the nineteen participants, we interviewed ten at all three stages (three men, seven women) with seventeen interviewed on at least two occasions. A total of seventeen antenatal and 28 postnatal interviews were conducted. Participants were offered a £20 voucher for each interview to cover expenses for taking part in the research.

Participants were aged between 23 and 39, with a median age of 29. All were unemployed, and the majority lived in areas of deprivation. Five participants were first-time parents, seven had resident older children and seven had non-resident older children (older children were aged between 2 and 19). At the time of the first interview, all participants were engaged with drugs services and prescribed opioids. This was mostly methadone, though one participant was prescribed buprenorphine, and one dihydrocodeine. During the course of the research, several participants' prescriptions altered, and in two cases ceased. Participants reported a range of experiences with drug use. While some presented themselves as being engaged with drug treatment and prescribed opioid-substitutes for some time (up to 13 years); others had only recently engaged, or re-engaged with drug treatment. Most participants reported a history of poly-drug use including prescribed and illicit benzodiazepines, cocaine and crack cocaine, cannabis, amphetamines, ecstasy, illicit opioids and mephedrone. Some reported on-going illicit drug use (and 'relapse') during the study period, primarily using illicit opioids and benzodiazepines. Problematic alcohol use was also described by participants; with two women reporting this during their pregnancy. All participants smoked cigarettes, ranging from 5 to 30 per day.

Research context

Although there are UK clinical guidelines on the use of OST (Department of Health, 2007), practice and policy varies geographically within the UK, and this is the case with OST during pregnancy also. A recent survey reports that service provision for opioid dependent pregnant women in England and Wales is generally high, but that variations in practice are evident, particularly in approaches to methadone prescribing (Perez-Montejano, Finch, & Wolff, 2011). This was evident within our sample, with eight participants prescribed OST by their general practitioner at the time of their first interview, and the other eleven prescribed by specialist drug treatment services run by the NHS. This included three participants who were managed by a specialist multi-agency support service for pregnant drug and alcohol users. In South East Scotland, OST is dispensed by community pharmacists; this can involve either 'supervised consumption' on the premises or 'take home' doses on a daily, three-times weekly, twice-weekly or weekly dispensing regime, depending on the needs and social circumstances of the drug user and how 'stable' they are perceived to be. Random drug-testing is advocated to monitor illicit drug use; and 'flexible' OST dosages are provided where the user is maintained, reduced or increased depending on service user preference, as well as how well they are seen to be responding to treatment and abstaining from illicit use. Within our sample, some participants reported being tested weekly, with others tested less often.

Data generation

Altogether, 45 interviews were carried out, largely by AC, though some were conducted by AW (5) and GM (3). The interviews were semi-structured, with questions addressing participants' current and past drug use, social background and history, socio-economic circumstances, relationships and social support, experiences of parenting, views on parenting needs, and experiences with services, with a particular focus on parenting support. Additional questions explored participants' understandings about parenting, what made a 'good' or 'bad' parent, and how far drug use might impact (or not) on individuals' ability to parent effectively. Interviews lasted between 1 and 2 h and were conducted in NHS premises, participants' homes, and some in community centres or cafes. Interviews were transcribed, anonymised and participants given pseudonyms.

Analysis

A sociologically informed, narrative approach to analysis was taken (McCormack, 2004), focusing upon the ways in which parents accounted for their use of OST within the context of pregnancy and parenting, and their experiences of parenting support services. This involved detailed reading of the transcripts by all co-authors, and thematic coding by AC and AW. Coding was facilitated by the use of NVivo software, allowing us to better manage the interview transcripts. The analysis presented here is based on a focused analysis of a content code that included all interview-talk about OST. Text coded as being about OST was subsequently sub-coded, with a focus upon the different ways that participants accounted for OST. We took a comprehensive approach to the data, whereby we included all cases in our analysis, along with deviant case analysis – highlighting those cases that did not fit with the others in terms of how OST was accounted for (Silverman, 2005: pp. 214–215). Comparative analysis was used to further interrogate the data set. We compared antenatal and postnatal accounts, male and female accounts, and accounts which described different OST management strategies, e.g. maintenance prescribing versus reduction and detoxification regimes. The accounts of participants were not taken to represent the 'truth' of what they did or did not do, rather we

focused on the way the accounts were framed (Barnard, 2005). Such an approach allows an acknowledgement of the social and cultural construction of drug use and parenthood as well as highlighting the importance of the research interview as a site where accounts of these contested issues are co-produced (Radcliffe, 2011; Rhodes et al., 2010).

Ethics

Ethical approval for the project was granted by the local NHS Research Ethics Committee. All participants volunteered to take part in the research and throughout the project, research team members remained attentive to the sensitive nature of the topic and potential concerns for participants in respect of confidentiality and child protection issues.

Findings

The parents' narratives characterised OST as both a facilitator and barrier to normal parenthood and through their accounts they sought to reconcile their status as drug dependent alongside a view of themselves as a 'good enough' parent. Suffusing these overarching narratives were three key themes: first, the material nature of OST, including its status as a substance and its embodied impact on mother and baby (Fraser & valentine, 2008); second, the wider structures surrounding participants' engagement in OST, including prescribing practices, relationships with health care and social workers; and thirdly, the highly charged discourses about the stigmatising nature of being a parent while 'on drugs' (including OST).

OST as a facilitator of 'normal' parenthood

Many participants' accounts suggested that OST helped them to engage in 'normal' family life by: enabling them to manage their opioid dependence, and reduce the risks and harms associated with drug use; helping them to 'prove' their worth, or suitability as a parent, to social services and retain custody of their children; and countering – to some extent – the stigmatising identity of a being a drug-using parent, by emphasising their orientation towards 'stabilising' or reducing their use of prescribed opioids and their avoidance of heroin.

I sort of stopped buying the heroin and started buying methadone fae somebody and got myself stable on the 20 mls when I found out I was pregnant. I was like that, I would rather one or the other, methadone is sort of the lesser evil of the two. (Caitlin, antenatal)¹

Caitlin's account positioned herself as able to take control of her use of opioids in response to her pregnancy, by using illicit methadone while waiting for a referral to drug treatment. Once prescribed methadone, she indicated that she began to reduce her dosage, planning to become entirely abstinent before her baby was born. Previous research has also found parents have justified their use of OST by framing it as less harmful than heroin (Banwell, 2003; Hogan & Higgins, 2001; Richter & Bammer, 2000). Our findings highlight that an individual's *practice* of OST can also be a way of constructing a narrative of active engagement in preparing for or practicing parenthood. For instance, Alison's narrative suggested that pregnancy spurred her into ceasing use of heroin and engaging with services:

¹ We have preserved dialect in the interview extracts. 'Frae' or 'fae' = from; 'bairn' = child; 'nae' = no or not; 'mair' = more; 'dinnae' = don't/do not; 'canna' = cannot; 'wi' = with; 'daein' = doing.

The first thing I had to do [upon discovering pregnancy] was to get on a prescription as soon as possible. (Alison, 3 months postnatal)

Alison suggested a key benefit of using prescribed methadone was that it enabled her to leave the sex industry, which had previously supported her use of heroin, allowing her to have what she termed a 'normal' life. Others spoke of OST improving their finances and enabling them to spend more time with children, instead of spending time procuring illicit drugs and mixing with deviant peers:

[OST] keeps you away fae everybody [. . .] I dinnae have to worry about the money side of things, which is massive. I dinnae have to worry about going out to get drugs . . . all that time involved . . . it can take up a whole day to find your drugs, to get sorted . . . Until you've got that in you, you're no' feeling great, so [OST] just takes all that worry away fae you, and what else have you got? You've just got your kids (Bronwyn, 3 months postnatal)

Participants often indicated a hierarchy of 'acceptable' and 'unacceptable' drug use, with parents who were injecting heroin framed as the most problematic:

It just gets me upset because there's so many people that have got children out there, and they're injecting and their bairns are out with nae shoes on and they've got their bairns, and me and Craig's no' got ours [referring to older children being taken into care]. (Cheryl, antenatal)

Cheryl's narrative argued that health and social services were unjust and ineffective: allowing more neglectful drug-using parents to retain custody of their children, while remaining highly suspicious of Cheryl's own parenting capacity, despite the apparent 'stability' of her drug use. That she and her partner had abstained from illicit drug use for a number of years should, Cheryl argued, be seen as evidence of their readiness to parent their children. Thus, the narratives of participants who had been prescribed OST for long periods of time maintained the centrality of remaining free of illicit drugs. Stuart had been prescribed OST for over ten years, and when asked about his experiences of parenting, and preparation for the new baby, his account focused upon his drug use:

AC: And what kind of things can help you to become [a] good enough [parent]?

Stuart: To carry on the way I'm going the now, staying drug free, keep coming [off] methadone.

Like Stuart, other participants emphasised their use of OST in answer to questions about parenting. These accounts framed abstinence from illicit drugs, and *either stability or reduction* of OST dosage, as an important marker of parenting capacity and being a 'good enough' parent. The concept of 'good enough' parenting is taken from parenting policy and research (Hoghugh & Speight, 1998). The term was not used spontaneously by participants and rarely by interviewers; more commonly, participants framed their accounts of parenting capacity around concepts of 'good' (acceptable) and 'bad' (unacceptable) parenting.

Accounting for OST during pregnancy was potentially fraught, with most participants indicating at least some awareness that babies born to drug-using mothers could be affected by neonatal abstinence syndrome (NAS). The position of being pregnant while using OST was justified by emphasising the importance of maintaining 'stability; in order to lessen pregnancy risks (particularly

stillbirth), or by indicating a resolve to reduce their dosage, based on a perception that lower opioid doses minimise the risk of NAS. This was the case for most of the women we spoke to, but similar narratives were used by the two men who had opioid-dependent partners. Michael, for instance said that his partner was "coming down, she needs to come [down] – the time roundabout when the baby's due she should be down to fifty ml". In most cases, either remaining stable or reducing OST during pregnancy was framed as being the 'best thing' for the baby:

It [remaining on methadone] didn't sit too well with me at all, but they said that the amount of stress and pressure it [reducing] put on me would in turn affect my baby and [. . .] do you know what I mean? So, yeah, it didn't sit very well with me but they had said in the long run it would kind of probably be best for me and the baby. (Elise, antenatal)

Elise described being reassured (and relieved) that her health-care workers agreed it was better for her and her baby if she remained on a stable dose. Elise's account oriented her use of OST as supporting her attempts to do 'the best thing' for her baby, while affirming the problematic nature of her status as a 'drug-using mother' and emphasising her discomfort with the situation. Elise framed the 'risk' of detoxification (and relapse) as more dangerous than the 'risk' of 'stable' drug use on OST.

Six female participants, including Alison and Caitlin, reported using heroin during pregnancy. In most of these cases, 'stabilising' their drug use by getting a prescription for methadone, and ceasing illicit opioid use was described as vitally important in preparing for parenthood. While men also reported striving to stabilise or reduce their opioid use via OST, women's accounts of doing this were necessarily more highly charged: being centred on concerns about neonatal abstinence syndrome (NAS) and the direct effects of maternal illicit drug use in utero. Nevertheless, both men and women in our study emphasised their own agency in seeking or reducing OST and this served to highlight their active attempt to be a 'good parent':

My baby will be here in another [few] weeks, I don't want. . . I mean I'm going to ask her [drug worker] to drop it down to 20 ml. This week I'm going to phone up and say look, can you drop it down to 20. (Paul, antenatal)

For women, reduction of OST was framed as an important way in which mothers could improve outcomes for the baby and themselves, and reduce the chance that their baby would experience severe neonatal withdrawal symptoms.

The doctor wanted me to stall at 50 [ml methadone] but I took it to 45 just to make sure because [GP] says it's really unlikely that a baby will withdraw if you're on 50 or less. (Nicola, antenatal)

Particularly in the antenatal interview, almost all women (with just two exceptions) indicated that they had reduced, were reducing, or *hoped* to reduce their prescribed opioids in the near future. This was a key way in which the problematic nature of OST was reconciled with their current or impending motherhood. However, more broadly a stated commitment to reducing OST at some point was an important means through which both male and female participants could use their engagement in OST to frame an account of themselves as a 'good' drug-using parent, drawing as it were on notions of 'recovery' and the good 'motivated' drug user. Of the five men in the sample, three reported reducing their dosage of OST during their partners' pregnancy. Thus, in the research interview, participants of either gender highlighted their awareness that

being opioid dependent did not fit with mainstream notions of ideal parenthood, but marked themselves as responsible parents by affirming their future, or current, plans to reduce and come off drugs (opioids at least).

The strength of commitment to reduction of OST varied over the course of the research, with different life events implicated in making reduction more or less possible or desirable. Although most female participants emphasised reduction of their dosage of OST prior to their baby's birth, none described becoming entirely abstinent in the antenatal period. Indeed, in the first postnatal interview (2–4 months), most participants who had been reducing antenatally maintained or increased their OST dosage. The time immediately following the birth of a baby was framed as stressful, with continued reduction representing too much extra pressure. In some cases, participants indicated that this view was endorsed by health care professionals:

I asked the doctor once about reducing and he said it's not the right time to reduce just now because I just had the baby (Hazel, 2 months postnatal).

Additionally, postnatally the risk of maternal drug use causing NAS had passed. Nicola, who had reduced from 120 ml methadone to 45 ml during pregnancy, stopped reducing in her third trimester and remained on the same dose at 3 months postnatal. She suggested that as she was breastfeeding it was better for her to remain on the same dose of methadone so that her baby (who she felt was suffering from NAS) continued to benefit from the drug:

[I'm] not ready to start stopping anything yet, she needs it for the milk [...] so we need to do it really slowly. But I think because I have to deal with her on my own I don't want to be going through not feeling well, so I'm not in a hurry to do it yet (Nicola, 3 months postnatal)

Nicola's account refers to the importance of support networks: like most of the women we spoke with, she was primarily responsible for the care of her baby with little input from her on-off partner or family. Only one participant (Melanie) became and remained abstinent postnatally, and it may be significant that she lived with supportive and highly involved parents, whereas all other participants lived independently. This highlights the importance of social and interpersonal contexts in shaping individuals' use of OST and, indeed, other opioids.

By the time of the final postnatal interview (held between 6 and 11 months postnatal) three participants had relapsed and used heroin, all of whom had previously been reducing their use of OST. In each of these cases, participants' accounts continued to focus upon their (renewed) commitment to remaining stable on OST, and, one day, becoming abstinent:

I absolutely hate myself for it [referring to her relapse], but it's done now, so I have to stop thinking about the past. I just hope that I can honestly stop it like once I come off this [subutex] and never go back to it [heroin], but I think I will [stop] (Carrie, 11 months postnatal)

Participants frequently talked about the importance of providing 'clean' drug tests as a method of demonstrating their commitment to being responsible parents. This reflects the importance that parents indicated health and social services were placing on drug test results as a marker of 'stability' and parental capacity. Having a baby that did not have severe neonatal withdrawal symptoms, engaging and 'complying' with OST regimes,

and providing 'clean' drug tests were each presented as evidence that a parent could be 'good enough' to look after their children:

As long as the people at the core group can see that I'm clean hopefully they'll feel more confident about taking her off the [child protection] list. (Elise, 4 months postnatal)

Fear of child protection interventions was an important aspect of many participants' justification of their use of OST. These accounts suggested that participants were compelled to engage in OST in order to secure or retain custody of their baby. For Paul this was a particularly clear feature of his account, as he described being denied access to his baby following a relapse, with limited access only granted once he had re-engaged with drugs services:

Well, it come to the point where I was just, I was doing all that [engaging with OST], like I'm still on a methadone programme and, [...] I was giving clean samples and all that [...] And so they said, yeah, he's doing okay and that. And he can have access to his [child] now. (Paul, 6 months postnatal)

Paul said that he resented being on methadone (suggesting it was replacing one addiction – to heroin – with another), but indicated that he had to continue with OST in order to be allowed to see his child.

Participants who had been engaged with OST for some time prior to the pregnancy also reported anxiety about the possibility of losing custody of their baby. Cheryl, for instance, presented herself as having been 'stable' on OST for several years but despite this expressed concern in her antenatal interview about being allowed custody of her baby when it was born: "it's [not being granted custody] always at the back of my mind". Such accounts demonstrate that once an individual is engaged in OST, 'normal family life' can still be difficult to achieve, and their status as a 'good enough' parent remains precarious. For some, the antenatal interview was fraught with anxiety about child protection intervention, with any excitement about impending parenthood tinged with concern that they might not be allowed a 'chance' to parent their baby. Thus, participants' accounts indicated that for opioid dependent parents, being (seen to be) 'stable' on OST was an important prerequisite for their being allowed to parent at all.

OST as a barrier to 'normal family life'

OST was described as being a barrier to 'normal family life' in three key ways. Some participants emphasised the ways in which the physical effects of opioid dependence, including withdrawals impacted on their daily routines. Being engaged in OST was tied up with being labelled a 'drug user'; this entailed intensive use of services that were frequently noted to impact negatively on family life. Finally, broader discourse about OST, and the particular stigma attached to methadone was highlighted.

While some participants emphasised that their use of OST carried no particular ill-effects, others highlighted problematic physical repercussions of OST, and continued dependence on opioids. For instance, Russell said that "methadone gives you a bit of a, kind of, fuzzy feeling, like, it's hard to describe, whereas the Subutex doesn't do that, it keeps you more normal", referring to an (initial) preference for buprenorphine over methadone. However, in both of his postnatal interviews, Russell's orientation towards buprenorphine had become more ambivalent; he described struggling "constantly" with physical symptoms of withdrawal and felt unable to cease his use of OST. Leading from this, in his final

interview Russell reflected upon and challenged the ideal of abstinence as the primary outcome of drug treatment:

My mum's got tons of tablets for arthritis type stuff that she has to take every day, [...] she's going to be on them forever, so, should I just accept it [being on OST indefinitely] like it's, you know, like that, or should I not accept. . . (Russell, 6 months postnatal)

Other participants similarly constructed accounts of their embodied experiences of OST around a desire to feel normal:

It's no right having to wait to get medicine to feel normal, I cannae be bothered wi' that crap any mair, I just want to be normal. (Nicola, antenatal)

In suggesting it is not *right* to need medicine to feel normal, Nicola's account emphasises the morally charged discourse around drug dependence more generally. Participants also talked about how they managed the physical effects of OST around their parenting responsibilities. Nicola and Carrie, for instance, talked about ensuring they took their methadone before their children woke up, in order to avoid having to look after children while waiting for the drug to 'kick in'. This process was framed as a daily, embodied reminder that, although ostensibly engaging in 'normal' family life, participants did not experience themselves as completely normal, because of continued opioid dependence and reliance on OST:

I'm glad [older child] doesnae wake up till that time because I always usually set my reminder on my phone to take my meth. I'm alright like, but see, when I wake up sometimes and I've just . . . it takes about an hour, maybe an hour and a half for my meth to kick in [...] it's really sad, I don't, . . . I was [crying] all the night, I just . . . I don't remember what it's like to wake up [normal] (Carrie, antenatal)

Managing dependence on OST was noted as a problematic aspect of life by parents, particularly in the postnatal interviews, or when participants had older children as concerns arose about 'visibility' of parental addiction (Rhodes et al., 2010; Richter & Bammer, 2000). Visiting the chemist to pick up prescriptions was a particularly contentious issue. Some participants suggested that taking children to the pharmacy was utterly unacceptable (and the marker of a 'bad' drug-using parent); while others – generally those with less social support, and thus fewer options – talked about the discomfort they faced when taking their children with them to pick up or consume prescriptions for OST.

I've ta'en her [older child] to the chemist with me a couple o' times, if [partner's] no' been well and that, and I dinnae like daein it cos I'm still on supervised [consumption of methadone]. But she's just, "Ah, mum, get your medicine, are you all better now?" But it's no' something I like daein in front of her, but sometimes I've got nae choice but to take her to the chemist wi' me. (Caitlin, 10 months postnatal)

Reflecting other research, participants tended to suggest that it was important that evidence of drug use and dependence, including OST, be concealed from children where possible (Hogan, 2003; Houmoller, Bernays, Wilson, & Rhodes, 2011; Rhodes et al., 2010; Richter & Bammer, 2000). Having to take children to the pharmacy to acquire or consume methadone generated situations where this concealment was more difficult. Additionally, and again paralleling findings elsewhere (Fraser, 2006: p. 198), participants' accounts suggested that the pharmacy represented a context where their

problematic status as a 'drug-using parent' could be discovered by others:

"You get folk looking at you, [...] whether I've got [older child] wi' me or no', so it's just, "There's the junkie, look at her"" (Caitlin, 10 months postnatal).

Another way in which using OST impacted on family life was the concomitant requirement that the drug dependent parent attend a variety of appointments with health and social care professionals. While some participants described the relationships they had with these professionals as being extremely supportive, in most cases, the number of appointments participants were required to keep was described as excessive: "I had an appointment nearly every day, which was quite hard" (Carrie, antenatal). If participants struggled to keep to all of their appointments, the consequences were portrayed as severe. Iona suggested that her failure to keep appointments was being given as the main reason she would be unable to have custody of her baby. Similarly, Darren's narrative angrily described the consequences he and his drug dependent partner faced if they missed appointments, or failed to pick up their prescriptions:

Now, things like that, to be able to have your [child] taken off you when everybody's saying, the social work and that, you're excellent parents, no question, never been seen taking drugs or anything like that. For lateness, missing a prescription appointment or missing your prescription, that... being able to adopt your [child], that is disgusting. (Darren, antenatal)

Darren's account was particularly antagonistic regarding his relationship with services. He framed himself and his partner as extremely responsible parents, who were being wronged by the structural constraints of OST, such as toxicology screening, opioid prescribing restrictions, and frequent appointments with a range of services. Unlike Darren and Michael, who had drug-dependent partners, the other three men (whose partners did not use drugs) in this study described much less scrutiny from services in their antenatal interviews. However, in two of these cases (Paul, Stuart) services became more involved in the postnatal period.

Participants also highlighted the on-going stigma they faced, and the ever present potential that they might be labelled a 'junkie (parent)' even after ceasing illicit opioid use and engaging in OST:

Yeah, you definitely get judged, even like with methadone, like the people in my street, I think some of them know that we're on the methadone programme, you can see the way they look at you and stuff, ken, just a junkie. (Carol, 3 months postnatal)

Similar issues were raised by other participants, and for some this was given as a primary reason for wanting to become abstinent. Carrie, for instance, who reported that both a neighbour and an ex-partner had referred to her as a 'junkie' emphasised her concern that her children not be adversely affected by such labelling: "I don't want her going to nursery and folk. . .or school and folk calling her, your mum's a junkie and that. That was one of the main reasons I wanted to stop."

Discussion

Parents' accounts of parenting, parenting support and OST were complex, reflecting the difficult moral terrain of both parenthood and drug use (Banwell, 2003; Reid et al., 2008). All parents indicated some awareness that being opioid dependent and engaged in OST as a parent was an undesirable, if not unacceptable, position to be

in. While some parents' narratives strongly endorsed the view that parenting in the context of problem drug use, including OST, was incompatible; others challenged this interpretation. In either case, participants had to account for their own use of OST and their role as a parent; the ways in which they approached this varied.

For some, OST was framed as an important prerequisite to being able to parent at all: this method of accounting framed illicit drug use and parenthood as utterly unacceptable, with OST a 'lesser evil'. These parents were involved with numerous health and social services and were subject to high degrees of monitoring and surveillance. They indicated a keen awareness that if they were not (seen to be) engaging in OST, and relapsed into illicit drug use, they risked (or had actually experienced) losing custody of their children. These parents' narratives framed engagement in OST as centrally important to their being able to maintain the role of a 'full' active and involved parent.

However, in the majority of cases, participants also highlighted negative impacts of OST on their attempts to maintain a 'normal family life'. We have argued that these negative impacts can be seen to relate to the substances involved in OST; the structures of the services entailed by OST; and finally the impact of wider (stigmatising) discourses regarding drug-using parents. It is important that services and policy makers recognise the ambivalent nature of parenting while using OST. Although ostensibly 'in recovery', the narratives of many of the participants we spoke with were rarely optimistic or hopeful: there was a keen awareness that their identity as a 'good parent' was at risk as long as they continued to use opioids of any kind.

There are potentially serious consequences of the idealisation of abstinence and sobriety, especially when such a view is clearly reflected in health and social care policy and practices (Rhodes et al., 2010): participants in this study reported concealing illicit drug use from services, relapsing following attempts to reduce OST dosage and become abstinent, and attempting to reduce rapidly during pregnancy. Nevertheless, policy in the UK is, if anything, wed to the notion of recovery and abstinence as a desirable, realistic and achievable goal for most, if not all, problem drug users (HM Government, 2010; The Scottish Government, 2008). We would suggest that given this policy context, along with fears around child welfare with regard to drug-using parents, it may be especially challenging for parents to have 'open' conversations about parenting needs, risk, and drug use as suggested by Rhodes et al. (2010: p. 1496). There is a need for further reflection on the interactions between policies and practices designed to support child welfare, harm reduction and the promotion of abstinence and recovery, and to consider the implications of these for both parents and children.

Participants' descriptions of the problems entailed by being engaged in OST were shaped by negative, stigmatising attitudes known to be held towards drug-using parents. These accounts often referred to the discomfort of not feeling 'normal'. This was simultaneously a bodily, physical symptom of withdrawal, as well as a painful reminder that the parent was not 'actually' normal, since they remained dependent on and engaged with OST. Similarly, the need to engage with various services as a result of their drug dependent status and use of OST, and the severe repercussions if they did not comply, were further – painful – reminders of their 'abnormal' status as a parent. Thus, as others have noted, the substances and structures that comprise OST are made all the more difficult because of wider attitudes towards problem drug use (Bourgeois, 2000; Fraser & valentine, 2008; Rhodes et al., 2010; valentine, 2007).

The above offers support to valentine (2007) arguments regarding the ambiguous and complex nature of OST – that it is not merely 'negative' or 'positive' but rather embodies qualities from both depending upon the context. This is certainly evident in accounts of negotiating and managing OST alongside parenthood.

OST is framed as generating positive effects by enabling (some) parents to better manage their drug dependence and move away from 'deviant' lifestyles. Simultaneously, accounts suggest more negative and uncomfortable connotations, with parents continuing to inhabit a liminal position where they are not yet fully 'normal', and the substances, structures and stigma involved in and associated with OST are a frequent reminder of this.

Finally, some of the limitations of our study are worth noting. The research was based on a small group of opioid dependent parents (mainly mothers) who were engaged in OST programmes, primarily orientated towards maintenance prescribing of methadone and delivered within general practice as well as specialist drug treatment settings. All our participants were recruited from one geographical area in Scotland. Thus our sample may not be typical of drug-using parents living elsewhere, including other areas of Scotland. The accounts of parents in our study can be seen to reflect local policies and practices surrounding OST and may not reflect parental experiences of OST in other areas where drug treatment and parenting support services may be differently orientated. The parents in our study all typically used a variety of other drugs, but in an area where the primary 'drugs of choice', other than opioids, are sedatives (primarily prescribed or illicit diazepam). Thus, concerns over stimulant drug use (e.g. cocaine, crack cocaine or amphetamines) which are far more prevalent in some areas, were not a dominant feature in this study. Nevertheless, we would argue that the child protection agenda now dominates the field of parental drug use, and all drug-dependent parents need to account for their drug-taking behaviour (prescribed or illicit). Examining the ways in which they do this sheds light on the challenges that they face, and equally the challenges that service providers face in working constructively with this group of parents and families.

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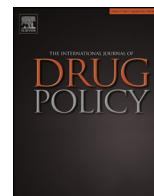
Conflict of interest statement

None of the authors have conflicts of interest to declare.

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Methadone diversion as a protective strategy: The harm reduction potential of 'generous constraints'

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ABSTRACT

Methadone maintenance treatment is evidenced as a successful harm reduction initiative in regard to the prevention of blood borne viruses and other injecting related harms. This is attributable to reductions in heroin use and injecting equipment sharing incidents, yet the means by which these are achieved are rarely elaborated. Methadone diversion is predominantly presented in a negative light; associated with overdose and other harms. In our qualitative London-based study with 37 people who inject drugs, 35 on substitution therapies, we found that methadone self regulation and diversion played a prominent role in helping participants to manage their drug use, prevent withdrawal, cement social relationships, and inadvertently protect against hepatitis C transmission. The ability of participants to enact these 'indigenous harm reduction strategies' was constrained to various degrees by their treatment dosing protocols. In this article we explore the strategies participants enacted with methadone, the role of 'generous constraints' in this enactment and the associated production and reduction of risk. In order to reengage people who inject drugs with harm reduction interventions, it is necessary for initiatives to take stock of the indigenous strategies that individuals are already utilising and – in the case of methadone self regulation – support them by the implementation of more generous constraints.

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Background

Opiate substitution therapy (OST) is evidenced as a successful harm reduction initiative in regard to the prevention of blood borne viruses and other injecting related harms. For example, people who inject drugs (PWID) on methadone and other substitution therapies have been found to have a 64% reduced odds of new hepatitis C infection compared to those not on OST. In combination with needle and syringe provision these odds are raised to 80% (Turner et al., 2011). Substitution treatments, by reducing rates of heroin use and protecting against withdrawal, can enable PWID to be more selective about the circumstances in which they inject (Koester, Anderson, & Hoffer, 1999), and have been associated with a reduction in needle sharing incidents (Gossop, Marsden, Stewart, & Kidd, 2003). Other positive outcomes include heroin overdose and criminal activity decreases (Marsch, 1998; Teesson et al., 2008).

Despite these positive outcomes, qualitative studies have found that many PWID demonstrate ambivalence or antipathy to OST, particularly methadone. Methadone is commonly conceptualised by research participants as highly addictive, causing more intense and prolonged withdrawals than those associated with heroin

(Dahl, 2007; Fischer, Chin, Kuo, Kirst, & Vlahov, 2002; Gourlay, Ricciardelli, & Ridge, 2005; Holt, 2007). Detrimental impacts are also reported in regard to dental health, personal motivation and self esteem (Bourgois, 2000; Fischer et al., 2002; Holt, 2007; Stancliff, Myers, Steiner, & Drucker, 2002). Restrictive treatment regimes have the capacity to foster suspicion and mistrust, further alienating already stigmatised clients from services (Bourgois, 2000) and creating a barrier to commencement and retention (Deering et al., 2011; Fischer et al., 2002). Additional barriers to treatment uptake and retention include concerns about stigma and lifestyle restrictions, self medication preferences, and reluctance to be officially identified as an 'addict' (Deering et al., 2011; Fischer et al., 2002; Peterson et al., 2010), an identification experienced as particularly risky for women with children (Fountain, Strang, Gossop, Farrel, & Griffiths, 2000).

When asked about potential treatment improvements, research participants commonly refer to prescribing practices and dosing regimes. This includes a desire for increased input into the treatment decision-making process (Fischer et al., 2002), with substantial percentages of sampled individuals disagreeing with dosing policies (40%: Al-Tayyib & Koester, 2011), feeling excluded from decisions about their treatment plans (37%: Al-Tayyib & Koester, 2011) and believing that their methadone dose is too high (22%: Stancliff et al., 2002). Independence has been categorised as one of most important components of a high quality of life for opiate dependent people, with take home doses allowing freedom

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from the restrictions and stigma associated with daily supervised consumption (De Maeyer et al., 2011).

Concerns about medication diversion are a primary factor in shaping global OST regulations (Bell, 2010). Daily supervised consumption, whereby the individual visits the pharmacy or clinic daily to receive a supervised dose, is recommended as best practice for diversion and overdose reduction (Strang, Hall, Hickman, & Bird, 2010) as well as to stabilise, regulate and ‘contain’ individuals, especially those perceived as ‘chaotic’ (Bell, 2010). Supervised dosing schedules may be eased after a number of months or years when individuals conform to specified ‘compliance indicators’, such as abstinence from illicit drugs, time in treatment and appointment attendance (Robles, Miller, Gilmore-Thomas, & McMillan, 2001). Take home doses are often posited by providers as a ‘reward’ for negative urine drug screens and other aspects of compliance (Gerra et al., 2011). In turn, individuals receiving substitute therapies have spoken of the demeaning nature of ‘earning’ privileges such as take-away doses and having to perform observed urine tests (Fischer et al., 2002).

Methadone diversion, for personal or other use, is common in the UK. Duffy and Baldwin (2012) report that of 886 participants, the majority on OST, 60% reported obtaining diverted methadone in the past year. Methadone diversion is generally posited as a negative phenomenon which increases injecting harms (Jenkinson, Clark, Fry, & Dobbin, 2005), overdose risk (Bell, 2010; Fountain et al., 2000; Strang et al., 2010) and individual instability (Bell, 2010). It is also primarily conceptualised in terms of sales on the black market (Fountain et al., 2000; Hall & Degenhardt, 2007; Johanson, Arfken, di Menza, & Schuster, 2012), sales that enable the generation of funds to buy preferred drugs or to pay prescription fees (Fountain et al., 2000). Little mention is made in the literature of other motivations or modes of diversion, such as stockpiling for personal use.

For the purposes of this article we draw on Bell’s broader definition of diversion which includes: “the supply of medication prescribed for one person being given or traded to someone else; the use by injection of medication dispensed for use by mouth; and the stockpiling of medication dispensed to be taken daily” (2010, p. 1531). While literature detailing these broader forms of diversion is scarce, methadone stockpiling and self-prescribed split dosing have been noted in British (Haskew, Wolff, Dunn, & Bearn, 2008), Australian (Fraser & valentine, 2008) and Danish studies (Dahl, 2007). Haskew et al. (2008) report methadone stockpiling and self-prescribed split dosing as common (at 28% and 34% respectively) and call for qualitative research to explore the motivations and rationales behind these ‘non-adherent’ practices (Haskew et al., 2008). Our qualitative study sheds light on some of these motivations, and diverges from the majority of the literature in the field to draw attention to the *harm reducing*, rather than producing, capacities of non adherent diversion practices.

Conceptual framework

As opposed to dystopian renditions of methadone treatment where the invasive nature of dosing protocols and surveillance is conceptualised as producing client alienation and mistrust (Bourgois, 2000; Fraser, 2006; Rance, Newland, Hopwood, & Treloar, 2012), Gomart (2002a, 2002b, 2004) is notable for her exploration of the ways in which substitute prescribing can produce agency. While Bourgois (2000) characterises life attached to the methadone clinic as one of capitulation and control, as opposed to the freedoms of the street (Keane, 2009), Gomart (2002b) offers possibilities whereby the ‘generous constraints’ afforded by the French substitute prescribing model can produce capacities and agency; freedoms, even. Gomart’s analysis is contextualised by the entrenchment in France of an abstinence ‘cold turkey’ based model

for opiate dependence; prominent until the early 1990s, just before her ethnographic study. This abstinence based discourse positioned the drug user as a slave of the drug, “an empty carcass” (2004, p. 88). Either the subject was abstinent – an “autonomous liberal agent maintaining a safe distance from drugs, or he/she was addicted, the toy of determinations” (2004, p. 89). This is akin to the discourse of the current UK Drug Strategy which positions drug use (including OST) in opposition to ‘recovery’, the latter defined as comprising “wellbeing, citizenship, and freedom from dependence” (Home Office, 2010). In these terms, the individual can only experience wellbeing and contribute as a citizen when s/he is free from substance dependence: “he/she could not act when the drug acted” (Gomart, 2004, p. 89). This positioning – of dependence versus ‘freedom’ – obviates the ways in which individuals and the substances they use can interact to capacitate agency and autonomy; potential ‘freedoms’ in a network of constraints.

Koester et al. (1999) illustrate how heroin using participants enacted agency around substitution therapies, consciously aiming to make the treatment more responsive to their immediate needs. These needs included the management of drug use, the preservation of jobs and personal relationships and avoidance of violent crime and incarceration. In this way, ‘indigenous’ motivations for methadone commencement resulted in the reduction of harm, not necessarily the cessation of heroin use. Reductions in blood borne virus transmission were identified as one unintended outcome of these indigenous motivations, as individuals were enabled to be more selective about the circumstances in which they injected. While Koester et al. (1999) outline these indigenous motivations, little detail is given about the particular ways in which the participants interacted with methadone and, in particular, the role of dosing protocols in producing and reducing risk. In this article we draw on Gomart’s conceptualisation of ‘generous constraints’ to extend Koester et al.’s analysis; exploring how participants interact with methadone and its constituent protocols to produce indigenous harm reduction strategies.

Methods

Drawing on a positive deviance control-case design (Friedman, Mateu-Gelabert, Sandoval, Hagan, & Des Jarlais, 2008), we undertook qualitative life history interviews with PWID in order to explore the social conditions of long term hepatitis C avoidance.

Sampling and recruitment

The study sample comprised 37 PWID: 22 hepatitis C antibody negative and 15 antibody positive. Participants were required to be over 18 years of age, proficient in English, currently injecting (defined as injecting in the past 30 days) and having injected illicit drugs for at least six years. Recruitment took place through community drug and alcohol services and drug user networks based in South East and North London.

Data collection

Data collection comprised one to three in-depth interviews with each participant, resulting in a total of 76 interviews. Sixty-nine of these interviews were conducted by the first author and seven by the second. Both researchers were involved in data analysis. The majority of participants were interviewed twice, with interviews conducted approximately two months apart. Interviews were audio recorded and conducted in private rooms at the participating services or at participants’ homes. The average interview duration was 100 min, with a range of 60–150 min. At the first interview an in-depth life history was taken, facilitated by the use of a hand-drawn timeline. A computer generated version of this timeline was used

in the second interview to aid memory recall and to explore the connections between significant events, networks and structures in the participant's life and the strategies they employed to reduce risk of hepatitis C transmission. The interview and timeline construction process are described in greater detail elsewhere (Harris, Treloar, & Maher, 2012).

Analysis

Participant interviews were transcribed verbatim and entered into NVivo8 qualitative software. Patterns in and across the interviews were coded thematically while individual interviews and timelines were studied with attention to the interrelationships between viral avoidance, life trajectory, drug use patterns, network dynamics and risk context. In line with grounded theory analytic techniques (Glaser & Strauss, 1967), initial inductive or in vivo codes were broken down into smaller, more concept-driven categories, and used to inform emerging hypotheses.

Ethics and confidentiality

Approval for the research was obtained from the Camden and Islington Community Research Ethics Committee (ref 10/H0722/20). Participants provided written informed consent, were assured of confidentiality, and have been provided with pseudonyms.

Sample characteristics

The sample ($n=37$) included 10 women (27%). Participants ranged in age from 23 to 57 with an average age of 40 years. The number of years since participants first injected ranged from six to 33 years with an average of 20 years injecting. Thirty-three participants had injected drugs in the past month, with the remaining four identifying smoking as their current main mode of administration. For 25 (68%), their current primary drug was heroin and for 12 (32%) a crack and heroin mix. The majority of participants (28, 76%) were White British with nine (24%) identifying as either: Irish, Jamaican, Latin American, Maltese, Polish, Portuguese or Armenian. All of the participants were unemployed at the time of the interview and the majority resided in council flats (25, 68%) with eight living in hostels (21%), two living with their mother and two street homeless. Thirty-five (94%) participants were on an OST programme, their duration on OST ranging from less than 18 months ($n=5$) to over 15 years ($n=4$). The majority received methadone (31, 89%) with four participants receiving subutex.

Findings

A central finding to arise from the data was that many of the protective practices employed by the hepatitis C negative participants were motivated by short term and pragmatic concerns rather than viral avoidance or harm reduction messages. As identified elsewhere motivations for protective strategies included vein care (Harris & Rhodes, 2012), drug use management, withdrawal avoidance and the maintenance of social relationships (Harris et al., 2012). Methadone diversion featured as a tool used by participants to facilitate some of these pragmatic concerns, and is the focus of this article. Findings are organised in relation to the following topics: ambivalence and risk, self-regulation, safeguard and social resource.

Ambivalence and risk

Participants spoke of methadone with ambivalence, the majority attributing both benefits and negative effects to the treatment regime. The benefits described included increased control over

illicit drug use and freedom from the demands of incessant money generation, as Keith relates:

[I was] going out every 10 minutes begging, [it was] a problem... but I wasn't on the juice [methadone] then. But now I'm in control of it... I suppose it's the methadone. [It has made a] hell of a difference.

Despite these benefits, methadone as a *substance* was predominantly viewed with antipathy, as Keith later expressed: "it [methadone] is horrible, really really nasty shit". Other participants spoke of negative physiological and psychological effects, Sally said: "methadone is not good... it makes me fall asleep, I don't feel I can do anything" and Kyle: "it gets in your bones, I don't want all that shit". Abby, who at her third interview had just transitioned to suboxone, described methadone as: "evil, the 'devil's juice' I call it. How can they say that's fuckin' medication? It makes you worse". For many participants, however, it was a necessary evil. Jeff expresses this ambivalence, saying: "it [methadone] is a cock up but I feel quite stable and happy on it at the moment".

The difficulty of withdrawal from methadone was commonly cited by participants as a source of antipathy and anxiety: "It (methadone withdrawal) is worse than gear" (Keith). Being in heroin or methadone withdrawal, as documented elsewhere (Mateu-Gelabert, Sandoval, Meylakh, Wendel, & Friedman, 2010; Rhodes & Treloar, 2008), is productive of blood borne virus transmission risk. Some participants reported engaging in risky injecting practices when in withdrawal, prioritising the obtaining of relief over any attendant risk. Tony spoke of sharing needles and syringes when in withdrawal, explaining: "I need to get the drugs into my body and getting the drugs into my body is more important than what may come with the syringe". Reuben similarly stated:

The withdrawal makes you want to use other people's needles... if you're ill and you've got no clean pins and the chemist is ten miles away, you ain't going to fucking go to the chemist, bollocks, just give me a pin, I'll use it! I have to get better, thank you.

In his first interview Reuben displayed an acceptance of risk, frequently sharing the needles of his hepatitis C positive brother. In a later interview, surprised to find out he was hepatitis C negative, Reuben described the measures he was now taking to actively avoid risk, with methadone playing a central role: "if I go over and I see my brother I'll just have to make sure I've picked up my juice [methadone] before I go, if I ain't going to be ill I won't need to use the gear."

While methadone can protect against risk by obviating heroin withdrawal, the contexts within which it is prescribed and dispensed can affect its protective potentialities, in some circumstances also producing risk. Participant experiences of methadone withdrawals due to a missed clinic appointment or a closed pharmacy were common. As Jeff says:

The guy who runs it [pharmacy], he's decided on a Saturday to shut at dinner time. And I'm disorganised and over the bank holiday weekend I missed it on the Saturday and that means the Saturday, Sunday, Monday is gone. And then it caused aggravation at the drugs centre because they couldn't see me on the Tuesday and I was getting angry with them. And I thought, I can't go through this again, even though I've done it a few times.

Colin related a similar experience:

I've done it twice, I've missed me weekly pickup twice and I've said, "can't you just give me six days worth of methadone cause

I missed one?” “No, no, you lose the whole [lot], cause you’re on weekly pickup. If you’d been on daily pickup you’d have lost a day and you could have carried on”.

Missing methadone doses precipitated situations of potentially severe withdrawals and associated risk situations. Participants worked to minimise these risks – both for themselves and others – by diverting and self regulating their methadone doses. This self regulation can be seen as an indigenous harm reduction strategy capacitating the use of methadone as a safeguard and a social resource.

Self regulation

Participants’ ambivalence towards OST and associated concerns about methadone withdrawal were managed, in part, by strategies to enact self regulation of their doses. For some, OST ambivalence manifest in a desire to dose reduce, with the aim of gaining more control and possibly reducing enough to leave the programme. As in [Koester et al.’s \(1999\)](#) study, where one motivation for entering short term treatment was to pilot test the regime before making a commitment – participants in this study could be seen to similarly ‘pilot test’ withdrawal before committing to it officially. Fred put it in this way:

I like to take my own dose, but I think I’m scared of actually saying to them “I want to come off it”. I don’t want to get down to a lower dose and then not feeling alright.

Self regulation afforded a degree of control and provided a stop gap, enabling participants to regulate and taper the methadone at their own pace. Dose reduction was a process of negotiation with doses tailored to the demands of the day:

This morning I woke up and I really didn’t want to take none [methadone] and I thought if I don’t take it I don’t think I’ll be able to ride the bike so I best take some. So I just took 40mils to see if that will hold me today. (Kyle)

Kyle’s goal was to “be completely off it [methadone] by the end of this year” and over his two interviews, two months apart, he reduced from his original dose of 120 mg down to 60 mg, also ceasing his use of heroin during this time. Kyle found that the easiest way for him to reduce his dose was to split it, saying in his first interview:

I try to regulate myself... [getting takeaways] makes a lot of difference because then I can cut down a lot easier, I can like do 30 in the morning, cut down to 20 in the afternoon and then 20 at night... I was on 120, so I’ve cut myself down from that.

After Kyle ‘tried’ this approach and found it worked, he told his case manager, who reluctantly approved the process. At the second interview he had brought himself down to 60 mg, stating: “[I pick up] three times a week...I can bring myself down, that’s the whole point of doing it.”

As described by Kyle, a number of participants preferred to split their dose, something that was impossible on supervised dosing. Colin has been on a methadone programme for 15 years, provided with weekly pickups for the past eight years. He speaks of this arrangement in terms of trust: “I’ve known me doctor for about 15 years and he trusts me”, and of the benefits this arrangement affords him:

Cause I don’t have to take it in front of the chemist, I can take what I want. I don’t have to take the full amount. I can take as little as I want. I can take 10mls if I want and then another 10mls later on. But if you take it in the chemist, you’ve got to do it all at once and you’re not allowed to save any, you have to drink it all.

Self regulation afforded a degree of control, important in a regime characterised by constraints. This constraint was felt the most acutely in regard to supervised consumption, where the avenues for self regulation were limited. Abby, recently put back on supervised consumption, exercises the small amount of leeway she has to control the use of her one day takeaway:

I get to take it [methadone] away at the weekend, so I don’t have to take it. If I don’t feel that it’s needed, I won’t take it. That’s my main focus now, is to get off my script, I’ve had enough. I’ll do it my own way . . . that’s why I want to get back on unsupervised, so I can medicate myself that’s what I want to do, is medicate myself again. It gives me control of it, I’m in control of it, it’s not controlling me.

For Abby, supervised consumption thwarted self medication and the enactment of control. It is not a generous constraint. This enactment of methadone treatment offers little leeway; participant agency is squeezed into deliberations around the taking of one dose. Methadone performed in weekly or regular pickups enacts a different treatment, one characterised by more generous constraints. These constraints widen the conditions of possibility for productive resistance, capacitating, as can be seen with Kyle and Colin, *self-regulatory* potentialities, among others.

A safeguard

Participants frequently performed the self regulation of methadone by taking lower doses than prescribed. This raises the question of what happened to their extra methadone. It was kept, by the majority, as a safeguard. The keeping back of methadone was capacitated by the generous constraints of takeaway provisions; however participants on supervised consumption still found some small leeway. Ros, for example, was on supervised consumption – except for a Sunday when the pharmacy was closed. Her Sunday dose was collected the day before, meaning that if she missed the Saturday pharmacy opening hours she lost both doses. This happened the weekend before Ros’ first interview:

They [the pharmacy] closed, this weekend gone because they close at 2 o’clock and I woke up at 10 past 2 on Saturday and I had a heart attack.

At her second interview some months later, she described how this experience had prompted her to keep back her Sunday dose:

I normally get a bit of gear on Sunday. But I make sure that I’ve got some spare methadone, just in case of emergency cause you don’t know. [I’ve done this] since I fucked up that Saturday and didn’t have any spare. And I thought, that ain’t going to happen to me again.

In Ros’ interviews the avoidance of blood borne viruses’ assumed paramount importance. She maintained a practice of only using her own injecting equipment and, over 12 years of regular injecting, remained hepatitis C antibody negative. When asked how she managed to avoid situations where she might be compelled to use others equipment, Ros replied: “Make sure I keep my [methadone]

script going. Don't fuck up there and I've got some spare methadone in my room that I've saved". For Ros, the keeping back of methadone operated as a conscious safeguard; a safeguard against viral transmission risk, as well as withdrawal.

Like Ros, Jeff kept a supply of methadone to protect against unanticipated risk situations, both at his home and his father's place:

I keep a stash of methadone up there, at my dad's... I don't take it up with me, I guest dose at a pharmacy, and if something's got fucked up and I'm late or I don't make the pharmacy, I keep a stash up there to use... it's there for emergencies. You know, emergencies. (Jeff)

Bruce, like Ros and Jeff, also spoke of being careful to maintain a 'stash' of methadone for emergencies: "I always make sure I've got 50 ml. I've always got 50 ml in my flat and 50 ml at [girl friends] extra." In this way, if Bruce misses his prescriber appointment, or – as happened once – his script was unexpectedly cancelled, he has a backup and doesn't have to use street drugs. These participants place a stress on the role of their diverted methadone to mitigate against *emergencies*. The repeated use of this word could be read as a narrative strategy of responsabilisation, positioning the self as separate from prevailing discourses that primarily frame methadone diversion in hedonistic or money generating terms (Fountain et al., 2000). In the interview situation, however, this repetition of 'emergencies' came across as a stress to the self – a reminder of the exigencies of withdrawal, that the methadone was *not* to be used for other purposes, that it was an important safeguard that *must* be maintained.

Diverted methadone operated as a safeguard against risks produced by institutional protocols (opening hours, mandatory appointments), but also risks related to personal vagaries – such as the debilitating effects of depression. Fred, injecting for over thirty years and on methadone for the past thirteen, picks up three doses of methadone every Friday. This 'generous constraint' enabled him to self medicate, storing the surplus as a safeguard for when he was unable to leave the house:

I feel it's like a back-up, it's a crutch, I've got like 500mls at home... when I get bouts of depression, there's days I don't even go to get my juice [methadone].

As with the other participants, the explicit aim of this safeguard was to protect against potential situations of withdrawal. One result of this was the avoidance of risky injecting situations and associated viral transmission. For some this was an incidental and unintended outcome, for others purposeful. Andy, for example, remained hepatitis C negative over his more than twenty years of injecting, due in part to his withdrawal avoidance strategies. As he says: "There's always been some kind of back-up, whether it's been a bag of morphine pills or methadone. . . I rarely, rarely let myself get sick". Tom also utilised methadone as a safeguard, but related this more specifically to the avoidance of injecting risk: "If I was going to be out on the road I made sure I had methadone...so, thank goodness I was never put in the position where I was really, really sick with heroin and no syringes".

A social resource

The participants in this study had few flexible economic resources; all were on government benefits and living in varying levels of poverty. For many, diverted methadone acted as an important social resource, one frequently described as operating in a gift, rather than black market, economy. Ros described a situation where a fellow hostel resident, in heroin withdrawal, was sold washing up

liquid as methadone by another resident. She was able to come to the rescue:

I had half a bottle of methadone I was able to give him... it was nice to help him out because that bit of methadone will get him out of trouble... And he was proper grateful, bless him. He was like, I'll give you money. I went, nah. It's alright mate. (Ros)

The giving of methadone is framed as getting the recipient "out of trouble". The recipients withdrawals are elevated, reducing their need to enter into potentially risky situations, such as accessing heroin from an unknown source (uncertain quality and strength); using others injecting equipment (notably filters which may contain some heroin residue) or committing crime (in order to fund heroin purchase). As Colin said: "my mate, he hasn't got a methadone script so if I haven't got any spare methadone he goes out robbing to pay for his habit". Like Ros, Colin endeavours to help his friend out with methadone, thus reducing his need to commit crime. In turn his friend will reciprocate with a hit of heroin from time to time. These reciprocal relationships have protected Colin from potential risk situations. Of the time when he missed his weekly methadone pickups (above), Colin said: "fortunately I've got friends that have got methadone and they helped me out."

The giving of methadone, as described by participants, can be seen as enacting an empathetic bond between marginalised people, potentially vulnerable to the vagaries and constraints of bureaucratic treatment systems. For example, Bruce described the plight of a friend who had been abruptly discharged from OST treatment and who, still dependent on methadone, struggled to find the money to buy this medication on the black market. Bruce picks up his methadone doses twice weekly, and adopts a somewhat unorthodox dosing system which enables him to help out his friend:

I tend to swig it out of the bottle, I have like three little swigs and then at the end of the week I've probably got about 60 ml left... I usually give it to my mate who has to buy it, and I just give it to him, or give him it for three quid or something.

Sally, like a number of the other participants, is on weekly pickups and self regulates by taking a smaller split dose. Any leftovers she gives to others who need it:

Leftovers I was giving away... I know people need money, it don't feel right to make money from that [methadone] you know, I'm getting this for free... people help me out to, so you know, this is about that.

The giving of methadone acts as an additional safeguard: it increases the likelihood that others will reciprocate in kind, when the giver is similarly in need. Participants also reflected on how their self esteem was positively impacted by the ability to relieve another's mental and physical distress; as Ros added: "he was proper grateful [to receive the methadone] and it really made me happy because he's out of trouble now".

The reciprocal protective effects of methadone diversion are illustrated by a case study of three friends, all of whom were interviewed for this project. Basil had been injecting heroin daily for the past twenty years, yet had only been on OST for a six month duration, 14 years ago. The thought of methadone did not appeal: "I don't like the idea of methadone. [it is] hard to get off, harder than gear". Basil's flatmate Ethan and a close friend, Sandra, operated a reciprocal arrangement whereby one would work and provide the majority of the funds (Basil), the other would cook and clean (Sandra) and the third (Ethan) would access the heroin. Sandra only used with

Ethan and Basil, coming by every day for this purpose. Using areas were clearly demarcated – Ethan the bedroom, Sandra the kitchen, Basil the living room, where each stashed their equipment. In this way blood borne virus transmission was avoided. Another aspect of the reciprocal arrangement was the sharing of methadone, on the days that heroin was scarce and Basil – the breadwinner – needed to go to work:

Monday's [Basil] has to go at five o'clock in the morning and unload the lorries so if you're not feeling very well you can't do it... I usually save some [methadone] for him. (Ethan)

Ethan, on weekly methadone takeaways, self regulates his dose to keep his heroin and methadone use from conflicting; maintaining both at a low level. The remainder of his methadone he keeps aside for Basil, enabling Basil to maintain his job. This also acts as a protective resource, when Ethan in turn needs a helping hand:

I'm getting 35 ml myself, so if I'm not taking any gear I take the 35, if I'm using on top, I just take 20. So whatever is left over I give him... when I came back from [overseas] I was a bit skint so he [Basil] was buying it [heroin] for me for a while.

At times Basil has attempted to stop using heroin – with the help of methadone from his flatmate: "When [Ethan] went [overseas] I thought I'd try and give up, so I started taking methadone, but I've stopped again now." Basil's 'trial' at withdrawal can be seen as similar to the pilot testing of OST reported by [Koester et al. \(1999\)](#) – as way of testing the waters before committing to formal treatment structures.

Like Basil, Beth has been injecting for over 20 years and has never been on OST. Her partner, also a study participant, gives her a very small dose of methadone when she is in withdrawal. Interviewed separately, their accounts verify each others, including the absence of money in these transactions. As Beth says: "he gives me a bit of his methadone to help me out... when I started getting sick and all." Her partner, Colin, relates:

When I go to collect me methadone, I give her a little bit of methadone, like 20 ml and she says she only takes like 10 ml. And the last time I gave her methadone, I got loads spare and I gave her 40 ml and I said, don't take more than the 10 that you're taking, and she's still got 20 in a bottle now.

The doses Beth needs to allay her withdrawals are very much lower than the standard recommended dose on a methadone programme. By not having ever entered into treatment and by keeping her usage of heroin and methadone at a low level Beth was able to manage her use, and had never needed to engage in crime to fund her habit.

Participants diverted and saved methadone enabled the helping out of others in need, and the cementing of social relationships. As a valued social resource, diverted methadone could however, also be used or misrepresented for profit making purposes, as Ros recounted in regard to the duplicitous selling of washing up liquid above. In the hostel environment she was also vulnerable to theft:

I had a big bottle of methadone like for emergency use but that went missing, I went for a shower and someone's nicked it out me room. Yeah, I was gutted.

Participants rarely spoke of selling their diverted methadone. This was only mentioned by three and all in regard to activities taking place over a decade ago – in contrast to details of other drug sales taking place more recently on the black market. Tony speaks of a prescription he had 14 years ago:

The script was helpful, it saved me from being sick and there was a big market in methadone then, so you could always make a few pounds selling it, which most of us did.

Tony's comment indicates that there may no longer be a profitable market in the sale of methadone, partially accounting for why methadone was spoken of in terms of a gift rather than black market economy. Rick's narrative offers an additional perspective:

I never used to sell it [methadone] to people at like street price, so they'd get double what they'd get elsewhere... 'cause it's bad enough that I was selling it on. I weren't going to be making loads of money on it, cause to me that's – I've got morals, you know.

Rick's comment reflects Sally's earlier statement that "it don't feel right" to sell a drug that she was getting for free, indicating that for some, diverted methadone may occupy a different place on the moral and economic spectrum than other black market drugs.

Discussion

As documented in other qualitative studies ([De Maeyer et al., 2011](#); [Koester et al., 1999](#)) participants in this study displayed a profound ambivalence to OST. The majority reported benefits from OST, but these were invariably mentioned alongside its negative capacities. Methadone diversion and self regulation played an important role in enabling participants to manage their illicit drug use, as well as their ambivalence towards OST. A number of participants were regularly taking lower doses of methadone than officially prescribed. This surplus methadone was strategically used by participants as a safeguard and as a social resource, both which were found to have protective harm reduction benefits. In line with [Koester et al.'s \(1999\)](#) analysis we found that participants – where possible – modified methadone treatment to meet their needs, and that these modifications acted to reduce injecting related harms. Drawing on Gomart we extend Koester's analysis to show that these indigenous harm reduction strategies were affected by dosing protocols and the 'generous' or restrictive constraints offered therein.

'Generous constraints' are defined by [Gomart \(2002b\)](#) as those which induce action and 'give a chance', rather than working as obstacles to action. Constraint is necessary in order to produce resistances – resistances which figure, in this analysis, as agencies and transformations. Supervised consumption is one such constraint, productive of certain resistances. More generous constraints (such as the provision of takeaway doses) widen the conditions of possibility for resistance and transformation. For advocates of supervised consumption, this may be the sticking point – how many resistances, how many treatment identities is it 'safe' to allow? What are the potential negative consequences of this widened range of possibility? Our lack of data on the negative consequences of generous constraints (for example, we found no reports of self regulation 'going wrong') means that we are unable to effectively answer these questions or map where the potential limits to generosity may lie. There is a wealth of literature pertaining to the benefits of tightened constraints, for example in regard to limiting overdoses associated with methadone diversion ([Strang et al., 2010](#)). Our aim is to report findings that show another side of diversion and by doing so add nuance to a debate (c.f. [Fraser & valentine, 2008](#)) primarily characterised by negative characterisations of OST diversion.

According to De Maeyer et al., "opiate dependent individuals hold a strong desire for normalcy" (2011, p. 1253), and restrictive dosing schedules are a constant interruption of this. Studies have found that the adoption of more flexible dosing regimens including

the provision of 'takeaways' have better outcomes than inflexible dosing and/or supervised consumption; resulting in improved treatment retention rates and no demonstrated increases in criminal activity, illicit drug use, or OST black market sales (Gerra et al., 2011; Robles et al., 2001). The removal of supervised consumption has been associated with reductions in heroin use and improved reported quality of life (Bell et al., 2007), including the commencement of employment (Gerra et al., 2011). Non-observed treatment, comprising weekly take home doses, is found to be significantly more cost effective than observed treatment (Bell et al., 2007). We add to this literature by illustrating how the generous constraints of unsupervised consumption can act with individuals to have *harm reducing* as well as harm producing potentials, and conversely, how the rigid constraints of supervised consumption can *produce* as well as reduce harm.

Methadone – obtained on the black market, consumed under supervised consumption and taken home for self consumption – is performed by and within particular networks, which in turn, enable different potentialities. The rigid constraint of supervised dosing protocols does not obviate participant agency, but reduces the conditions of possibility in which it can be performed – with potentially more harmful consequences. For example, individuals on supervised consumption who wish to exert some control over their dose, can hold prescribed medication in cheeks (for oral solutions) or under tongues (for tablet based formulations) later distributing, stockpiling or injecting these less than hygienic 'spit-backs' (Fountain et al., 2000). The desire to inject, to experience the freedom from self at times afforded by drug use, might only be enabled for those on supervised consumption by the use of amphetamines or crack cocaine. Unlike heroin, these drugs will be felt against the opiate buffer of daily OST, but their use is also associated with increased injecting frequency, venous damage and BBV risk (Rhodes, Briggs, Kimber, Jones, & Holloway, 2007). The agency afforded by the self regulation of dosing, and the occasional use of heroin this can also allow, might not lead to these more harmful resistances against restrictive constraints.

The paucity of narratives relating to the sale of methadone indicates that for many that this drug occupies a different economic and moral status than that of heroin and illicit drugs; potentially having more value as a personal safeguard and social resource than a commodity on the black market. This is affirmed by studies detailing methadone sharing and exchange among participants on OST (Dahl, 2007; Duffy & Baldwin, 2012; Fraser & valentine, 2008). Duffy and Baldwin's (2012) UK-based study found that methadone distribution primarily took place between friends and associates and, in line with our findings, that a substantial proportion of these interactions (44%) were cashless. The authors conclude that the UK methadone market does not appear to be commercially motivated, suggesting an altruistic element in methadone diversion, including expectations of future reciprocation. For our study participants, all of whom were out of work and many in unstable housing, diverted methadone was a valued social resource. The ability to give methadone was associated with feelings of self worth and the cementing of social relations (c.f. Dahl, 2007; Fraser & valentine, 2008) as well as protection against injecting and associated harms – both for the recipient and for the giver. Gifts of methadone acted as a future protective safeguard; an 'insurance for reciprocation' as Dahl (2007) also demonstrates.

Participant expressions of agency, autonomy and altruism in regard to self medication and the provision of methadone doses to others, are in line with the current UK Drug Strategies focus on the production of 'responsible', 'autonomous', 'citizens' (Home Office, 2010). These values, we argue, do not exist exclusive to the taking of psychoactive substances, and may even be capacitated by the diversion and self regulation of OST. The ways in which participants negotiate methadone treatment to enact medication stockpiling,

self regulation, split dosing and the 'helping out' of others, can in de Certeau's terms be seen as autonomous 'ways of operating' in which 'the weak' reappropriate the spaces and assemblages of the 'strong'. These 'tactics of consumption', dispersed, makeshift and creative, operate within disciplinary assemblages, not to 'overthrow' them, but to appropriate a personal space therein: "The actual order of things is precisely what 'popular' tactics turn to their own ends, without any illusion that it will change any time soon" (de Certeau, 1984, p. 26). In this way, the diversionary tactics enacted by participants enabled them to carve out a space for themselves in the treatment regime, to make it more responsive to their needs, rather than to disrupt or revolutionise it.

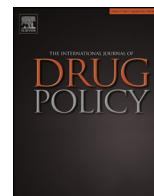
Notions of 'freedom' and 'dependency' are often posed in opposition, particularly in relation to the use of opiates, prescribed or illicit. For Bourgois (2000) the OST clinic is one of constraint and dependency as opposed to the 'freedom' of hustling on the streets. In the recent UK drug strategy 'freedom' is obtained through abstinence, as opposed to the dependencies of illicit drug use and long term methadone treatment. While OST may be conceptualised as a stepping stone to freedom, it is not conceptualised as "full recovery". We argue for a more nuanced view whereby the constraints of OST assemblages are productive of certain freedoms – the less generous these constraints, the more squeezed and potentially destructive opportunities for 'freedom' are enacted. This is not to say that a reduction in harm is an automatic systemic effect of more generous constraints, but that the loosening of constraints offers increased possibilities for individuals to enact indigenous strategies which, intentionally or unintentionally, can result in the reduction of harm. Participants performance of indigenous harm reduction strategies, were for example, informed by their attitudes to risk as well as the range of possibilities afforded to them by the treatment regimes. For some (i.e. Ros and Tom) viral risk reduction was explicit, for others it was an unintended effect of a focus on withdrawal. Participants such as Reuben shifted in their conscious use of methadone as a harm reduction strategy according to context and their hepatitis C status awareness.

Our findings highlight the utility of attention to the pragmatic and short term needs of PWID, and the ways in which interventions addressing these can promote the reduction of harm. As elaborated in other research papers (Harris & Rhodes, 2012; Harris et al., 2012), behavioural and risk focused interventions can fail to engage PWID who have a present-focused temporal orientation and for whom hepatitis C is not an immediate priority. We found that participants self regulation and diversion of OST was – often inadvertently – protective in that it enabled the management of illicit drug use and protected against withdrawal, thus reducing situations of injecting risk and associated blood borne virus transmission. This is a timely issue; given the current UK Drug Strategies focus on 'recovery' and the methadone treatment restrictions this potentiates. In order to engage PWID with harm reduction interventions, initiatives need to take stock of the indigenous strategies that people are already utilising and – even where controversial (as in regard to methadone diversion) – acknowledge protective potentials where they exist. In this way initiatives can harness the pragmatics and expertise of PWID to create interventions which are responsive to their needs.

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Research Paper

What is low threshold methadone maintenance treatment?

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ABSTRACT

Background: Low threshold methadone maintenance (MMT) was developed for clients who do not have abstinence as a treatment goal. We explored how MMT programs in Canada defined low threshold and the challenges they faced.

Methods: Using semi-structured interviews, we collected data from clients ($n=46$), nurses/counsellors ($n=15$) and physicians ($n=9$) at three low threshold MMT programs. All participants were asked to define low threshold MMT and describe how it was implemented in practice. Interviews were taped, transcribed, verified and analysed using an iterative thematic coding technique.

Results: Low threshold MMT was defined by an explicit rejection of abstinence from opiates and other drugs as an over-arching treatment goal. In the absence of guidelines defining a set of practices as low threshold, programs implemented practices they believed would reduce barriers to admission and help retention. There was not always agreement between professional groups or across the programs regarding these practices. For physicians, there was a tension between accepting poly-drug use during treatment as a means to improve retention, with an obligation to do more good than harm for their patients. Missed prescribing appointments generated few to severe consequences and revealed differential focus on reducing barriers versus encouraging client 'ownership' of treatment. Differences of opinion regarding appropriate urine drug testing practices revealed power dynamics between medical and non-medical staff.

Conclusion: Our findings show that there are potentially more ways to reduce barriers to MMT than those presented in the current literature. Our findings are important given the growing number of people with opiate dependence across the world and calls to increase access to MMT. To fully develop the low threshold model, it will be important to evaluate what policies and practices can achieve the goals of reducing barriers to admission and improving retention in treatment.

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Introduction

Methadone maintenance treatment (MMT) was designed by Dole and Nywlander (1965) to manage opioid dependence, which they characterized as a permanent metabolic deficiency. To block cravings and stabilize this deficiency, they advocated for long-term maintenance of the client and provision of ancillary services (Dole & Nywlander, 1965). As Ward, Mattick, and Hall (1998) note, MMT quickly became the most common treatment for opiate dependence. However, it underwent significant changes in the United States in terms of its goals, dosage and ancillary services and its focus on 'maintenance' was diminished (Ward et al., 1998). Whilst, Dole and Nywlander (1965) designed a program with long term

goals, newer models have moved towards shorter duration of treatment and abstinence within a few years (Ward et al., 1998).

However, in the 1980s the pendulum swung back towards a maintenance approach, with the introduction of a 'low threshold' MMT model. This emerged to reduce barriers to admission and retention in MMT amongst people for whom abstinence from all drugs was not their goal, but who might benefit in other ways from treatment (Klingemann, 1996). Two MMT policies in particular were identified as barriers: abstinence from all drugs as a condition of entry into treatment and abstinence from all drugs, including non-opioids, throughout the entire course of treatment. The first low threshold programs, such as 'methadone by bus' in Amsterdam, tried to remove these barriers. This program was designed for a group of mostly black heroin users who did not use services and experienced many health and social problems (Buning, Van Brussel, & Van Santen, 1990). The goal of methadone by bus was to stabilize opiate dependence, provide regular contact for clients, and address other health and social problems. Although not an original

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goal, it was hoped that low threshold MMT might also reduce transmission of HIV and other blood-borne pathogens by reducing or eliminating drug injection, a problem that became increasingly relevant in the late 1980s. Over time, similar programs emerged in other jurisdictions, including Canada (Klingemann, 1996).

Empirical comparisons to higher threshold MMT programs (i.e., programs with strict policies governing continued use of any illicit drug during treatment) show that low threshold MMT attract different types of clients (Ryrie, Dickson, Robbins, Maclean, & Climpson, 1997); have higher retention rates (Torrens, Castillo, & Pérez-Solá, 1996) and are associated with reductions in heroin use (Yancovitz et al., 1991), injection related HIV risk behaviors (Finch, Groves, Feinman, & Farmer, 1995; Millson et al., 2007), injection-related mortality (van Ameijden, Langendam, & Coutinho, 1999) criminal charges (Ryrie et al., 1997) and mortality (Langendam, van Brussel, Coutinho, & van Ameijden, 2001).

In recent years, there have been calls to scale up the availability of MMT to prevent overall mortality and morbidity and to reduce HIV transmission (Mathers et al., 2010; Mattick, Breen, Kimber, & Davoli, 2009). Often these calls are made in reference to populations experiencing intersecting problems characterized by poverty, social isolation and poly-drug use (Mathers et al., 2010). One might surmise that the low threshold model of MMT could have an important role to play in addressing the needs of those with opiate dependence.

Understanding how to eliminate barriers to treatment is important to ensure that all who might benefit can access programs that meet their needs. As noted above, low threshold MMT is defined in the existing literature by two criteria, but methadone treatment using any approach – e.g., maintenance, non-maintenance, withdrawal management – is complex and involves multidisciplinary teams and many different practices and policies such as: physician visit attendance schedules; urine drug testing; methadone dose stabilization and adjustment(s); and take home dose privileges. If the goal of low threshold MMT is to reduce barriers to treatment, one might wonder if there are other ways to change practices and further reduce barriers to admission and retention. Here, we explore how and why three MMT programs tried to reduce barriers and some of the challenges they faced.

Methods

Data were drawn from a qualitative study of three MMT programs in three Canadian cities that described their programs as low threshold. All provided methadone prescribing and were co-located with a needle and syringe program. A public health unit hosted two programs and an AIDS organization hosted the third. Two dispensed methadone onsite and clients of the other program filled their prescriptions at a community pharmacy. All physicians and most staff members worked part-time. The programs also offered voluntary psychosocial counselling; case/crisis management; referrals for housing, employment, legal assistance, food, and clothing; emergency financial coverage for methadone costs; telephone access; and drop-in space. None offered full primary care services but they did provide wound care, immunization for influenza and Hepatitis B, testing for HIV and hepatitis C (HCV) and referrals for other medical specialities and other drug treatment programs.

To recruit clients, each program provided a list with a client number and gender but no names. To achieve our goal of recruiting 15 clients per program, we randomly selected 20 men and women in proportion to the distribution in each program (i.e., 60–80% were men). We sent the list of numbers to program managers who then distributed the study flyer to the first 15 clients selected. The flyers described the study objectives, eligibility criteria, interview

process, and how to contact the study team. Where the initial recruitment failed to yield 15 client participants, we asked managers to distribute five more study flyers. This process yielded a total of 46 clients (Program A $n = 15$; Program C $n = 16$ and Program D $n = 15$). All staff and physicians at each program were sent a study flyer and invited to participate, yielding a sample of 24 participants (Program A $n = 5$; Program C $n = 6$ and Program D $n = 13$). All participants provided written informed consent and were compensated (\$25.00 CAD). Programs were compensated for office space (\$1000.00 CAD). We received approval from the Research Ethics Board at the Centre for Addiction and Mental Health.

Using semi-structured interview guides, we asked participants to define low threshold MMT and the role of harm reduction within the program. We also asked them about admission policies, goal setting, staff training, clinic environment and location, expectations regarding drug use during treatment, physician appointment attendance policies, dose setting, take-home dose policies, counselling and urine drug testing. Interviews were taped, transcribed verbatim, verified for accuracy and managed using NVIVO. We conducted site observations to collect information about the physical location and organization of the programs.

To analyse the data, we followed a standard iterative analytic procedure (Corbin & Strauss, 2008; Lofland, Snow, Anderson, & Lofland, 2006). Two team members reviewed the transcripts from the first program, identified and compared themes, and developed a common codebook comprised of major themes and sub-themes. Using this codebook, all remaining transcripts were coded by one team member and verified by another. Any new themes and/or coding refinements were discussed and incorporated into the coding structure as deemed appropriate. To ensure consistency of coding across the transcripts, we reviewed and applied new codes to previously coded transcripts. All discrepancies in coding were discussed and resolved by consensus. In keeping with the methods, we wrote thematic memos to describe, summarize, and analyse the content of each code. Finally, we grouped codes into higher order themes (e.g., what is low threshold; client experience of urine drug testing). Interview excerpts are used below to illustrate the analyses.

Results

Low threshold MMT is harm reduction

All participants defined low threshold MMT by explicitly rejecting abstinence from opiates and other drugs as the over-arching treatment goal. Participants said the goal of low threshold MMT was to reduce a broad range of drug-related harms inclusive of, but not limited to, a reduction in drug use (e.g., overdose, HIV transmission, skin/vein problems, homelessness, social isolation). The terms ‘harm reduction’ and ‘low threshold’ were used interchangeably to describe the MMT programs in operation:

With your low threshold or whatever you want to call it, harm reduction, it's aimed to get people into treatment that would be written off [*in other programs*] and aren't really ready to stop using and to get them to stop stealing and so on and so forth, you know. (Client, Program A)

It's supposed to accommodate your needs. . . to help you with needles, or getting a resume if you're working the streets, and to come down off it [methadone] if you want. (Client, Program A)

Our goals are completely harm reduction goals; where people are using less syringes. . . where people are even staying where they're at or even trying to get themselves on a more even keel, to sort of reduce the chaos of their lives. (Staff member, Program A)

Program staff stated that they wanted to offer clients a model of MMT with fewer barriers to admission and retention than higher threshold MMT programs. The MMT Guidelines laid out by the College of Physicians and Surgeons of Ontario (CPSO) in 2005 did not identify a specific compliment of policies and practices to define a particular model of MMT (e.g., low threshold, high threshold or detoxification) but rather these guidelines set out parameters of acceptable practice and recommended physicians use their sound clinical judgement to prescribe methadone (*College of Physicians and Surgeons of Ontario, 2005*).

Given their desire to implement a low threshold MMT approach, and in the absence of a defined set of practices and policies, the programs reviewed and implemented practices they believed would reduce barriers to admission and retention. Whilst there was agreement that the goal of low threshold MMT was to reduce these barriers, analyses showed that there was not always agreement between professional groups or across the programs regarding specific practices.

Non-punitive stance towards drug use during treatment

In alignment with the literature (*Klingemann, 1996; Langendam et al., 2001; Millson et al., 2007; Ward et al., 1998*) none of the programs required abstinence from opioids or other drugs as criteria for admission. Programs expected that all clients would likely continue to use illicit drugs (e.g., crack cocaine) whilst in treatment. It was believed that penalizing patients for use of drugs whilst enrolled ignored other benefits of MMT (e.g., counselling and referrals) that would accrue over time:

Kicking people off of methadone for using heroin is like terminating someone's chemo [therapy] because they grew a tumor. (Staff member, Program C)

But I think because [the goals] are harm reduction. . . we expect everybody that walks in the door to be using other substances, so the abstinence-based model in this population would not work – the clinic would not exist. (Physician, Program D)

Whilst accepting that clients would continue to use drugs, physicians believed that an uncritical acceptance of continued use of opiates (e.g., morphine, heroin) and other drugs during treatment was dangerous for clients and might also pose legal liabilities:

I think that the worst thing that can end up happening is that . . . I'm just potentiating their health-damaging behaviour by providing them another substance for them to get high on and that can potentially interact with other stuff they may be doing outside of here. . . and that does happen from time to time. . . because we can end up putting people in the way of harm by providing them with a dangerous substance. (Physician, Program D)

For many physicians, there was a tension between accepting poly-drug use during treatment as a means to improve retention in treatment with their obligation to do more good than harm to patients. This tension emerged more openly in relation to practices regarding missed appointments and urine drug testing policies.

Attendance policies, program environment, and getting away from the drug scene

Staff noted that attendance policies needed to be flexible to encourage retention. When first admitted, clients in all programs attended physician appointments once or twice weekly to receive a methadone prescription. As per the CPSO general MMT guidelines

(2005), this attendance schedule continued until the client reached an optimal dose with opiate cravings eliminated; thereafter, clients saw their MMT physician once a week to renew their methadone prescription. Staff and physicians contrasted this approach with higher threshold MMT programs, where clients saw a physician twice a week for the duration of treatment.

We try to balance the need for ongoing assessment against being overly intrusive in their lives. Would you want to come here every day for the rest of your life? I wouldn't and I'd stop coming. So, I recognize that and try to make sure that I know [client name] is doing well. (Physician, Program D)

Yep, I used to come lots, like every second day or whatever. . . but after 6 months, he said I didn't have to come so much but only if I was doin' good. So sometimes, I've come lots, now I don't come so much. (Client, Program A)

Along with an attendance policy designed to increase retention, staff noted the need to accept clients where they were 'at'. Drug use, drug selling/trading and violence onsite were not accepted at any program; however, both clients and staff spoke about the atmosphere in the waiting area. One client said

We talk business. . . stuff, quiet like, some people got big mouths. . . they don't toss you out or tell you to shut the fuck up. . . but I don't make a big deal ok? [Staff member name], she doesn't get all proper like. . . she's ok with us. (Client, Program D)

Whilst this environment of acceptance helped some clients feel welcome, comfortable and encouraged to remain in treatment, for others, it was troubling and interfered with their desire to get away from the drug scene: "I don't need to hear shit like that every day, they don't stop. . . Been there, done that. . . I'm moving on." (Client, Program A). Programs responded in one of two ways for clients seeking to disengage from the drug scene. In Programs C and D, reducing appointments to once or twice monthly removed retention barriers for clients with a consistent attendance record (i.e., few missed appointments), a stable methadone dose and a goal of getting out of the scene:

Depending on how long they've been in the program and how stable they are, the clients have a set time period. Initially they'll be seen weekly, and then as things stabilize and they don't need frequent dose adjustments, it'll be every two weeks, and if they're fairly stable, then they might be coming once a month. (Physician, Program D)

Program A implemented a different approach for these patients by dividing clients into sub-clinics and scheduling attendance at different times of the day:

Well people say "I'm trying try to get away from this life and I come down here and see all the people that were involved with my other life" so it's hard for them, and perhaps that's not so much the issue, but it's the fact that they say "I come here and . . . people are always propositioning me and trying to sell me stuff, and it's hard for me to say 'no' right now, so I don't want to be exposed to this. It's easier for me to stay clean if I go when they're not here." (Staff member, Program D)

Although workers at Programs C and D also noted the benefits of dividing client attendance times based on a self-defined treatment goal (i.e., abstinence versus other goals), neither program practised this social or spatial segregation of clients. For those

seeking a different treatment environment and/or take-home dose privileges, Program C transferred clients to other MMT programs in the community to ensure that “no caste system . . . evolves [in this program] where people are this or they’re this and I think it has potential to develop that way.” (Physician, Program C). Workers at Program D stated that they too wanted to avoid a “tier system” and would have liked to offer currently abstinent clients the opportunity to transfer to another program, but the lack of alternate MMT programs in their locale made this difficult:

It can be hard doing a harm reduction clinic right here and the next client’s trying to stay totally clean and straight, and has to put up with the influence of the client who’s only dealing with opiates but still poly drug using . . . If you get a young client who has no legal issues, no big psychiatric issues . . . it would be nice to almost closet that client away so that while they’re dealing with the stress of their opiate dependence, they’re not having all these influences, because of course, where you’re going to find the vast majority of the drug users or criminals in the area at any given time, they’re all out here [in the waiting room]. I don’t mean that to come across negatively . . . it’s just that therapeutically it would be great if you could say, “Johnny, you’re probably best not to be here. We’re going to ship you over to clinic B ten blocks away,” or something like that, but when the option is not there, it’s better service than no service. (Manager, Program D)

These workers also worried that implementing sub-clinics might lead to admitting fewer clients with the most severe addiction problems, and undermine the goal of increasing access for this population. A staff member said, “It’s a choice we make. Maybe it is not the best choice but we do what we can with what we’ve got . . . there are fewer people in our community with way out of control drug problems, it’s a balancing thing.” (Staff member, Program D)

Consequences of missed physician appointments

Many clients’ lives were characterized as chaotic and with demands that led them to occasionally miss physician appointments. The CPSO guidelines (2005) outlined policies for a missed methadone dose(s), but did not offer guidance on how to respond to missed appointments. In this respect, physicians were advised to use good clinical judgement and the programs had to develop their own missed appointment policies. To reduce barriers to treatment, Programs C and D developed a patient-centred approach that considered the individual circumstances of clients, such as prior attendance record, compassionate needs, and stability of dose. In some circumstances there were no consequences for a missed appointment:

Sometimes people just get lackadaisical about it and the doctor has to lay eyes on them. It’s like a rule, so sometimes we will say “yes, we’ll do it for you because we know that you’re too sick to come here,” but other people who do it way too often, making the doctor feel uncomfortable because she doesn’t know where they’re at and she’s prescribing a powerful narcotic, that can be difficult so we try to nip that in the bud and tell people, “look – once a week you’ve got to be here.” (Staff member, Program C)

However, there were points at which a methadone prescription would not be written for clients who consistently failed to attend appointments.

They [program staff] understood, and frankly, I don’t really care what their reaction is, because ultimately I’m prescribing

a narcotic; these particular individuals are on the higher dose as well, and I’m not going to write a script without being able to assess people periodically. That’s bad medicine, that’s bad practice, and I’m not going to do it. That’s not my job. My job is to be responsible about this. (Physician, Program C)

This boundary aligned with the programs’ goal of encouraging retention, reflecting good medical practice and aligning with general MMT guidelines (CPSO, 2005).

To determine its policy, Program A emphasized what they termed client “ownership” of treatment. Ownership was demonstrated by attending methadone-prescribing appointments. Also, the program staff noted that to be “fair to all of our clients, we can’t expect one thing from [client name] and do something else for [client name]. It doesn’t work that way . . . can you imagine the shit that would cause? To be treated, you gotta be seen.” (Staff member, Program A). In the absence of CPSO guidelines about missed appointments, Program A did not accommodate clients who missed appointments. Most physicians in Program A, also practised at another higher threshold methadone program in the community. The policy at the higher threshold methadone program was adopted in the low threshold program because the physicians believed that there were limits to accommodating clients. At a minimum, clients had to attend their appointments. In Program A, a missed physician appointment typically meant no prescription for methadone until the next appointment, sometimes a week later.

[The doctor] would not give me the methadone for a week because I wasn’t on time for my appointment, and the clinic was still open, it was during clinic hours, so they said go out on the street and take care of yourself. Come back next week if you have time and we’ll write you a script then. (Client, Program A) Hmm I came here to get away from all what they do at [treatment centre name]. And it’s mostly better here but they don’t consider what might have been going on in my life; they say be here when you’re supposed to be here or it is too bad for you right? And I said *%\$ ok, I’ll take care of myself but it’s supposed to help me not send me out there again. Have a little mercy. (Client, Program A)

Clients who missed appointments and did not have a prescription said they tried to buy methadone or another opioid on the street to avoid withdrawal. Using opiates purchased in this way often continued for many days. According to CPSO guidelines (2005), after a client misses several prescribed doses, the dosage must be reduced to recognize that tolerance may have been affected and to prevent an overdose. This policy did not address illicit consumption of opiates and, consequently, clients at Program A, who missed an appointment and did not receive a prescription, found that their doses were reduced when they next attended.

If they missed one visit, then the next visit we taper them down . . . There’s a formula to use for calculating that new dose, which is a 50% reduction of the amount above 50 milligrams . . . We won’t necessarily reduce them that much . . . if it’s two urines and two visits, then we start them over again at 20–30 milligrams a day and gradually increase it. (Physician, Program A)

Staff and physicians at Program A defended their practice as part of “natural consequences” and the need for clients to take ownership of their treatment. In contrast, Programs C and D believed that refusal to provide prescriptions after a missed appointment, a return to relying on black market opiates, and dose reductions were a recipe for drop-out and ran counter to their attempts to reduce barriers to treatment retention.

Urine drug testing

Since all programs accepted that clients would likely continue to use drugs during treatment, they established their urine drug testing practices in ways they believed would encourage retention in treatment. As per the guidelines (CPSO, 2005), all programs required clients to provide a urine specimen at admission to confirm opiate dependency. All programs agreed that random drug testing thereafter (recommended by CPSO but not required) was not consistent with their acceptance of drug use. Random testing was believed by staff and physicians to be a method used to catch clients who could not be trusted to tell the truth about their drug use. A random schedule was also perceived to interfere with the development of a positive therapeutic relationship and might negatively influence treatment retention. Program D noted that urine drug testing policies were established following a collaborative, multidisciplinary decision making process that prioritized the goal of encouraging retention in treatment. In programs A and D, staff and physicians said they notified clients of the urine drug testing schedule and its purpose (i.e., to confirm methadone metabolites):

If there was a very restrictive policing going on around the urines, then [clients] would be spending a lot of time figuring out how they could get past the urines and get a clean test result through devious means rather than just getting down to the issue of whether we can help them to decrease their drug use. . . .When there are consequences for any particular behaviour, people have a way of lying about their behaviour. (Physician, Program D)

Whilst not all clients liked providing a urine specimen, none reported any repercussions from the results: “I come in, she hands me the cup, I do my thing. . .no garbage. . .And if she gets nosy. . . if I do a toke or a hundred, I tell her but that’s my business.” (Patient, Program D).

The CPSO guidelines (2005) noted that the evidence base showed mixed results with respect to the impact of urine drug testing on treatment outcomes (CPSO, 2005). Consequently, the manager, staff and former physician at Program C felt that they might further remove barriers to retention by discontinuing urine drug testing after admission. The manager argued:

You can’t say that you’re a program that provides choice to people and then take the choice away from them. You can’t, and if we are truly a program that says “other drug use is not an issue in terms of your methadone,” then we must follow that through. Let’s not just say it and be full of shit. Let’s not call ourselves harm reduction and then be abstinence-based thinking. It doesn’t make sense. (Staff member, Program C)

Given that this departed from the recommended but not required practice of ongoing urine drug testing, “to be safe and to protect the doctor, we asked for an opinion from the CPSO about it” (Manager, Program C). However, this practice did not sit well with the current physician who believed that the decision to deviate from the recommended practice was hers to make. This led to conflict:

The doctor’s right on board with harm reduction but like with the client that [continues to use heavily and] she wanted to do a urine drug screen, and I guess the whole team felt that was the last thing we needed. We pretty much knew what was going to be in his urine, and maybe that would jeopardize the relationships we were trying to build with him. I think because she feels like she’s obligated, you know, the responsibility. I know it must be a very difficult position to be in. (Staff member, Program C)

This tension revealed the power dynamic between the non-medical program manager and the physician, where each sought to impose their version of a low threshold MMT practice:

So, I as the manager for the program, I have to go to the physician and say ‘what are you doing? We don’t do that here; that’s not our policy’, [but the physician will say] ‘No, no, no - the College says I have to collect urines and I’m the one that’s going to be audited and so we have to do this’.

Interviewer: And who does make the final decision?

Staff member: I do, definitely. These are our policies and procedures; they’ve been approved and the College of Physicians and Surgeons [of Ontario] has said all of these things are fine as long as you’re not doing regular carries. . . [The guidelines] are open to interpretation and if you can prove that you’re not putting anybody at enhanced risk, then it’s fine. . . the Expert Committee on Methadone has approved our policies. (Manager, Program C)

When asked, the physician noted that she had capitulated to the demand of the manager to “keep the peace.” This incident revealed the potential impact of physician (and perhaps other staff) turnover on low threshold policies that were developed within the program but not recognized by formal guidelines.

For clients to receive take-home doses, the MMT guidelines (CPSO, 2005) clearly stated that programs were required to perform regular urine drug testing to verify that clients had not used drugs for three months or longer. Clients at Program C who wanted take-home dose privileges were transferred to other programs in the community that conducted regular urine drug testing. Program A similarly transferred clients to other programs. Program D offered the opportunity to carry privileges. It notified clients of the urine drug testing schedule and used test results to determine and verify eligibility for take-home dose privileges. As per the guidelines, clients needed to repeatedly test negative for drugs to maintain privileges; repeatedly testing positive for drugs resulted in loss of take-home dose privileges. Test results and consequences were discussed with clients before any changes in privileges were imposed.

Discussion

Our goal was to explore how the notion of low threshold MMT is defined and practised every day. These findings show that low threshold MMT is not a fully developed model. The programs in our study were able to define their practices because the guidelines in this jurisdiction were sufficiently broad and allowed for latitude. Existing evaluations of two of these programs showed positive outcomes associated with low threshold MMT (Millson et al., 2007). However, the relative contribution of each practice to the outcomes is unclear.

Our data suggest that freedom in policy making had a downside for clients of one program. For example, clients were penalized for missing or being late for appointments with physicians. Other programs tried to accommodate clients who were late or who missed appointments. As noted above, clients who were penalized often sought methadone and/or other opiates on the street to avoid withdrawal until they could receive another methadone prescription. This policy variation likely influences the patient experience and also the outcomes. Existing literature demonstrates that a stable methadone dose is an important predictor of MMT retention and retention is an important predictor of positive MMT outcomes (Ball & Ross, 1991; Cushman, 1978; Gunne & Gronbladh, 1984; Magura, Nwakeze, & Demsky, 1998; McGlothlin & Anglin, 1981; Rosenbaum & Murphy, 1998; Simpson, Joe, & Brown, 1997; Strain, Bigelow, Liebson, & Stitzer, 1999; Ward et al., 1998; Zhang, Friedmann, &

Gerstein, 2003). Practices that force patients to resort to street-acquired opiates to avoid withdrawal seem to be at odds with both a harm reduction approach and good clinical practice. To fully develop the low threshold model of MMT, it will be important to evaluate what policies and practices can achieve the goals of reducing barriers to admission and improving retention in treatment.

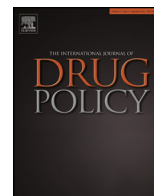
We also noted differing opinions about low threshold MMT policies between the physicians and other MMT staff members. Whilst non-physician staff members could not be held accountable or legally liable for negative client outcomes, including death, physicians could be subject to sanctions by their regulating college (CPSO, 2005). Consequently, this may have made the physicians more cautious. The literature concerning physician adherence to MMT guidelines is limited but does demonstrate that physicians whose practices are judged not to be compliant can face stiff penalties (Strike et al., 2007).

Methadone is a medical treatment but it does include a multidisciplinary team. One of the strengths of our study was the collection of data from multiple low threshold MMT programs and from clients, staff members and physicians, as this enabled us to gain different perspectives about how low threshold MMT can be implemented. Our data show that both physicians and non-medical staff played a role in defining practices believed to represent a low threshold approach. Existing literature shows the decline in the authority of physicians (Bradby, 2012) and our findings hint at this too. In one program, the non-medical program manager determined and imposed a lenient policy with respect to urine drug testing. This difference in decision making authority may be related to the availability of methadone prescribing physicians within this program's jurisdiction and also sufficient leeway within MMT guidelines (College of Physicians and Surgeons of Ontario, 2005). In Ontario, there has been rapid growth in the number of physicians prescribing methadone following policy changes in the mid 1990s (Strike, Urbanoski, Fischer, Marsh, & Millson, 2005). Whilst the physician noted capitulation to "keep the peace," it is also possible that she was replaceable and the supply of physicians was sufficiently large to find another who would support the program manager's preferred policy. In other jurisdictions with more limited supply of physicians and/or rigid practice guidelines, there may be fewer opportunities for non-medical staff to influence how low threshold MMT is practised.

Our findings show that there are potentially more ways to reduce barriers to MMT than are presented in the literature. (Finch et al., 1995; Langendam et al., 2001; Millson et al., 2007; Ryrrie et al., 1997; Torrens et al., 1996; van Ameijden et al., 1999; Yancovitz et al., 1991). These findings are important given the growing number of people with opiate dependence across the world (Hernandez & Nelson, 2010; Manchikanti & Singh, 2008; Shield, Ialomiteanu, Fischer, Mann, & Rehm, 2011) and the calls to increase access to MMT.

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The trajectory of methadone maintenance treatment in Nepal



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ABSTRACT

There are about 28,500 people who inject drugs (PWID) in Nepal and HIV prevalence among this group is high. Nepal introduced harm reduction services for PWID much earlier than other countries in South Asia. Methadone maintenance treatment (MMT) was first introduced in Nepal in 1994. This initial small scale MMT programme was closed in 2002 but reopened in 2007 as an emergency HIV prevention response. It has since been scaled up to include three MMT clinics and continuation of MMT is supported by the Ministry of Home Affairs (MOHA; the nodal ministry for drug supply reduction activities) and has been endorsed in the recent National Narcotics policy. Pressure from drug user groups has also helped its reintroduction. Interestingly, these developments have taken place during a period of political instability in Nepal, with the help of strong advocacy from multiple stakeholders. The MMT programme has also had to face resistance from those who were running drug treatment centres. Despite overcoming such troubles, the MMT programme faces a number of challenges. Coverage of MMT is low and high-risk injecting and sexual behaviour among PWID continues. The finance for MMT is largely from external donors and these donations have become scarce with the current global economic problems. With a multitude of developmental challenges for Nepal, the position of MMT in the national priority list is uncertain. Ownership of the programme by government, a cost-effective national MMT scale up plan and rigorous monitoring of its implementation is needed.

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Introduction

Nepal has concentrated HIV epidemic among certain population groups, including people who inject drugs (PWIDs). The policy environment in Nepal has not been unfavourable to a harm reduction response to preventing the spread of HIV and Nepal initiated harm reduction services for PWIDs, including needle exchange programmes (NEP) and methadone maintenance treatment (MMT) much earlier than in other countries in South Asia. In fact, Nepal was the first country in South Asia to introduce MMT for opioid dependent people who use drugs. The trajectory of the MMT programme serves as an interesting case study, with implications for other developing countries with emerging or established HIV epidemics among PWIDs. The paper discusses salient issues to support learning for other countries in the region. We have relied upon our

own experience of working on MMT in Nepal and have conducted a desk review of relevant documents. While buprenorphine based substitution treatment is also available, it is much smaller in scale and scope and therefore we restrict our focus to MMT.

Injecting drug use and related HIV prevention services in Nepal

Nepal has a long history of drug use. Cannabis was sanctioned for use on certain religious occasions, and occasional use of alcohol was tolerated socially. Reports of heroin use started appearing by the 1960s, and by the 1980s the number of heroin chasers had increased considerably. The next decade saw a shift in the pattern of drug use from heroin chasing to injectable opioid preparations such as buprenorphine (Reid & Costigan, 2002). A rapid situation assessment carried out in 1996 showed that 40% of drug users had injected drugs at least once in their lifetime; 66% PWIDs had injected buprenorphine and 20% had injected heroin (Ray, 2000). A study by Central Bureau of Statistics (2007) estimated that 61% of the 46,309 current 'hard drug' users were PWIDs (i.e. 28,439 PWIDs in Nepal). A recent nation-wide mapping study estimated the number of PWIDs to be in the range of 30,155–33,742. Among the PWIDs surveyed, a high proportion noted sharing needles/syringes and few reported using condoms (HSCB and NCASC, 2011). In 2011

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HIV prevalence among PWIDs was estimated at 6.3% in Kathmandu and 4.6% in the Pokhara valley (National Centre for AIDS and STD Control, 2012).

Nepal was the first country in South Asia region to introduce NEP in the 1980s. Though HIV prevention services for PWIDs have been scaled up in recent years, the coverage remains low. The IBBS Round V survey conducted in 2011 showed that in the preceding year, only about 47% of PWIDs in Kathmandu and 82% in the Pokhara valley interacted with a peer educator/outreach worker, 2.9% and 3.5% visited a sexually transmitted infection (STI) clinic, and 20% and 31.3% visited a HIV testing centre (NCASC, 2011). The size estimation exercise conducted in 2011 also shows that in terms of services available for PWIDs, only one-third had access to a NEP, condom outlet or voluntary counselling and testing service within one kilometre of drug use hotspots (HSCB and NCASC, 2011) implying that much needs to be done to achieve universal access to HIV prevention services for PWIDs.

Methadone maintenance therapy in Nepal

The first MMT clinic was introduced in a psychiatric hospital in Kathmandu in 1994 with the objective of “preventing relapse, facilitating recovery and reducing overdose, risk of HIV, hepatitis and other infections among drug users” (Shreshtha, 2000). The clinic had a medical doctor and a trained nurse working under the supervision of a psychiatrist. Methadone was dispensed as a tablet of 40 mg (unlike the current practice of dispensing liquid form), and most clients received a maintenance dose of 40 mg daily. Each client paid a subsidised amount, roughly 25 US cents for a full dose of 40 mg methadone. By 2001, about 270 clients had received methadone (Burrows, Panda, & Crofts, 2001). Guidance for implementing MMT was also prepared. Yet, despite such efforts, the clinic was closed in 2002. While the reasons and consequences of such a closure have not been documented systematically, anecdotal reports show that factors including political instability, unfavourable public opinion, concerns about the illegal diversion of methadone and financial constraints led to the closure of the MMT clinic (Jha & Plummer, 2012; Lawyers Collective, 2007; Max, 2010). Worryingly, this closure occurred when HIV prevalence among PWIDs was estimated to be as high as 68% in Kathmandu (NCASC, 2011).

MMT was reintroduced in 2007 and while there is little information about what happened to the clients in these five years, reports have suggested some medical casualties among drug users (Sharma, 2011). Elsewhere, the negative consequences of the closure of MMT clinics on drug use, criminal behaviour and HIV risk of PWIDs have been well documented (Grella, Anglin, Rawson, Crowley, & Hasson, 1996; Rosenbaum, Washburn, Knight, Kelley, & Irwin, 1996). Pressure from drug user groups such as ‘Recovering Nepal’ forced government and other bilateral/multilateral agencies to restart MMT as an ‘emergency response’. With ‘emergency’ funding from United Nations Office on Drugs and Crime (UNODC), MMT services were reinstated in 2007 in a tertiary care medical teaching hospital in Kathmandu. By 2011, MMT services were available in three clinics, catering for a total of 946 clients; 409 clients were actually receiving MMT (Sharma, 2011). Data show that only 3% of PWIDs have ever been on MMT and 1.5% are currently receiving MMT, which is way below what is recommended by WHO/UNODC/UNAIDS for universal access to HIV prevention among PWIDs (World Health Organisation, 2009). By contrast, despite late initiation, other countries in Asia region such as China, Indonesia, Malaysia and Myanmar have been able to scale up at a much faster rate compared to Nepal (Global state of Harm reduction, 2012; Sullivan & Wu, 2007). For example, Malaysia has expanded its opioid substitution treatment (OST) services from 95

sites in 2010 to 674 sites in 2004, China has currently about 738 OST sites catering for about 140,000 PWIDs (Global state of harm reduction, 2012).

Initially MMT services were not restricted to PWIDs; criteria for access included a long history of opioid dependence with failure in other treatment programmes (irrespective of whether a client was injecting or not). Thus the aim of MMT was not primarily the prevention of blood borne diseases, but rather it was considered to be a long term pharmacological treatment for those who were opioid dependent. Since its reinstatement in 2007 as a central component of HIV prevention strategy, it has been restricted to PWIDs. This emphasis makes it likely that MMT will be seen only in terms of HIV prevention and not as a long term pharmacological treatment option for opioid dependence. Once rooted, such beliefs become difficult to change among policy makers, service providers and consumers alike. There is also an ethical dilemma, as it inadvertently gives the message that injecting is the only way to get access to methadone treatment, and in Nepal, where many opioid users are non-injectors, this is concerning. Restricting access to MMT/OST services to PWIDs also occurs in other South Asian countries (Rao, Agrawal, Kishore, & Ambekar, 2013; Rao, 2008).

The current model of MMT operation differs from the earlier approach in a number of ways. There is now greater involvement of NGOs in the running of MMT clinics. The ‘clinical care unit’, run by the psychiatry department of tertiary care hospitals, is in charge of the daily dispensing of methadone to the clients, while the NGO runs a ‘Social Support Unit’ (SSU) and is responsible for identifying PWIDs, motivating them to seek MMT services, outreach based follow-up and referral of PWIDs to other services. There is no longer any fee for MMT (Rao et al., 2013).

The reinstatement of MMT in Nepal occurred at a time when the country was undergoing major political upheaval. The royal family of Nepal had been massacred in 2002 and the country was moving from a monarchy to a democratic form of governance in 2007. This period also witnessed Maoist insurgency (or a ‘people’s war’) and their eventual entry into mainstream electoral politics. Since then, there has been major unrest in the country over the drafting of the constitution. In the midst of this political turbulence, MMT has been expanded in other sites, which should be seen as a major achievement. This sequence of events is interesting in light of the observations of some researchers on priorities accorded to HIV by democratic versus autocratic and authoritarian regimes. Pisani (2010) cites examples of Iran and China (seen as autocratic regimes) where policies and programmes are much more conducive for providing harm reduction services as opposed to many democratic countries (like USA and India). In Nepal, the transition from a monarchy to a democracy coincided with the re-launch of MMT. More importantly, on this occasion, the ownership of the methadone programme rested primarily with the Ministry of Home Affairs (MOHA), which was also busy handling on-going internal security issues.

The Ministry of Home Affairs is in charge of matters related to the control of illicit drugs in Nepal, including the formulation of policies and programmes and it has administrative oversight of the implementation of activities approved in policy. Apart from control of the supply of illicit drugs through a ‘drug enforcement’ section, the ministry has a separate project office to implement plans for treatment, rehabilitation and other demand reduction activities (MOHA, 2012). This is a happy departure from the division of labour followed in other countries in South Asia, where there are different ministries overseeing various aspects of drug use. For example, India has at least four different ministries/departments in charge of different aspects of the drug problem. This includes the Ministry of Social Justice and Empowerment (for demand reduction), Ministry of Home (for supply control), Ministry of Finance (for revenue

associated with opium), and Ministry of health (for treatment of people who use drugs (PWUDs) and for prevention and treatment for HIV/AIDS). In such a scenario there is often an ideological clash between ministries overseeing law enforcement/supply control activities and those mandated to provide treatment and care for PWUDs (Rao and Ambekar, 2009). In Nepal so far, such an ideological clash has been avoided for MMT, even though here too different arms of the government are involved. The hospitals where MMT is provided are part of the health sector; the Ministry of education is in charge of medical college hospitals where MMT is located. Coordination between these various arms of government is ensured by MOHA, which also works with NGOs and other service providers on drug demand reduction. The National drug control strategy (2010) outlines specific programmes for OST and other harm reduction measures for minimising infections by blood borne viruses, as well as sexually transmitted diseases among drug users and their families (Ministry of Home Affairs, 2010).

In Nepal, interestingly, one section of society that resisted the reintroduction of MMT were 'ex-drug users'. The opposition for these 'abstinence-only' loyalists was both ideological and financial. Ideologically, they saw MMT and other OST programmes as an encouragement for the continuation of drug use. Many of these lobbyists also ran 'Rehabilitation Centres', and saw MMT as a threat to their 'businesses'. They wrote to Government officials asking them not to re-open MMT and allegedly spread false rumours such as "MMT causes brain damage" or "MMT causes impotency" (Kingdom of Nepal, undated). To counter this, various community groups such as 'Recovering Nepal' conducted advocacy programmes and helped to negate these rumours among beneficiaries and the general community (USAID, 2005). The fact that these community based organizations were part of the implementation process (by running 'SSUs' of MMT) also helped. Nepal boasts of a strong civil society movement as well as a socially active group of people who use drugs. Together, these various networks have been able to keep HIV prevention and MMT on the radar of policy makers, planners, national programme managers as well as funding agencies.

Unfortunately, the major source of funding for the MMT programme is from external donors, who to date have funded almost all components of MMT, including procurement of methadone, staffing (for the clinical unit and for SSU), office support, and rent. This dependence on external donors is not limited to MMT; of the overall spending on HIV/AIDS in 2009, the Nepalese government contributed 1.3%, while the rest was financed by the Global Fund, bilateral agencies, multilateral agencies, and international not-for-profit agencies (HSCB, 2010). With funding from bilateral and multilateral agencies shrinking following the global economic meltdown, there is now a big question mark on the sustainability of MMT. Recently, there was a threat of closure of many drug rehabilitation centres following withdrawal of funding by Department of International Development (Nefport, 2011). With a small number of clients and a limited number of centres, the fear of closure of MMT for staff, clients and various stakeholders is not unfounded. Indeed, concerns over the absence of a concrete plan to ensure its sustainability are being voiced by many, including the government, civil society as well as other stakeholders (Pathak, 2007). It is well known that for a country such as Nepal, there are a number of developmental issues and challenges; drug use problems have to compete with other development priorities. This makes ensuring the continuity of MMT difficult. The availability of funds to scale up MMT through Global Fund Round 10 project provides some hope that MMT will be continued in Nepal (The Global Fund, 2012).

Conclusion

A systematic evaluation of the outcome of MMT in Nepal is still needed. However, programme reviews and many small reports

on MMT give encouraging signals (Ojha, 2011; Ambekar, Pun, & Kumar, 2010; Sapkota, 2010). While there is much to celebrate in the country's attempt to overcome various barriers in implementing MMT, there are many areas of concern as well as lessons that can be learnt from this experience. According to the target setting guidelines, the scale of MMT has to be increased to cater for at least 12,000 PWIDs. Small funds from donors and other agencies would not be adequate to financially support such expansion. A costed national OST scale-up plan to achieve the target is urgently required. Such a plan should be drawn up by all the key stakeholders and its implementation should be regularly monitored through a coordination committee involving government, civil society, drug user groups and funding agencies. Getting enough human resource and capacity to deliver a scaled up target, while maintaining quality in service delivery, would also be challenging. The current practice of engaging only specialists such as psychiatrists could be changed to involve non-specialists medical staff in methadone delivery. Finally, practice guidelines and operating procedures are needed to ensure uniformity in MMT services (Ambekar et al., 2010).

For other governments as well as for donors, Nepal's story provides an example of how token 'pilot' projects are not enough. These can close even after running for a long period of time. Unfortunately, Nepal's neighbouring countries are still in the pilot mode of OST implementation. Bangladesh and the Maldives have on going pilot projects, while a pilot of OST in Pakistan has recently been introduced (Qasim, 2012). India has been able to initiate scale-up of the OST programme after a long period of 'pilot' projects (Rao et al., 2013). An important factor in scaling up of pilots is government's own willingness to assume ownership of this process. Unfortunately, drug use problems and drug users are often neglected in government's health and social development programmes. The Nepal MMT story also provides an example of how civil society and drug user groups can effectively engage with the government to re-initiate closed down programmes and help promote client friendly services. Thus, civil society and drug user groups can not only act as an effective advocacy force, but also assist in actual implementation of MMT programmes. A sustained effort in this direction can help ensure universal access to evidence based programmes such as MMT in Nepal.

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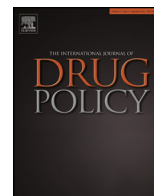
Conflicts of interest statement

We declare no conflict of interest with any other agency/organization whatsoever.

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Zoned Out: “NIMBYism”, addiction services and municipal governance in British Columbia



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ABSTRACT

In Canada, Provincial Governments have jurisdiction over delivery of healthcare including harm reduction services and Methadone Maintenance Therapy (MMT). While policy directives and funding come from the provincial capital, individuals' access to these services happens in neighbourhoods and municipalities spread out across the province. In some cases, public health objectives targeted at people living with addictions and the rights to equitable access to healthcare are at odds with the vision that residents, business associations and other interest groups have for their neighbourhood or city.

This paper looks at the cases of four British Columbia municipalities, Mission, Surrey, Coquitlam and Abbotsford, where local governments have used zoning provisions to restrict access to harm reduction services and drug substitution therapies including MMT. This paper will contextualize these case studies in a survey of zoning and bylaw provisions related to harm reduction and MMT across British Columbia, and examine the interplay between municipal actions and public discourses that affect access to healthcare for people living with addictions. Finally, this paper will explore possible legal implications for municipalities that use their zoning and permitting powers to restrict access to health care for people with addictions, as well as public engagement strategies for healthcare advocates that have the potential to reduce resistance to health services for people living with addictions in communities across the province.

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Introduction

As one of the most thoroughly studied medical treatments for addiction, Methadone Maintenance Treatment (MMT) has a proven track record in stabilizing the lives of people with opioid addiction. MMT is correlated with reduced use of illicit opioids and with a reduction in illegal and risk-promoting behaviours (Murray, 1998). MMT has also proved cost effective for the public health system (Jamieson, Beals, Lalonde, & Associates Inc., 2002). However, access to MMT for stabilizing opioid addiction remains a global problem. Despite being around for over 40 years, less than 10% of those in need of treatment are able to receive MMT (World Health Organization, 2008). Further, MMT remains outright illegal in some countries with extensive opioid dependency problems, notably the Russian Federation. In countries where it is widely available, only 40–50% of drug users receive treatment (World Health Organization, 2008).

MMT access may be limited by any number of factors, including governmental control measures targeted at narcotic drugs (World

Health Organization, 2008) or the lack of funding, physicians and pharmacists to carry out an effective programme (Health, 2011). Policy decisions around MMT availability, however, are often influenced more by the stigma and contempt for drug users than the data and evidence about effectiveness of the treatment (Wodak, 2002).

Following a “turbulent history” (Fischer, 2000), MMT has been available in all provinces in Canada since 2005. MMT is currently prescribed to approximately 51,000 Canadians (Luce & Strike, 2011). In British Columbia, where there is a higher rate of heroin and other opioid use than in other Canadian provinces, MMT is prescribed to approximately 10,000 individuals (Reist, 2010).

Despite the empirical evidence supporting low-barrier access to MMT as an important tool for stabilizing and improving health outcomes for people with opioid addictions, availability of this treatment in Canada is threatened by the growing number of municipalities, particularly in the provinces of Ontario and British Columbia, that have restricted access to methadone and other harm reduction services through zoning bylaws. In many cases, these municipal restrictions on access to methadone and harm reduction services are an acquiescence to “Not in My Backyard” (NIMBY) organized community opposition. While there have been many cases of NIMBY organizing by residents and business associations in Canadian municipalities that have resulted in reduced access to MMT

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and other harm reduction services, scholarly debate around this phenomenon has been lacking (Smith, 2010). This commentary aims to provide a survey of the use of zoning bylaws to address NIMBY opposition to harm reduction health strategies in the Lower Mainland of British Columbia, the geographical area surrounding the city of Vancouver, and explores the legal and human rights impacts of these developments for marginalized drug users.

Zoning against harm reduction

In Canada, zoning is a mechanism by which municipalities, through authority conferred on them by provincial statute, are empowered to regulate land use through bylaws. Although not consistent across Canada, some stated statutory purposes of zoning are “to control the use of land for providing for the amenity of the area within the council’s jurisdiction and for the health, safety and general welfare of the inhabitants of the municipality” (*The Planning and Development Act, 2007*) or, more simply, to “prohibit, regulate, and control the use and development of land and buildings in a municipality” (*Municipal Act, 2002*).

Exclusionary zoning – using zoning bylaws to exclude certain socio-economic groups from parts of a municipality – is nearly as old as the implementation of zoning itself (Kinnally, 1999). Zoning developed in Europe in the mid-1800s, and its first application in North America was in 1885 in California, when zoning provisions were used to exclude Chinese laundries from certain areas (Bish & Clemens, 2008). Zoning has been used to restrict access to land use based on race, ethnicity, and social class, both overtly and covertly through bylaws that are neutral on their face, but discriminate in effect.

Courts have, on occasion, been asked to examine the purpose of zoning laws and have settled on some ground rules for valid exercise of zoning powers. In order to be deemed valid, “a zoning ordinance must be reasonably related to the police power – that is, it must further the public health, safety, morals, or general welfare” (Rohan, 2007). It is important to consider, however, that communities are rarely unanimous in their estimation of whether a particular service or land use decision contributes or detracts from safety, morals or general welfare. In that context, the needs of marginalized community members may be undermined if zoning powers are used to deny access to necessary social and health services provided by higher levels of government or to “zone out” groups of people rather than manage land uses.

Typically, zoning bylaws define a set of “uses” that the municipal government wants to regulate, such as retail store, library, or retirement home. The bylaw generally sets out geographical “zones” within the municipality, which might, for example, be designated residential, commercial, industrial, or mixed use, and then ties the uses to the zone, either permitting certain uses outright or with conditions, or prohibiting them entirely.

Since 2000, several municipalities in the lower mainland of British Columbia have passed amendments to their zoning bylaws that restrict access to methadone and other harm reduction services. These amendments typically create new uses such as “methadone clinic” or “methadone dispensary” as distinct from other health care or social service uses, as well as new restrictions on the zones in which these services may be located or how they may be distributed throughout the municipality or the zone. What follows is a brief survey of some changes to zoning bylaws that restrict access to methadone or other harm reduction services and the process through which the bylaws came into being.

Mission, BC

Mission is a British Columbia district municipality with a population of 34,505 (*Statistics Canada, 2007*). A number of

unincorporated semi-rural and rural districts are closely linked to Mission and the area has a low volume of new local employment opportunities (*District of Mission, 2012*).

In August 2012, the Council of the District of Mission amended its zoning bylaw to remove two uses from the zone identified in the bylaw as “Core Commercial Downtown One Zone”. The amendment removed “Pharmacy” and “Medical Clinic” from the bylaw (*District of Mission, 2009*). This amendment came on the heels of an application for a building permit by Life Pharmacy Inc. in April 2012 to open a general-purpose pharmacy which would include dispensing methadone. The apparent purpose of the amendment was to prohibit this business from establishing in the downtown area.

Following the purchase and permit application by Life Pharmacy, unsubstantiated rumours began to surface that the pharmacy would be not only dispensing methadone, but also offering a needle exchange programme, operating a medical cannabis clinic, and prescribing methadone. On May 2, 2012, at a special Council meeting, Mission Mayor Walter Adlem asked Council to consider an amendment to remove “pharmacy” and “medical clinic” as permitted uses for the zone in question. The resolution was passed by Council and the bylaw was subsequently made the subject of a public hearing, at which Council staff reported receiving 78 signed form letters in support of the amendment from individuals identified as members of the Mission Downtown Business Association (*MacNair, 2012*). Some people who wrote letters in support of the amendment stated that they did not want a business in downtown Mission that would attract “the wrong type of people.”

A representative of Life Pharmacy spoke against the amendment and attempted to clear up rumours, noting that their pharmacy business would not be providing cannabis, needles or prescriptions for methadone. The pharmacy would, however, be dispensing methadone to patients with valid prescriptions in accordance with the law. The representative of the pharmacy suggested that opposition to the business may have arisen from the fact that they would be providing services to marginalized people who were already accessing social service agencies in the vicinity of the intended site for the pharmacy. Other than the business owner himself, there were no clear opponents to the amendment present at the public hearing, particularly any person who supported the rights of MMT patients to receive unfettered access to treatment (*District of Mission City Council, 2012*).

In passing the amendment, the Mayor and some Councillors cited the City’s incomplete and developing “revitalization plan” as the rationale for prohibiting Life Pharmacy from opening their business. In support of the amendment, Councillor Jeff Jewell stated, “we have to respond to the overwhelming concerns of the people who are directly affected, specifically the businesses of Mission” (*MacNair, 2012*). Councillor Jenny Stevens, the only councillor who voted against the amendment, said she couldn’t support a bylaw that prohibited certain businesses based on their legal activities, and suggested that the City of Mission might be in contravention of the *Canadian Charter of Rights and Freedoms*.

Surrey, BC

With a population of nearly 500,000, Surrey is British Columbia’s second most populous city. Surrey is just 35 km from Vancouver, and is characterized by large number of commuters and low population density (*City of Surrey [COS], n.d.*). Surrey’s efforts to restrict methadone services in the city began in 2000 with a move to amend its zoning bylaw to add a definition for “Methadone Clinic” (*City of Surrey, 1993*). The City also amended the list of *Permitted Uses* for all zones to exclude Methadone Clinic except as an “accessory use to a hospital.” City staff forwarded a report to Council on October 25, 2000 that outlined the rationale for this bylaw change, which would

restrict methadone clinics to a single site, Surrey Memorial Hospital, and which included comment from interested parties (City of Surrey, 2000). That report noted that the South Fraser Health Region had some concerns about the bylaw change, namely that a methadone clinic was not currently located at the Surrey Memorial Hospital site, and it was neither planned nor feasible to locate a clinic there. The health region representative further noted that in the absence of a comprehensive and integrative alcohol and drug treatment plan, enacting the bylaw “may further limit or restrict the community’s access to a necessary service” (City of Surrey, 2000).

During the public hearing on the bylaw, Dr. Roland Guasparini, Medical Health Officer for the health region, noted that there were approximately 2300 addicted people in the Region, 800 of whom were in methadone treatment. He recommended that the municipality consider alternate ways to manage methadone clinics such as size and design (City of Surrey Council, 2001). Those recommendations were ignored by the City of Surrey, which passed the bylaw changes.

In July, 2008, the municipal council of Surrey proposed further amendments to its zoning bylaw targeting methadone dispensing pharmacies. The 2008 zoning changes reportedly resulted from a discussion between the City and the B.C. College of Pharmacists concerning “the need to address the proliferation of methadone dispensing pharmacies in City neighbourhoods, and in particular the rapidly gentrifying City Centre, due to the adverse impacts to neighbourhoods that such a proliferation is causing” (City of Surrey, 2008). The City created new definitions of “methadone dispensary”, “small-scale drug store” and “drug store”, and legislated minimum distances of 400 m between small-scale drug stores and drug stores. Amendments were also proposed to Surrey’s *Methadone Dispensing Bylaw* (City of Surrey, 2003) that reflected the new definitions of the zoning bylaw and also stipulated that methadone dispensaries could not locate within 400 m of an existing methadone dispensary, small-scale drug store, or drug store (City of Surrey, 2008). These changes built upon the 2001 zoning changes that prohibited new methadone dispensing drug stores being established in a retail zone.

In media reports about the proposed amendments, Jay Redmond, president of the Downtown Surrey Business Improvement Association stated of the 400 m rule, “It will be a good first step. Obviously we’re not going to solve all the world’s problems, especially the drug problems in this area, but by reducing the concentration it will hopefully reduce the impact on the businesses in that area.” He further noted that the concentration of the methadone dispensaries serving addicts also attracts “undesirables” to the gentrifying Whalley core and merchants complain they scare away customers (Surrey Now, 2008).

Coquitlam, BC

Coquitlam is a largely suburban city near Vancouver, BC, with a population of 126,456 (Statistics Canada, 2012a). On July 27th, 2009, the mayor of Coquitlam signed the *Adult Oriented and Undesirable Business Bylaw No. 3864, 2009* into effect (City of Coquitlam, 2009). This bylaw added several new definitions into the city’s zoning bylaw, including “Methadone Clinic” and “Methadone Dispensary”.

The amended bylaw prohibits a broad range of businesses which it describes as “adult oriented” in all zones of the city: pawnbrokers, massage parlours, methadone clinics, escort services, and exotic dancing (City of Coquitlam, 2009).

This amendment also restricted the location of certain new permitted “adult or undesirable” businesses including methadone dispensaries, to no closer than 1 km from other existing businesses, and restricted the locating of a new methadone dispensary to no closer than 1 km from existing adult entertainment use, adult

video store, cheque cashing business, methadone dispensary, tattoo parlour, massage parlour, pawnbroker, pawnshop, escort service, exotic dancing use, or scrap metal dealer (City of Coquitlam, 2009).

The explicitly moral tone of the bylaw and the diverse businesses captured by the bylaw drew the attention of the Canada-wide newspaper, the *Globe and Mail*. Al Boire, president of a local Residents’ Association, told the *Globe and Mail* that the area was struggling with drug problems, vandalism, graffiti and prostitution after a neighbourhood pawnshop opened a couple of years prior. Boire said it was becoming an adult-entertainment zone, and that was not acceptable in a family-oriented community.

City Councillor Mae Reid, who spoke to the *Globe and Mail*, said that the City could not provide the number of complaints it received about businesses classified as undesirable, but was cited as saying: “we got it before we ended up having hundreds of these businesses” (Sandhu Bhamra, 2009). At the time the bylaw was passed, Coquitlam had three pawnshops, and did not actually have an existing methadone clinic (North Shore News, 2009). Bars, liquor stores and the large local casino, all of which serve only adults, were not affected by the bylaw change and continue to operate as they had previously.

Abbotsford, BC

Abbotsford is located 74 km east of Vancouver. It is the fifth largest municipality in British Columbia and home to approximately 133,497 people (Statistics Canada, 2012b). It also has British Columbia’s most sweeping anti-harm reduction zoning bylaw. In 2005, Abbotsford City Council amended their zoning bylaw to add “harm reduction use”. For the purpose of the bylaw, harm reduction use included, (1) the growing, production, manufacture, sale, distribution and trade of drugs listed in Schedule 1 of the *Controlled Drugs and Substances Act*, including cannabis, or any by-product of cannabis, or any substance held out to be cannabis; (2) Methadone treatment clinics and dispensing facilities, except where administered by a Provincially registered pharmacist; and (3) Needle exchanges, mobile dispensing vans, safe injection sites, and any other similar uses.

The zoning bylaw was further amended to prohibit “harm reduction use” in any zone of the City (City of Abbotsford, 1996). In comments in support of his City’s anti-harm reduction policies, Abbotsford Mayor Bruce Banman made his position on harm reduction clear: “you are, if you are a drug user, a criminal. You’re not a helpless victim. You are, and choose to be, a criminal. It is an illegal activity that you are doing. If you are a paedophile, you are a criminal. And how we deal with criminals is we lock em up” (Bellrichard, 2012).

The bylaw runs contrary to plans outlined by the Fraser Health Authority to implement harm reduction strategies in the community. As noted by the regional health authority, the bylaw has an impact on their provincially mandated health provision work (Fraser Health Authority, 2012). Abbotsford currently faces escalating rates of infectious disease higher than both provincial and national averages (Fraser Health Authority, 2012). However, Fraser Health Authority public health director, David Portesi, noted, “If we institute harm reduction services in a hostile environment their effectiveness is diminished considerably” (Bellrichard, 2012).

Some groups in Abbotsford are flouting the restrictions in the bylaw and distributing clean needles to injection drug users, either through surreptitious distribution at a location where other services are offered or through operation of a mobile van. However, the bylaw has created a chilling effect and community organizations wishing to operate overt services are unable to secure approval and funding from the health authority, which has stated explicitly that the bylaw is an obstacle to providing service.

Abbotsford officially continues to “review” the bylaw, and there are indicators that the tide is changing. In some venues, the Mayor has supported needle exchange to combat the spread of hepatitis C and overdose death, and the provincial Minister of Health has come out in support of needle exchange in Abbotsford (Baker, 2012). On April 22, 2013, Council directed City staff to create both an amendment to the bylaw that would remove the reference to “harm reduction” and a “good neighbour” policy to which needle exchange services would have to adhere. However, any amendment to the bylaw would be subject to public hearing and both that and the policy would be dependent on Council approval (City of Abbotsford Executive Committee, 2013).

Discussion

Zoning can be used as a tool to increase opportunities and improve access to services for marginalized groups, such as people with disabilities. As evidenced by the above examples, however, it can also be misused, “zoning out” necessary services for vulnerable communities, with dire public health and human rights implications.

In Canada, authority for providing healthcare rests with provincial governments. In British Columbia, municipalities cannot specifically legislate with respect to public health unless such legislation is authorized by regulation, agreement or with approval of the responsible minister. As a result, a municipality cannot legally tread on the authority of the province to deliver healthcare through its zoning unless it has provincial authority to do so. When municipalities attempt to legislate access to healthcare, such as methadone or harm reduction, through their zoning bylaws, they are likely exceeding their jurisdiction. This is especially true where municipalities have banned a particular mode of healthcare outright.

In the case of Abbotsford, for example, the health authority would provide harm reduction services, were it not for the municipal bylaw standing in the way. The tensions between the exercise of the municipal powers and the aims of public health present possibilities for legal interventions on behalf of those denied access to healthcare through zoning laws. One example of such an intervention into the bylaw amendment process on behalf of marginalized people occurred in the Province of Ontario. The Ontario Human Rights Commission (OHRC) looked at a case in London, Ontario involving bylaw amendments to restrict the provision of methadone in that city. In a letter to London’s Mayor and planning staff, who were evaluating the amendments to restrict methadone clinics and pharmacies in all zones of the city, the Commission noted that public hearings reinforce the incorrect assumption that neighbourhood residents have the right to make decisions about the availability of housing and medical care (Hall, 2012). A similar letter was sent to the Ontario town of Northeastern Manitoulin and the Islands (NEMI) in February 2013 noting possible human rights violations of restricting methadone access on the basis of discriminatory stereotypes of methadone patients (Hall, 2013). While the Human Rights Tribunal in British Columbia does not take a proactive stance in voicing concerns about potential human rights infringements as the OHRC does, the Ontario example raises the possibility that human rights claims could be brought challenging the public process that leads to restrictive bylaws as well as the content and effect of the bylaws themselves.

In a recent similar case in the United States, a Pennsylvania District Judge ruled on August 17, 2012 that the City of DuBois’ zoning ordinance barring a methadone clinic from establishing in the downtown was unconstitutional and ordered the City to pay the clinic \$132,801 (US\$) in damages. The City had enacted the ordinance after a federal appeals court struck down as

unconstitutional a state law that restricted where methadone clinics could be located. Addressing the key question of the case – whether city officials intended to treat drug treatment facilities differently from other medical offices and facilities – U.S. District Judge Kim Gibson concluded, “. . .the plain language of the ordinance – which specifically prohibits methadone and drug treatment facilities, and no other medical uses. . .speaks for itself and demonstrates the City’s intention to do just that” (Ray, 2012).

That municipal governments feel emboldened to engage in managing health care accessibility through zoning results not only from the failure of higher levels of government to exert their own legal authority in constraining municipal powers in that realm, but perhaps also from the failure of the harm reduction movement to engage municipalities more effectively. When the harm reduction movement focuses on individuals, programmes and high-level drug policy directives without effectively engaging mid-level decision-making bodies, such as municipal councils, in the planning and collaboration of harm reduction services, it is natural that a gap in policy-making will emerge. That gap is as likely to be filled by public opinion as by evidence, and could result in exclusionary zoning decisions that limit access to health care.

However, exclusionary zoning decisions will continue to raise questions about human rights infringement of marginalized persons, as exemplified in London, Ontario, DuBois, Pennsylvania and elsewhere. These bylaws, as well as the complexity of the province in choosing not to challenge them, may constitute discrimination against people with disabilities or an infringement of the *Canadian Charter of Rights and Freedom* protected rights to life and security of the person of people who are prescribed methadone. These bylaws may also constitute discrimination on the basis of geography given that in Vancouver methadone and needles are readily available to drug users as provincially supported medical care.

Conclusion

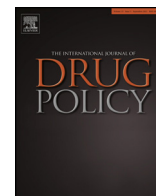
The stigma around drug use and even around recognized and effective methods of stabilizing and treating opioid addiction such as MMT are driving zoning policy and healthcare delivery in several Canadian municipalities. Despite the fact that methadone is a provincially sanctioned, funded and regulated form of healthcare in British Columbia, the motivation for this legislative action seems to be to move people prescribed methadone elsewhere.

Yet, municipal governments do have other alternatives and, in fact, can use their zoning powers to strengthen access to MMT and other health services in their communities. The City of Saskatoon in Saskatchewan Canada, responded to NIMBY pressure about a needle exchange programme that has been operated by a service group in the community for three and a half years by commissioning a report that looked into the impacts of the service. The report, tabled on December 3rd, 2012, found that despite claims to the contrary, the needle exchange has not increased crime in the area and it was correlated with a reduction in new cases of HIV infection (Grauer, 2012). The definition of a “medical clinic” in Saskatoon’s land use and zoning bylaw did not, however, specifically mention needle exchanges, and so these facilities were at risk of falling outside of lawful use. Based on the recommendations of the report, the City will now undertake a review with the intention of “clarifying” the definition of “medical clinics” to include needle exchanges to ensure that its zoning bylaws do not stand in the way of sensible and effective responses to a public health crisis and do not undermine public health goals. Undoubtedly, a culture in the local government recognizing the stigma faced by drug users and the importance of evidence-based decision-making paved the way for a municipal response supporting public health. Positive media portrayals of drug users and the complexity of drug dependency and health

interventions also likely shape public opinion in support of harm reduction approaches (Adam, 2013) and support non-exclusionary planning and zoning decisions that do not “zone out” health care options for marginalized persons.

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Research paper

From political controversy to a technical problem? Fifteen years of opioid substitution treatment in Finland



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ABSTRACT

Background: The aim of the article is to analyze changes in opioid substitution treatments (OST) in Finland. OST spread in Finland in the late 1990s and early 2000s (Phase 1). Since then, OST has become an integrated part of Finnish drug policy and is provided in various substance abuse treatment units as well as in municipal health centers (Phase 2).

Methods: The paper analyses the policy around the implementation of opioid substitution treatment in Finland, focusing on identifying the key factors and the relations between them that have contributed to the implementation of OST in Finland.

Results: OST has become accepted in Finland during the past ten years as a crucial element of a harm reduction strategy. Present incentives behind this development are not as clearly related to drug-specific policies as in the late 1990s; rather, they stem from both the restructuring of health care services (e.g. cost-effectiveness) and the strengthening of the medical or technico-administrative approach to the development of OST.

Conclusion: Since the early 2000s, the development of substitution treatment in Finland has not taken place under explicit drug-political guidance, but largely as a result of many differing intended and unintended effects. One of the unintended effects is the fact that buprenorphine has replaced heroin as the most commonly misused opioid in Finland.

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Introduction

Until the 1990s drug use in Finland, compared to other European countries, did not raise any serious concern. According to a national survey conducted in 1992 (“Drug Strategy,” 1997), only one per cent of the population had used illegal drugs during the past year. The formal aim of drug policy was to prevent the use of drugs and minimize their availability. The actual focus of policy was to control drug-related criminality, whose magnitude at that time might have been exaggerated (see Stevens, 2007). This was a reflection of the central role the Ministry of Interior played in drug policy at the time, the Ministry being responsible for the internal security and combatting crime. Consequently, the development of specialized health care services for problem drug users received less attention (Kinnunen & Lehto, 1997). The idea was that the need for treatment services was best satisfied by providing problem drug users with help within the general social and health service system. Thus,

special treatment for drug users was part of treatment services directed primarily to people suffering from alcohol problems.

In the second half of the 1980s, a handful of specialized drug treatment units offering psychosocial services for drug users were established. However, the attitudes of the people working in the treatment system toward medical substitution or maintenance remained very unfavorable (Hakkarainen & Kuussaari, 1996; Kinnunen & Lehto, 1997). As late as 1993, the National Coordinating Committee for Alcohol and Drug Treatment still suggested that “maintenance treatment for problem drug users should not be initiated in Finland, because it condemns the patient to lifelong drug addiction” (“Opioidiriippuvaisten,” 1993).

Then, in the late 1990s, the policy course took a new direction. One of the protagonists in the process to come was the Ministry of Social Affairs and Health (MSAH), being responsible for the promotion of national health and welfare, including the prevention of substance abuse related harms. In addition, regarding drug policies the MSAH was – and is – also a “super Ministry” in charge of planning and developing drug legislation and regulation. In 1997 the MSAH laid down a regulation that for the first time accepted OST as part of the official arsenal for tackling drug problems in Finland (“Sosiaali,” 1997). At the beginning of the 2000s, the Ministry wanted to speed up the introduction of OST, and to this

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Table 1
Number of OST patients and policy response between 1996 and 2011.

Number of OST patients	Year	Policy response and important events
5	1996	
	1997	First regulation on OST
	1998	HIV epidemic
	1999	The Consensus Meeting on treatment of drug addiction
	2000	First OST decree
200	2001	
400	2002	Revision of the OST decree
700–750	2004	
	2006	Evidence based guidelines
1200	2008	Revision of the OST decree
2400	2011	

end issued decrees in 2000 (“Sosiaali,” 2000) and 2002 (“Sosiaali,” 2002), thereby loosening the criteria for access to OST. As a result of this shift in policy, the number of patients in OST rose sharply, from only five individuals in 1997 to 200 in 2001, and then to some 750 in 2004, and finally to some 2400 in 2011 (EMCDDA, 2004, p. 123; Hakkarainen & Tigerstedt, 2005; Partanen, 2012; Virtanen & Sjöberg, 2006, p. 72, see also Table 1).

According to the latest statistical estimates of the OST coverage (EMCDDA, 2012), about half of all problem opioid users in Europe have access to substitution treatment, although the coverage differs between countries. The United Kingdom and the Netherlands represent countries with higher coverage (more than 50%), and Germany, Italy and Finland are examples of countries with slightly lower coverage (40–50%), and countries such as Greece or Hungary have low coverage (less than 40%). The coverage in Finland is calculated on the statistical estimate of the number of problem opioid users in 2005 and the estimate of the number of patients in substitution treatment in 2010. The OST coverage in Finland has thus almost reached the average European level over the course of the last fifteen years.

In the first part of the paper, we will focus on five factors contributing to this rapid change (Hakkarainen & Tigerstedt, 2005). Firstly, one important precondition was the significant increase in drug problems in the second half of the 1990s, which forced authorities and politicians to reconsider national drug strategies and policies. Secondly, OST was put on the public and political agenda as a result of several major controversies that arose when private physicians prescribed buprenorphine as a medical treatment to their heroin-dependent patients. Thirdly, OST was supported by influential spokespeople representing administration, medical and health professions, organizations, citizens, and the media. Fourthly, the influence of the international spread of OST had an impact also in Finland. Finally, we will argue that the introduction of OST was part of a medical and social reframing of drug problems in our country. We point out that in the new frame the client is given a new role in drug policy, and drug policy is divided into criminal policy, on the one hand, and social and health policy, on the other.

In the second part of the paper the focus of our analysis is on the development of OST in Finland during the latter part of the 2000s. We will argue that the development of OST during this period no longer took place under explicit political guidance, but rather was a result of a process of both intentional administrative decisions and unintentional effects that emerged in the context of the changing drug situation, public controversies and the restructuring of health care services. This meant, in practice, that the variety of actors involved in the OST question were replaced by a few administrative decision-makers. On the basis of our analysis, we will also discuss the importance of the Finnish case as it shows the complex political nature of OST, sometimes leading to quite

paradoxical results. One example of this is the fact that buprenorphine has replaced heroin as the most commonly misused opioid in Finland.

Theoretical framework and methods

Shifts in drug policies toward a harm reduction approach are typically created by trigger events and crisis situations. These events are related to changes in public, political and expert opinions, but also have backgrounds in different societal and cultural trajectories, in professionals' roles and positions in the policy field, and in international replication of policy models. In other words, a range of factors affect drug policy formation. When more than one of the factors come together favorably, a “policy window” – an opportunity to change policy direction – opens a new phase of agenda-setting. Policy windows are not just chance opportunities, but can also be actively created (Kingdon, 1995; see also Berridge, 1996).

Our analysis will focus on two phases of opioid substitution treatment (OST) in Finland: the introductory phase of OST in the late 1990s and early 2000s and the subsequent expansion and entrenchment phase in the latter part of the 2000s. Our data consists of a systematically collected set of all key drug and drug treatment policy documents published during those two phases. By analyzing this textual material we identify the key factors and their mutual relationships that contributed to the political opportunity and implementation of OST. We will also draw on existing research literature on drugs, drug policy, and OST in Finland and elsewhere. We are interested in the ways that different actors, policy effects, disputes and problems related to OST and opioid misuse have changed and contributed to the development of OST from being a marginal practice into a dominant way of responding to the misuse of opioids. In other words, we will analyze how the policy window was opened in the late 1990s and closed during the latter part of the 2000s.

The drug policy dilemma of the 1990s

After a long period of relative stability, the 1990s saw a major change in the scale and nature of drug problems in Finland (Hakkarainen, Tigerstedt, & Tammi, 2007). A crucial factor in considering OST and its potential clientele was that heroin gained a stronger foothold in Finland. One reason for this was that following the collapse of the Soviet Union the supply of drugs reached new levels in the Finnish drug market and the prices of drugs came down dramatically (Hietaniemi, 2001). Based on register data, the number of problem users of amphetamines and opioids was estimated to range between 11,500 and 16,400 in 1998 (Partanen et al., 2000) and 16,000 and 21,000 in 2002 (Partanen, Holmström, Holopainen, & Perälä, 2004) (in a country with a little over 5 million inhabitants). Between 1800 and 2700 persons primarily used opioids in 1998 (Partanen et al., 2000), and between 4200 and 5900 persons in 2002 (Partanen et al., 2004). In step with this development, societal harms associated with drug use multiplied. For example, the number of deaths related to heroin overdose increased from 9 cases in 1996 to 60 cases in 2000 (Vuori, 2001). Also, the HIV epidemic among drug users in the summer of 1998 was greeted with alarm. There had been only 20 cases of HIV among drug users before the epidemic, but in 1999 the number of new cases rose rapidly to 85 and in the year 2000 there were still some 50 new cases, even though the epidemic was already in decline (Arponen et al., 2008).

The changing nature of the drug problem forced Finnish authorities, politicians and other public actors (e.g. leading experts and stakeholders in substance abuse treatment) to profoundly reconsider the conventional drug policies and strategies (Hakkarainen

et al., 2007). The key document in this reassessment was the state committee report entitled the *Drug Strategy 1997*, whose changes of direction were soon confirmed by government resolutions in 1998 and 2000. In addition to being defined as an issue of criminal behavior, drug use was regarded in this report as a significant social and public health problem. Consequently, the criminal policy approach, including an emphasis on the investigation of drug possession and use, was balanced by a determined emphasis on health policy measures and prevention aimed at reducing harm. Social support and consultation services also emphasized the same aim. According to a key statement in the *Drug Strategy 1997*, “[t]he goal of drug policy is to prevent drug use and the spread of drugs so that the financial, social and personal harms and costs caused by their use and combating them will be as small as possible” (p. 8). From this point of view, the need for OST was acknowledged. Further, the *Drug Strategy* states:

“It should be possible to extend the provision of substitute pharmacotherapy to patients seriously addicted to opioids. The treatment must always be linked to psychosocial rehabilitation, and it shall be strictly controlled and multiprofessionally planned. *The Committee proposes that substitute pharmacotherapy should be provided according to the present need.*” (p. 10 – italics in original).

The reassessment of the situation presented in the *Drug Strategy 1997* opened the doors for the approval of OST as a legitimate measure in Finnish drug policy. In 2001, two working groups commissioned by the MSAH suggested that OST should be considerably expanded (from about 200 to about 1200 individuals treated a year), that the centralized provision of medical treatment should be replaced by normal prescription practices, and that problem drug users should be referred to low-threshold maintenance treatment as early in their drug path as possible (“*Opioidiriippuvaisten*,” 2001; “*Huumausaineiden*,” 2001).

However, this groundbreaking change of policy did not take place without opposition, resistance and serious disagreement. In particular, two separate disputes in which the authorities were opposed by two private physicians played a decisive role in redirecting drug policy.

Two disputes

In private practice, substitution medication had not been prescribed since the early 1980s, when the police and medical authorities took legal action against some physicians for prescribing methadone – trademark Dolorex – to their heroin-dependent patients (Simola, 2002). The trial that followed made physicians very cautious about prescribing sufficiently strong analgesics. However, during the 1990s, there emerged two major disputes concerning GPs providing buprenorphine as a long-term medical treatment to their heroin-dependent patients. Both disputes contested the prevailing prescription practice and made the general public aware of a new substitute drug, buprenorphine, marketed as Temgesic and subsequently Subutex. The first case took place in the early 1990s (Hakkarainen & Hoikkala, 1992) and the second one ran from 1997 to 2003 (Hakkarainen & Tigerstedt, 2005).

In both disputes, the medical authorities and the police wanted to limit the action taken in private practices. According to the police, the private doctors’ (Hannu Penttinen and Pentti Karvonen) experimental treatment would result in buprenorphine leaking into the illegal drug market. The doctors objected to the decision of the national health authorities, who reacted by limiting their rights to prescribe the medication, while the doctors also went public with the dispute. The media drew a picture of two responsible and

Table 2

Differences with regard to themes and actors appearing in the two disputes on substitution treatment in the 1990s.

	Case 1 (1990–1991)	Case 2 (1997–2003)
Degree of collegiality among physicians	Low; profession dispersed	High; profession more consolidated
Health authorities’ role	Restrictive	Favorably disposed toward OST and supportive of it
The role of the police	Dominating authority arguing for control over physicians	OST issues left to the medical field
Patients’/users’ right to treatment	Minor issue, disappeared during dispute	Major issue
References to research evidence	Minor issue	Growing issue
References to adverse effects of OST	Major issue	Minor issue
Overall definition of “the drug problem”	International threat	National/local & international threat
Administrative practice	Centralized	Decentralized

motivated physicians who wanted to test the new treatment methods without hesitating to fight for the rights of their patients (e.g. “*Temgesiciä*,” 1990; “*Korvaavan*,” 1997). Dozens of parents of the patients made public statements arguing in favor of the medical treatment of problem drug users (Hakkarainen & Hoikkala, 1992; Hakkarainen & Tigerstedt, 2005).

Both disputes had an impact on the reversal of the Finnish drug treatment policy. The first dispute brought the problem to the attention of the general public, and the second dispute speeded up concrete action in this area. Due to public awareness of the issue, OST was put on the political agenda. Indeed, the official health care program was reformed due to the determined and even stubborn action of the two GPs.

Yet, such shifts in policy are seldom caused solely by individual actors. In fact, when the doctor involved in the first dispute clashed with the health authorities, he decided to withdraw from any discussions on the topic. The doctor involved in the second dispute, in turn, lost his license to practice medicine, was convicted of an aggravated drug offence at the Supreme Court and given a two and a half year prison sentence. However, having entered the stage, the development of OST proceeded along other paths supported by other actors.

The change in discourse and attitudes

In Table 2 we have summarized some crucial differences between the two disputes described above. The differences deal first, with the relations between the social forces that engaged in the respective disputes and, second, with the main subjects and general societal context of the disputes. The changes in these factors drove drug policies toward a definitive break from the salience of control policies (Table 2).

In Dispute 1, the field was dominated by two powerful parties: the drug police and the physicians (often representing national and local health authorities) (Hakkarainen & Hoikkala, 1992). The police were remarkably active, relying on a two-decade-long tradition in drug policy with firm roots in criminal justice and control policy. By 1997, when Dispute 2 started, the drug political framework had already changed in many respects. Drug use had increased and, along with it, the ideas that drug risks should be governed more pragmatically and that drug addiction should be viewed as a disease were already gaining ground. The drug problem was not anymore defined only as an external threat, but increasingly as a phenomenon inherently belonging to Finnish society. In this situation the *Drug Strategy 1997* declared its principal support to OST

and furthermore the first centers for the exchange of needles and syringes were established (Tammii, 2005). Moreover, newspaper editorials gave their support to these winds of change and the police, for example, were pressured into collaborating with social and health workers (Hakkarainen & Törrönen, 2002, pp. 546–547). From there on, the police have been more favorably disposed to the treatment of problem drug users. In their own anti-drug strategy, formulated some years later, the police stated that “the drug user is always offered instructions for treatment and, if needed, the person is passed to social and health personnel for treatment” (“Poliisin,” 2002).

Although the radical action taken by a single private doctor in Dispute 2 led to confusion and criticism among other doctors, the growing unity within the medical field regarding OST was conspicuous. In 1997–2001, the national medical journal *Suomen Lääkärilehti* published a dozen articles and statements regarding OST (see Selin, 2010). Every text spoke in favor of such treatment and resolutely called for change, but the possible adverse effects of OST, such as the leakage to the illegal markets, were not discussed.

Simultaneously, the Finnish Society for Addiction Medicine put strong emphasis on the promotion of medically assisted substitution and maintenance treatment of opioid dependent drug users. Among others, the Society can be credited for promoting the importance of such treatment during the preparation of the *Drug Strategy 1997* (Tammii, 2005). Another persuasive proof of the systematic activity of the medical profession was the consensus meeting on the treatment of drug addiction, arranged in November 1999 by the Finnish Medical Society Duodecim and the national research council the Academy of Finland (“Konsensuskokous,” 1999). As a result of this meeting, medically-assisted treatment of opioid addiction became part of Finnish evidence-based medical practice (“Käypä hoito,” 2006). Thus the health authorities, which only a decade earlier had strongly opposed OST, and the doctors supporting medical treatment came together.

It should also be pointed out that the rapid proliferation of OST was strengthened by international trends (see e.g. Solberg, Burkhardt, & Nilson, 2002). Finnish doctors and medical authorities used international biomedical research as their authorities (see e.g. “Konsensuskokous,” 1999). In that research tradition, drug addiction is defined as a brain disease, to be cured primarily with pharmaceuticals. Most examples were taken from the US, such as the recommendations by the National Institute on Drug Abuse and the 1998 consensus meeting of the National Institute of Health (see Effective... , 1998), but also from the comprehensive Swedish review of evidence-based treatment (“Behandling,” 2001). During Dispute 2, these international trends had gained strength, and OST was gathering pace elsewhere in Europe (Solberg et al., 2002).

Substitution treatment and the dual-track drug policy

The acceptance of OST was part of a radical reframing of drug problems that also left its imprints in the division of labor in governmental drug policy. The formerly dominant *criminal justice*-driven definition (i.e. drug use is a crime to be rooted out) was accompanied not only by a *public health* perspective (i.e. drug use is a risk for spreading epidemics), but also by a *patient* perspective (i.e. the drug user is an individual suffering from an addiction) and a *human rights* perspective (i.e. the drug user is a fully authorized citizen) (Hurme, 2004).

The patient and human rights perspectives came across in “client orientation”, a key concept in the social work and health care discourse in the 1990s. Hence, as a societal phenomenon, OST was a child of its time. The statement of the consensus meeting of 1999 declared that “[r]egardless of principal abode, everyone

suffering from drug problems has the right to be examined by a multi-professional team specialized in drug treatment”; when deciding about treatment “the patient him/herself should play a major role” (“Konsensuskokous,” 1999).

At the beginning of the 1990s, the state administration *en masse* (National Board of Health, MSAH, Ministry of the Interior) opposed OST. When entering the 2000s, the course of action of the state administration had started changing. The authorities and Ministries no longer necessarily had to define a joint opinion on specific issues: “When the social and health authorities discuss drug issues with representatives of the Ministry of the Interior, they meet like delegations of two different parties”, and the propositions presented by the government to the parliament may well be a proposition by a specific Ministry (Mäkelä, 2000, 465). An important prerequisite for the rapid breakthrough of OST was that the issue was prepared in the super Ministry concerning drug policies, i.e. the MSAH, which was heavily devoted to the prevention of harms related to substance use. The Ministry of the Interior was completely excluded from that process.

The course of a dual-track policy included in the subsequent national drug strategies implied that the police, with an expanding mandate, took care of issues dealing with criminal justice, while at the same time they toned down their previous role as the most visible, loud and dominant actor in drug policy (Hakkarainen et al., 2007). On the other hand, professionals, most notably Doctor Pentti Karvonen and Professor Mikko Salaspuro, within the social and health care field mobilized themselves as important drug policy actors and actively took part in the creation of a new treatment and prevention field (Tammii, 2006). The duality of Finnish drug policy was highlighted by Osmo Soininvaara, who served as Minister of Social Affairs and Health in 2000–2002. In his book *Ministerikyyti* (*Minister Ride*) he remarked that in the late 1990s the Finnish government had made a compromise “between the prohibitionists and the harm reductionists”. When starting his job in the government, he had decided to concentrate on promoting the latter option (Soininvaara, 2002).

Ten years after: substitution treatment in Finland now

After these eventful and, in the 1990s, even dramatic initial developments, the development of OST in Finland since the early 2000s has taken place without any major public debate, even though the numbers of patients in OST has increased from some 400 in 2002 to 2400 in 2011 (Partanen, 2012). The opening of “a policy window” for OST in the Finnish drug policy in the 1990s was followed by a specific policy change model: the crisis (the need to clarify the role of substitute medication in the treatment of opioid addiction) triggered by Dispute 1 and culminated with Dispute 2 first instigates a search for solutions and actors, but as soon as the policy has been redefined, the policy window closes and the political issue in question fades from the agenda. However, the issue may of course return to the agenda and re-open the policy window if new claims, actors or other major changes in policy conditions emerge (cf. Kingdon, 1996). However, as Weckroth (2006) proposed in his ethnographic study of an inpatient OST clinic in Finland during the years 2001 and 2002, the tension between “prohibition” and “harm reduction” in Finnish drug policy could be seen in the daily practices and routines of OST. One disputed issue was the strict non-tolerance of drug use during treatment. Also finding the proper level of medication caused a lot of tension: the patients complained that the doses were too low to improve their health, whereas the treatment personnel did not regard their critique as plausible.

In spite of the lack of political debate, two major changes concerning treatment practices have taken place since the early 2000s.

First, in 2006, the Finnish Medical Society Duodecim published its guidelines on evidence-based practices in OST (revisions made in 2012). These 2006 guidelines highlight that polydrug use during treatment is not a reason to interrupt the treatment, that OST is a socioeconomically cheaper solution than no treatment at all, and that OST without any psychosocial support is at the least a better option than keeping patients in treatment queues. All these recommendations were aimed at lowering the existing barriers to treatment and undercutting the influence of social control or the “ideological” aspects of treatment. Thus, we claim that one of the purposes of these guidelines was to “enlighten” the staff in OST in order to strengthen the ideas of harm reduction in the treatment of opioid addiction and thus shape the content of treatment.

Second, the formal statutory substitution treatment decree was revised in 2008 (“*Sosiaali*,” 2008). The 2008 decree is of major interest here, because it redefines the aims of treatment. One salient reason behind the new decree was the *Government Resolution on Cooperation Regarding National Drug Policy 2008–2011*, which set the aim of increasing the availability of OST (“*Valtioneuvoston*,” 2007). Another factor that called for revision of the existing decree was the substitution of buprenorphine (Subutex) with a combination of buprenorphine and naloxone (Suboxone) as the principal medication in OST. The reason for this was that the abuse potential of this new medication was assessed to be low and the existing decree was based on the abuse potential of buprenorphine (Hermanson, 2008). The importance of the question of the abuse potential of substitute medication is related to the special characteristics of opioid misuse in Finland. The misuse of heroin has declined while the use of other opioids has increased in Finland throughout the 2000s (e.g. Hakkarainen, Metso, & Salasuo, 2011). This is also highlighted by the fact that buprenorphine was the primary problem substance for 33 per cent of the patients entering drug treatment in 2009 (Forssell, Virtanen, Jääskeläinen, Alho, & Partanen, 2010).

The 2008 decree implied significant changes compared to the 2002 decree (“*Sosiaali*,” 2002) where, first, OST was not a first-choice treatment. Rather it was reserved only for patients who had unsuccessfully undergone a previous detoxification attempt using some other “scientifically justified and generally accepted” method. Second, the 2002 decree laid down that the treatment needs assessment and the initiation of treatment had to take place either in a central hospital or at the Järvenpää Addiction Hospital.

Contrary to this, the 2008 decree (“*Sosiaali*,” 2008) stipulates that treatment needs can be assessed and the treatment initiated in primary health care, in a substance abuse treatment unit or in prisons. In addition, the 2008 decree specifies in principle the same three aims of the OST treatment as the previous decree: detoxification, rehabilitation and maintenance. However, patients in maintenance treatment can be divided into two subgroups: those in treatment with psychosocial support and those in treatment with limited psychosocial support. The new decree thus allows for more treatment options than the previous one. Compared to the earlier decrees, there is also a clear transition toward a more liberal and flexible way of implementing OST.

Instead of being based on open political debate, these two intended changes (the 2006 guidelines and the 2008 decree) – supporting the importance and primary nature of OST and consequently the medical approach in the management of opioid addiction – have been furthered by techno-administrative decisions taken by various experts. The restructuring of the delivery of health and social services has also mediated the development of OST in Finland, one example of this being the increased use of competitive tendering.

Finnish municipalities can autonomously decide how they provide statutory social and health services. During the past twenty

years, competitive tendering has become increasingly common as a means of choosing the producer of social and health services (Koivusalo, Ollila, & Alanko, 2009). Some OST providers have, in fact, been selected through competitive tendering in several major Finnish cities. One emergent feature related to this attempt to offer drug treatment services more cost-effectively has been a suspected tendency to overemphasize cheaper OST with only marginal or limited psychosocial support (“*Kahden*,” 2011). Treatment with limited psychosocial support is an alternative that the 2008 decree made possible. In substance abuse treatment in general, competitive tendering has had adverse effects on the quality of treatment (Perälä, 2010 cited in Forssell et al., 2010, p. 68). There are no Finnish studies specifically on the effects of competitive tendering on OST, but previous international examples show that demands for cost-effectiveness can, for example, curtail the availability of psychosocial support in opioid addiction treatment despite evidence on the significantly improved treatment outcomes of OST with psychosocial support (Fraser & Valentine, 2008; McLellan, Arndt, Metzger, Woody, & O'Brien, 1993). Together with the treatment guidelines and the 2008 decree, it seems that competitive tendering is directing OST toward harm reductionist maintenance treatment with limited psychosocial support.

Conclusion

Finnish OST has become more and more harm reduction-oriented, primarily as a matter of administrative regulations. How can we understand this development? First, it is clear that the stronger position of the medical profession in the handling of opioid-related drug problems is a crucial factor behind this development. This is highlighted by the fact that both the formulation of the evidence-based guidelines and the administrative preparation of the 2008 decree rely heavily on work by various medical experts (see Hermanson, 2008). In comparison to the numerous actors participating in the discussion on OST in the late 1990s and early 2000s, we can notice that most of the other actors have withdrawn. For instance, the patients and parents had an important role in advocating change in policy in the 1990s, but much less in the 2000s (e.g. “*Temgesiciä*,” 1990; “*Kesää*,” 1997; Tammi, 2006). As a result, the discussions are no longer multifaceted, but rather dealing with a set of administrative and technical questions due to the medical way of “framing” the treatment of opioid addiction (for example, in terms of evidence-based medical practice). However, in reality the point of view of the medical profession is only partial and excludes other ways of framing OST based on, for example, social and ethical considerations.

Second, we claim that even if harm reduction has gained ground in Finland, control policy and harm reduction remain entangled. With regard to OST, the relation between them has become even more complicated than before. The 2008 decree was justified by a leading official of the MSAH in the following manner: “The purpose of the decree is to make treatment available for those needing it in a way that the treatment need is met, but at the same time the quality of treatment is guaranteed and the misuse of the drugs used in treatment is prevented” (Hermanson, 2008). Significantly, both the aim of meeting the needs of drug abusers and preventing the misuse of substitute medication were interpreted to require a step or two toward maintenance-oriented OST. Such reasoning was grounded on the firm belief that the combination of buprenorphine and naloxone had a low abuse potential that made the strict regulations of the previous decree unnecessary. Thus, slackening the regulations of OST made sense in terms of both control policy (the regulation of the widespread misuse of buprenorphine) and harm reduction (increasing OST with limited psychosocial support). Generally speaking, then,

harm reduction can be viewed as a compromise that does not threaten the foundations of prohibitionist drug control policies, but addresses some of the harms that are beyond the scope of criminal control policy. Thus, neither in Finland nor in many other countries has the introduction of harm reduction policy implied a liberalization of the crime control of drug use (Tamm, 2007).

Third, we claim that it is possible to interpret the development of OST in Finland during the past ten years as an establishment of a certain way of thinking and problematizing the treatment of opioid addiction. Michel Foucault's (1997) concept of problematization refers to an act of thought that can take place when certain ways of doing things face difficulties and become problematic. The transition from psychosocial treatments of opioid addiction toward OST in Finland can be understood as this kind of problematization (Selin, 2011). Problematization also creates a way of responding to different problems and criticizing existing practices: "it develops the conditions in which possible responses can be given; it defines the elements that will constitute what the different solutions attempt to respond to" (Foucault, 1997, p. 118).

The evidence-based guidelines, the treatment decrees and the attempts to improve cost-effectiveness are responses to different problems in OST, including heterogeneous treatment practices, barriers in the access to treatment, cost savings, and the extensive misuse of buprenorphine. The variation in the role of psychosocial support has become one important way in which these problems and their solutions are framed or problematized. For example, when it is accepted that OST is cost-effective and the importance of cost-effectiveness is taken for granted (which happens easily during the current period of economic hardship), it should not be a surprise that the most affordable form of treatment that includes only limited psychosocial support gains ground. Consequently, OST coverage in Finland has almost reached the average European level (EMCDDA, 2012). Thus, through the concept of problematization we can understand the development of OST in Finland as a mixture of intended and unintended effects. We can also see that our claim that OST has become a technical rather than a political question holds and that no particular actors are seen to be masterminding this development. The Finnish case can function as an example of the complex political nature of OST, giving rise to surprising and even paradoxical effects. This is shown by the fact that during the last ten years buprenorphine has replaced heroin as the most commonly misused opioid in Finland, leading to a situation where the borderline between medical and non-medical use of buprenorphine has been blurred. The situation is a clear challenge to the increasingly complex Finnish drug policy, where control and harm reduction responses work side by side, sometimes in an uncontrollable way.

Conflict of interest

None declared.

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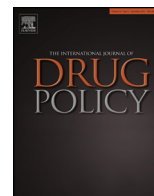
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Research paper

Methadone, a contested substance: Danish methadone policy in the 1970s



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ABSTRACT

Background: During the 1970s in Denmark, there was a great deal of controversy about the role of methadone in Danish drug policy. At stake were not just epistemological issues about how to explain drug problems or indeed technical issues about the best possible treatment for such problems, but also social issues about how drug problems and drug treatment affected and were affected by social change. The paper uses an analytical framework in which drugs are co-constructed with their social worlds. It uses this framework to investigate how conflicts emerged about the different ways of conceiving of the relationship between methadone and Danish society.

Methods: Documentary data from the archives of a pressure group of parents of children with drug problems, the archives of an addiction doctor, newspaper articles, and policy documents from that time were coded in order to identify and analyze central controversies.

Results: The methadone controversy of the 1970s was not just about the best treatment methods, but also a matter of the future of the Danish welfare state. The nation debated whether it should medicalise a social problem or solve it through social reform.

Conclusion: Drug treatment is not just a technical issue, but also a political issue and this needs to be accounted for when making drug policy.

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This article is about the controversy caused by methadone in Denmark during the 1970s. This was partly about whether or not methadone maintenance treatment (hereafter MMT) would be a viable treatment technology in Denmark. But this question was embedded in a more general controversy about the nature of the drug problem that had emerged during the 1960s, which in turn became part of a social conflict about how the Danish welfare state should address the challenges posed by the new youth culture. MMT therefore came to represent more general social and ideological issues than just the technical question about best to treat people with drug problems. MMT continued to be a controversial issue after the 1970s, but it was during this decade that the issue came to be an arena for wider social and ideological conflict.

Introduction: drugs as social phenomena

The analytical basis for the paper is that drugs are more than just chemical substances. They are also social and cultural phenomena that are part of and play an important role in diverse social practices and social institutions. As such, substances that affect the body and

mind are not just defined by their chemical properties, but also by what they do and how humans attribute meanings to them (Becker, 2001). Substances that in certain contexts may function as medications may in other contexts function as poisons or intoxicants. The social and material context plays an important part in the construction of substances as particular kinds of drugs with particular kinds of effects that are attributed particular kinds of meanings (Becker, 1953; Zinberg, 1984).

But it also works the other way around. Drugs play an important part in the social construction of certain forms of social interaction, social relations, and social institutions. The construction of chemical substances as particular kinds of drugs, influences social identities, relations, power, knowledge, norms, and values (Cohen, McCubbin, Collin, & Pérodeau, 2001; Montagne, 1996; Nichter & Vukovic, 1994; Persson, 2004). Medicine as a social institution, for example, plays an important role in the social construction of certain chemical substances as “medication”. But at the same time, medications play an important role in the construction of many of the social positions, social relations, and forms of social interaction that make up the institution of medicine. One may therefore say there is a co-construction of drugs and the social worlds of which they are a part.

Because of their embeddedness in social interaction, drugs are also attributed certain meanings that for example include ideas

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about self, illness, the normal and the pathological, work and play, and more. As Nichter and Vuckovic said about medications, “Taking medications involves more than the in-body-ment of substances. Also embodied are subtle ideas about self, illness, causality and responsibility, the meaning of sickness and perceptions of entitlement” (1994, p. 1509).

The central issue here is therefore not whether or not drugs and their social world are co-constructed, but how different ways of co-constructing take place and the concerns, controversies, and conflicts this creates. In this paper, I will investigate how methadone, and particularly the constitution of methadone as a maintenance drug for treatment of drug addiction during the 1970s, was closely related to different perceptions of drug problems, drug users, and drug treatment, but also to different ideas about social progress and social reform.

Methods

“The data came from four sources. The first was the archives of “The Movement for Humane Drug Treatment”. This Movement was called “The Union of Parents to Drug-afflicted Children” during the 1970s and this is the name that will be used in this paper (hereafter “The Union”). Material used from the Union includes correspondence between the Union and public authorities, and other actors involved in drug policy or drug treatment in Denmark. The material covers the period 1974–1981.”

The second source was the archives of the addiction doctor Preben Freitag. The material included articles by Freitag published in Danish and Nordic medical journals and newspapers articles during the period 1972–1979. Freitag has been prominent in the professional debates about methadone treatment in Denmark since the 1970s. The third source was newspaper articles about methadone from five national newspapers from the period 1972 to 1980 (Politiken, Berlingske Tidende, BT, Ekstra Bladet, Information). Articles from Politiken and Ekstra Bladet were retrieved through electronic searching of their digital archives. Key words used were “methadone”; “methadone treatment”; “drug addiction”; “drug use” and “drug treatment”. For the others; articles were retrieved by searching issue by issue on microfilm. The fourth source was policy documents about the regulation of methadone covering the period 1973–1979 from the Danish Advisory Council on Drug Issues.

The data were coded according to how participants positioned themselves with regard to the use of methadone in Denmark, the way they argued for or against its different uses, the concepts they used, and how they related to other statements in the debate. The author and two assistants coded the material using a codebook that included: problem constructions, treatment philosophies, ideological positions, status of participants, relations between participants, and concepts used. Coding had the purpose of identifying the main issues and the different positions taken by participants. It also identified the issues that sparked controversy and at what points in time these debates were particularly heated.

Findings

A new drug problem and its treatment: disease or social symptom?

The drug culture among young people that developed in Denmark from the early 1960s became a major social issue after 1965 (Houborg & Vammen, 2012) and was a challenge to Danish society in general and the institutions tasked with handling drug problems and juvenile delinquency (the psychiatric system, the child and youth care system and the youth prisons) in

particular. It was an epistemological challenge because the new drug phenomenon was difficult to comprehend via existing theories and concepts. It was a methodological challenge because it was difficult to handle with existing treatment and preventive measures. But it was also a social and cultural challenge (Houborg, 2006, 2008).

The question about how to handle this new drug phenomenon became a major social issue and central to the debates was how to explain this phenomenon and how to assess its consequences for Danish society. There were two major positions in these debates. On the one hand, a medical explanation viewed the drug problem as a social pathology and the drugs themselves as the main issue. Nils Bejerot’s disease theory of addiction was an apparent influence on the arguments, emphasizing social pathology as a precursor to the drug problem. That is, addiction is seen as an artificially induced drive that requires long-term psychiatric treatment. According to this theory, drug users and particularly problem drug users would transfer drug use and hence the danger of developing addiction to healthy individuals through “psychic contagion” (Bejerot, 1972). Supporters of this disease model of addiction therefore saw drug use as an epidemic that should be contained by removing the contagious agent (drugs) and its carriers (drug users and particularly drug addicts) from circulation among the general population. This would involve increased control at the borders, punishment for possessing illicit drugs and long-term in-patient, sometimes coercive, treatment of individuals with drug problems at psychiatric hospitals (Behrendt, 1971a,b; Behrendt et al., 1971).

The opposing explanation rested on sociological and social-psychological theories that explained problem drug use (not addiction) as learned social behavior that resulted from a dysfunctional relationship between individuals and their surroundings, usually in situations characterized by social deprivation (Berntsen, 1971; Mentalhygiejnisk Forskningsinstitut, 1974; Ulf-Møller & Jørgensen, 1971, 1972; Voss & Ziirsén, 1971). Problem drug use should therefore not be treated as an individual pathology, but by changing the interaction between individual and society.

“The different forms of problem drug use are such “social processes,” which is why treatment is not just a matter of changing the individual drug user, but just as much a matter of changing the social systems the person in question is a member of.” (Jørgensen, 1971, p. 2525)

Problem drug use was, in other words, not a social pathology that should be dealt with through harsh epidemiological measures, but as a social problem that should be addressed through a combination of social reform, social treatment (re-socialization), and social rehabilitation.

The opposition between the medical and the social model was not just an epistemological or technical issue, but also a more general social issue that concerned different conceptions of social progress, social reform, and how to handle the challenge of the new youth culture. For some of the supporters of the social explanation, the drug problem showed a need for social reform and institutional change. The difficulties that the established institutions experienced with handling the young drug users were seen to reveal deficiencies of these institutions: “By their presence in the psychiatric wards and their criticism, the young problem drug users have revealed and pointed out certain deficiencies of the psychiatric wards, just as they have revealed deficiencies of other institutions and cooperation between institutions” (Pedersen, 1981, p. 25).

For participants in the debate who saw the drug problem as social pathology, the association between the new drug culture and the new youth culture was seen as a subversive movement in Danish society. One prominent proponent of this view was Gerda Vinding, chairperson for “the National Union for the Combat of

Hash and Drug Abuse" (Landsforeningen til Bekæmpelse af Hash og Narkotikamisbrug). In a pamphlet about the dangers of cannabis, she wrote about the association between left-wing subversive politics and the new drug culture:

"The drug [cannabis] changes your mind, not just in the acute phase, but also in the long term. This change of mind has tempted some to use hash as a political weapon. Here [in Denmark] it has primarily been young anarchists who think that they can change society by means of hash, and because it looks like the adult generation is difficult to persuade, they have started with the young. [...] This mixture of hash and so-called left-wing politics is very dangerous and is not an isolated Danish phenomenon." (Vinding, 1971, p. 17)

However, participants in the debate that supported the disease model did not necessarily see themselves as conservatives. In fact, in the debates about the various drug issues, proponents of the disease model and the epidemiological approach to drug policy often presented themselves as the proper defenders of social progress in Danish society. Another member of the National Union for the Combat of Hash and Drug Abuse, for example, wrote an article with the headline "The Hash-culture – a Reactionary Phenomenon". The author argued that the new drug problem – which had followed from a permissive drug policy – was undermining social progress in Danish society with regard to disease prevention and institutional reform. "The society that has been under continual development until now experiences, because of the drug problems that hash has carried with it, serious setbacks". It is therefore important to note that the ideological conflicts that the new drug problem carried were not just between conservatives and progressives, but also between the different ways of conceiving of social progress and social reform.

Ultimately, the social understanding of the drug problem was backed by the Advisory Council on the Youth Drug Problem (hereafter, "the Advisory Council"), which was established in 1968, and also by the government and a majority of the parties in the Danish parliament (Kontaktudvalget, 1970). Members of the Advisory Council played an important role in developing a social treatment model based on a conception of problem drug use as a symptom of social deprivation and as developed through social learning. This model was backed by the public authorities through the allocation of funds for developing treatment institutions. Drug treatment of young people with drug problems therefore moved from the psychiatric system to the social welfare system, and treatment became primarily a job for social workers and psychologists, with medical doctors performing auxiliary tasks. However, both drug policy in general and drug treatment policy in particular continued to be a contested area where, for example, the National Union for the Combat of Hash and Drug Abuse played an important role. The methadone issue became one of the areas where the conflict between the disease model and the social symptom model and the different ideas about social reform and social progress became most protracted.

A restrictive methadone policy

Methadone control first became a public issue in 1971, when a group of doctors associated with the new social drug treatment system and the Advisory Council found it necessary to warn general practitioners about being careless when prescribing methadone. They were concerned that its unregulated prescription could lead to the introduction of MMT in Denmark through the backdoor and developed a set of guidelines to regulate general practitioners' prescriptions of methadone for detoxification only (Bohm et al., 1971a,b; Nimb, 1971).

However, in 1972, a sudden decrease in morphine supply made drug users and their relatives appeal to treatment institutions and general practitioners to prescribe substitution drugs. This and indications that heroin was entering the Danish illicit drug market, made some politicians raise the question of introducing medical substitution treatment in Denmark, if only as an emergency measure. In this context the government asked the Advisory Council to conduct a review of methadone (Politiken, May 2, 1972; Ekstra Bladet, May 3, 1972; BT, May 2, 1972; Kontaktudvalget, 1973). This report, by a committee of doctors, came to represent the basic principles of official Danish methadone policy for the decade and beyond and was the first in a series of reports and circulars that established guidelines for the use of methadone. The report defined its only proper role in Danish drug treatment as a detoxification drug:

"For clients that want to change their situation, methadone treatment can make it easier to get past the physical addiction on drugs. This is the role of methadone and nothing else. It is important to give the clients such an understanding of the proper role of methadone within the treatment process." (Kontaktudvalget, 1973, p. 45)

The report dismissed methadone maintenance as a viable treatment method in Denmark. It did acknowledge the apparent success of the experiments conducted by Dole and Nyswander in the USA but a majority of the committee found it impossible to reproduce such results in Denmark and felt it was undesirable to do so.

A number of reasons were given for this. First, there was a difference between drug users in the US and in Denmark. The Danish drug users were, on average younger and had more serious social and mental health problems than those in America. In addition, in Denmark, poly-drug use dominated, while heroin was the main drug of use for those who had been in MMT in the US. The committee also saw the US welfare state as less developed than the Danish welfare state: "It is unlikely that methadone maintenance treatment would have been relevant at all even in the USA, if there had been the treatment opportunities and social welfare available for drug user that exist or are under development in Denmark" (Kontaktudvalget, 1973, p. 29). Furthermore, the majority of the committee felt that the introduction of MMT in Denmark would contribute to reproducing the drug problem rather than solving it, because drug users would become less motivated for drug free treatment; in addition, the one-third of drug users who spontaneously stopped would be maintained on drugs. On this basis the committee concluded that MMT should not be standard treatment in Denmark: "As a result of these considerations the committee agrees to oppose methadone maintenance treatment a. m. [ad modum] Dole as an ordinary treatment method even in cases of advanced morphine abuse" (Kontaktudvalget, 1973, p. 31). The committee did, however, make the concession that some form of maintenance treatment could be indicated in rare singular cases, cases so rare and complicated that the committee could not put forward which indications should be present. Also, the committee did not want special institutions to be responsible for this, because this would lend MMT "unwarranted recognition" (Kontaktudvalget, 1973, p. 32).

Instead of presenting criteria for when MMT would be indicated, the committee recommended that the National Board of Health (NBH) should establish a committee to control the use of methadone in Denmark (Kontaktudvalget, 1973). This was formed, but only after reform of the Danish social welfare system in 1976 when methadone control was delegated to regional and local drug treatment committees (Hallgrimsson, 1980). These were known as "methadone committees" because part of their work was to authorize long-term methadone treatment, although

they had no authority to prevent general practitioners from prescribing methadone for drug treatment. This meant a medico-administrative system was established that would contribute to co-construct drug problems, drug users, and methadone, according to the social symptom model of problem drug use. This construction was backed by a majority of the Danish parliament when it had debates about the status of the drug problem in Denmark, for example on November 29th 1979 (Hansard of the Danish Parliament, no. 4, 1979–80, pp. 1175–1252).

Experiments with methadone

Despite the fact that official Danish methadone policy was to allow the drug to be used for short-term detoxification only, a few institutions and doctors experimented with long-term methadone treatment. One was the head of the Copenhagen prison hospital, Torben Jersild (*Jyllandsposten* July 11 1977; *Ekstra Bladet* June 26 1978; Freitag, 1978a). Another was the treatment institution Højbjerggård, which in 1972 started to experiment with long-term detoxification because of a high degree of recidivism after short-term detoxification (Fredenslund, Freitag, Ruggård, & Hansen, 1974). It was found that results could be improved by conducting individualized detoxifications that were adjusted to the psychological and social needs of the client (Freitag, 1978b). Such detoxification could last from two months up to a year (Fredenslund, Freitag, Ruggård, & Hansen, 1974). The institution did not see drop-out or recidivism as lack of motivation for treatment, but as a result of a too short detoxification period that exposed the drug user to psychological and social problems that he or she was not yet able to face without drugs: “By finishing the symptom relieving methadone treatment without having put forward alternative psychological and social perspectives, we remove the ground under a pupil¹ with a real but not yet realistic wish for becoming abstinent” (Freitag, 1973, p. 4).

Through this work, the institution experimented with another way of co-constructing the drug problem, drug user, treatment and methadone through a co-construction of methadone as a “stabilizing medication” (Freitag (1978b) made reference to Chambers (1972), who used this term) and the client as a severely – primarily socially and psychologically – dependent subject who could not be made morally responsible for dropping out of drug treatment under short-term detoxification. In 1972, Højbjerggård established an outpatient clinic in Copenhagen to work on re-socialization outside the institution (*Politiken* October 16th 1977). In a newspaper interview, Freitag later explained how methadone made this kind of re-socialization possible:

“The genius of methadone is that you take people in their own terrain, start treatment by letting them stay out in society in normal surroundings where they meet non-criminal, non-drug abusing people, get married, get children etc. Then as time goes by they probably do not want to be bothered by being dependent on different doctors who give them methadone.” (*Jyllands-Posten*, January 23, 1979).

The dominant social treatment philosophy in Denmark was to downplay the importance of withdrawal symptoms as much as possible to de-emphasize the clients’ need for drugs and in this way avoid a medicalised conception of their drug use. But an important dimension in the treatment philosophy developed by Højbjerggård and carried on by Freitag was that even though social rehabilitation

was the central aspect of drug treatment, it was important to recognize that problem drug use should be treated as an independent syndrome:

“The possibility that “psychopathological problems, social adaptation problems or considerable immaturity” in some cases play a role in causing opiate abuse does not change the fact that the abuse symptoms apart from this may very well act as an independent syndrome that often demand specific treatment.” (Freitag, 1978a, p. 3170)

Neither Freitag at Højbjerggaard nor Jersild at the prison hospital in Copenhagen engaged in the more ideological discussions about medicalisation of the drug problem, but focused on epistemological and technical discussions about drug treatment, sometimes with reference to international and particularly American experiences with medical drug treatment.

The ideological fight against methadone maintenance treatment

The official rejection of long-term methadone treatment in Denmark happened at a time when social reform and the role of social work in the emancipation of citizens from social and mental constraints were very much on the agenda. The social treatment model was based on a conception that problem drug use revealed or accentuated fundamental social problems in Danish society and it became a field that attracted “progressive” people who wanted to work for social change. One of the journalists who engaged in the struggle against the introduction of MMT in Denmark in 1976 expressed how problem drug use had changed ways of thinking about social problems and how problem drug use should be seen as a social protest:

“Drug use caused a monumental change in the common perception of social problems. Many articulate and uncompromising young drug users contributed to underscore the importance that drug use in particular and social deviance in general should be seen in a broad societal context.” (*Information*, December 11, 1976)

According to this view, MMT represented a way of converting a social problem into an individual medical problem, and through this, hiding the fundamental causes of the problem. This, in turn, would direct attention and resources away from the “real” problems and the attempts to address them. In 1972, one of the most active opponents of long-term methadone treatment wrote an article in the *Danish Medical Journal* in which he explained the reactionary nature of MMT, because it would stop social reform:

“First and foremost methadone maintenance may hide the fundamental causes of the drug use. It will no longer be urgently necessary to investigate the mental and social causes in this field. The drug users, that are produced by complicated hereditary, family and in a broad sense societal factors just need methadone and the problem is solved or at least hidden. In this way methadone maintenance will easily become chemical feeding rather than social reform.” (Jakobsen, 1977 [1972], p. 18)

With reference to the widespread use of MMT in the USA, where African American citizens were a disproportionately large number of the people with drug problems and in MMT, he continued to describe how MMT could become a social control instrument: “Seen from this perspective methadone maintenance can appear as a large scale chemical castration of ethnically and

¹ The treatment institution had started as an institution for re-socializing young women who in the terminology of the institution were called “pupils” (Fredenslund et al., 1974).

socio-economically deviant groups of the population under the cloth of being a “medically” correct treatment program” (Jakobsen, 1977 [1972], p. 20).

The opposition to MMT should be understood as one part of the more general battle against medicalisation of the drug problem that I presented above, but also as part of a more general conflict about how Danish society should handle the challenges of the new youth culture. At stake in the methadone debate was not just the technical issue about how to treat young people with drug problems but also how to define social progress and social reform as part of the ideological basis for the Danish welfare state. In a wider sense, it was how to interpret the modernist ideal of enlightened social progress that was at stake.

Opposition to the official methadone policy

Opposition to the official methadone policy became increasingly intense from the late 1970s. The debate became particularly heated after the NBH took away a general practitioner's authorization to prescribe addictive substances, because he was maintaining 177 patients on methadone without proper control of the patients (Information, October 24, 1978; BT, October 26, 1978b). Part of the critique of the ruling treatment policy was technical in nature. Central to this critique was that short-term detoxification had proved to be inefficient with regard to helping clients abstain from drugs. Instead, it had created a large group of increasingly older drug users who were suffering from all sorts of social, medical, and mental problems (Freitag, 1978a; Ekstra Bladet June 27, 1978).

But the critique was also directed towards the medico-administrative system that controlled Danish drug treatment policy and the social treatment model it represented. The Advisory Council was particularly seen as an obstacle for the introduction of new kinds of knowledge and experiments with new treatment methods (Freitag, 1978a, 1979). To inform politicians and persuade them to reform drug treatment, a “Committee for Information on Drug Abuse” was formed in 1978 by doctors, parents, and former drug users (Berlingske Tidende, May 25, 1978; Jyllands-Posten, May 28, 1978; Aktuelt, October 7, 1978). This information committee wanted to break what it saw as the Advisory Council's monopoly on representing the drug problem, particularly to politicians. The epistemological basis for drug treatment thus became part of the political struggle over Danish drug treatment.

“The reason that things are not changed is that the governments' advisory council on alcohol- and drug issues only consists of experts of the old school. They think that the patient should show strength and the will to get detoxified, says Preben Freitag.” (Jyllands-Posten, May 28, 1978)

The drug treatment system and medico-administrative drug control apparatus that had developed in part on the basis of institutional critique was now becoming subject to institutional critique itself. It was particularly the politics of knowledge that this apparatus represented that became subject to critique, that is, a mixture of a particular epistemology, treatment technology and political power.

A fight to make drug use into a medical problem

The most significant ideological opposition to the official treatment policy, and also one of the most significant participants in the methadone debate advocating for MMT, was “The Union of Parents of Drug-afflicted Children” (hereafter, “the Union”), established in 1974. The work of the Union and its critique of the established treatment policy and treatment system should be seen as a continuation

of the struggle for getting the disease model accepted a few years earlier. The major difference is that the Union presented itself as representing parents and drug users who were suffering under the drug problem in Denmark and that it had the introduction of MMT as its main issue. But like the National Union for the Combat of Hash and Drug Abuse, the Union of Parents also fought for the acceptance of a disease model and against left-wing political influence on Danish drug policy and drug treatment.

The Union became publicly known in 1976 when a newspaper told how the chairperson of the Union, a housewife from Copenhagen, was conducting long-term detoxification treatment at home. Under the headline “27-year-old Lotte was a prostitute at Halmtorvet: Housewife helped her out of the drug hell,” (Ekstra Bladet, December 28, 1976), a new voice appeared in the debate about drug treatment in Denmark. It was a voice that claimed not to represent formal, expert knowledge, but rather the knowledge of experience that had come from having children with drug problems:

“I have no fancy education. I am just an ordinary working class housewife, but I have seen two of my children almost go to waste because of drug use, and for 10 years I have worked with the problem. My bitter experiences are my education. And they count for as much as formal knowledge.” (Ekstra Bladet, December 28, 1976)

Once again, it was the epistemological basis for Danish drug treatment and the politics of knowledge in Danish drug treatment policy that was at issue. This time it was the lay experts that challenged the official knowledge base of Danish drug treatment. In the years to come, The Union continuously challenged the right of treatment experts to represent the drug problem and how it should be treated by referring to the experience of living with children with drug problems (BT, June 26, 1978a,b).

The Union's main cause was the introduction of MMT for “older” drug users who had started using drugs during the 1960s and been treated many times in the social drug treatment system without success. The Union did this by lobbying for a general change in Danish drug policy and by engaging in individual cases to get drug users accepted as eligible for MMT by the regional “methadone committees”. One issue that combined the two strategies was the case of the general practitioner who had his authorization to prescribe addictive drugs taken away by the NBH because he had 177 drug users in methadone maintenance treatment without proper control of the patients. The Union defended the doctor in letters to local and national politicians, to government ministers and newspapers as a pioneer in Danish drug treatment who had shown a successful treatment of “older” drug users where the official treatment system had failed.

The Union also took it upon itself to follow what happened to the former patients of the doctor. Because some of the patients were found ineligible for MMT, the Union campaigned to get them accepted as methadone patients by corresponding with doctors and administrators in the treatment system, the social authorities in the municipality of Copenhagen, the government Minister of the Interior, and the ombudsman of the Danish parliament. All these different actors were targets because they were seen to have the authority to allow the drug users to get access to methadone. Advocacy for the former methadone patients was also used in the Union's more general struggle to change Danish drug treatment policy. The fact that some of the patients were ineligible for MMT was used as an example of the one-sided bias towards the social symptom model of the official treatment system and as an opportunity to lobby for accepting a medical model and MMT. In late 1979, the Union wrote to the government Minister of the Interior to have him intervene on behalf of the patients and used this as

an opportunity to raise a critique of the treatment system in general, and the regional methadone committees in particular, because they were often the obstacle for getting drug users accepted as methadone patients:

“We want NOW, when the traditional treatment system’s failure has become apparent, its economy unacceptable [. . .], that we in a democratic way as decent taxpayers are heard about our children’s future treatment. We appeal to you that the dictatorial and one-sided visitation-group² is immediately closed down (what it has caused because of stupidity, lack of experience and human compassion is almost criminal). We want [the methadone committee] to become an efficient, democratic institution where one-track political social pedagogues and other social workers are not in majority, - where intelligent, humanistic doctors and lawyers with knowledge about drug cases from our courts together with representatives for parents and well-functioning drug addicts in long term [methadone] treatment have a seat.” (M. Asvarisch & L. Andersen, personal communication, November 19, 1979)

This is just one of many examples where the Union tried to discredit the social treatment system. Usually this was done by pointing out its lack of success in the treatment of older drug users. But the Union also attacked the social symptom model upon which the social treatment system was built for providing an inadequate explanation of problem drug use. Also, in this case the politics of knowledge of the Union rested mainly on the members’ own experiences, although sometimes reference was also made to scientific literature, particularly about MMT. At issue here was also the implication of the social symptom model; that the members had given their children a bad upbringing and therefore been partly responsible for their children’s drug problems. In late 1979, the Union lobbied members of parliament and government ministers in connection with a parliamentary debate about Danish drug treatment by writing a series of letters presenting its views:

“The one-track pedagogues have [. . .] successfully made our children into “backyard scum”, social losers. But we are able to prove that 90% of the so-called “old” drug afflicted come from solid ordinary homes. And they have never during their upbringing shown any sign of for example crime or other abnormal behavior.” (F. Kruuse, personal communication, October 1979)

The Union also accused the social treatment system of having been hijacked by left-wing social workers. It took the connection between the social symptom model and the agenda for social change that representatives of the treatment system sometimes would make and turned it into an association between the social treatment model and radical left-wing politics: “We have seen how our children have been given the role as guinea pigs at the traditional treatment institutions with one-track social workers as Marxist-pedagogical commissioners [folkeopdragere]” (L. Andersen, personal communication, November 20, 1979).

On the other hand, the Union continuously campaigned for medicalisation of Danish drug treatment and rolling back of the social treatment model. In so doing, it not only appealed to politicians and public authorities, but also tried to get Danish doctors to become allies. The Union thus wrote several letters to the Association of Danish Doctors and the Association of General Practitioners

to get them to support their demand that medicine regained its central role in Danish drug treatment:

“The concept of morphinists is not new. We know that they have been registered since around 1890 and that on a yearly basis there has been 1200–1600 patients. These special people have never been a problem, neither for society nor for a large part for themselves or their relatives, because it was doctors that tackled the problem. That is exactly what we see with most of the ones in long term treatment.” (M. Asvarisch & L. Andersen, personal communication, August 23, 1981)

In the work of the Union, epistemological issues about how to explain drug problems and technical issues about how to treat them therefore got entangled with ideological issues about social progress and social reform that were related to other more general debates about Danish drug policy. What was special about the role of the Union in the debate was its politics of knowledge. When it engaged in epistemological, technical and ideological debates about drug treatment in general and MMT in particular, it did so with reference to the experiences of being parents to children with drug problems. The Union members positioned themselves as lay experts and “ordinary” politically moderate citizens against a politically radical social treatment system and a rigid medico-administrative drug control system.

Conclusion

This article has been concerned with the co-construction of drugs and their social worlds and how this gives rise to different concerns, interests, and conflicts. The central issue investigated has been how a particular drug – methadone – during a particular period of Danish drug policy became a contested substance. The article has shown how the conflicts surrounding methadone during the 1970s were closely related to wider conflicts about the epistemological foundation for Danish drug treatment, which in turn were related to even wider conflicts about how Danish society should handle the challenges posed by the new youth culture. The nation debated whether Danish drug treatment policy should be based on a conception of addiction as a drug induced disease or as a socially learned behavior and a symptom of social deprivation. It debated whether the challenges that young drug users posed for the institutions that were supposed to handle them should be seen as causing a halt to social progress (a reactionary phenomenon) or as posing a (welcome) need to reform conservative social institutions.

A social treatment model based on a social explanation of problem drug use as a social symptom and result of social learning became the basis of Danish drug treatment. In this social world, there was no room for methadone as anything other than a detoxification drug. Those who defended this social world were concerned that allowing methadone to exist as a maintenance drug would seriously alter this worldview. A medico-administrative drug control system and engaged participants in the social world of social drug treatment (treatment workers, journalists, administrators, politicians, and more) therefore actively and sometimes rather fiercely tried to defend the world of social drug treatment by working against MMT or trying to tightly control it.

The opposition against the official methadone policy was diverse. It consisted of doctors, who mainly engaged in technical and epistemological debates about the nature of drug problems and ways of conducting drug treatment, but who also increasingly opposed the politics of knowledge that was the basis for Danish treatment policy. It also consisted of lay actors who engaged in epistemological, technical and social/ideological issues by referring to lay expertise.

² A group established by the municipality of Copenhagen to evaluate eligibility for methadone maintenance treatment of the former patients of the general practitioner who had his prescription rights revoked.

The argument of this paper is that the controversies and conflicts about MMT in Denmark during the 1970s was not and could not have been, a purely technical issue. Because of the co-construction of drugs and their social worlds, it had to involve many different social issues that had to do with how the specific co-construction of methadone and its social world was made. By implication then, drug treatment, medical or otherwise, should not be seen as solely a technical and epistemological matter, but also as a social and ideological matter because of the co-construction of drug problems, intervention technologies, and the social worlds of which they are a part. This issue becomes particularly pertinent when drug treatment comes to rest on a politics of knowledge where certain ways of constructing problems, interventions, and their social world cannot be debated.

In Denmark, from the mid-1980s, MMT became gradually more widespread. However, the conflicts of the 1970s meant that even up until the late 1990s methadone treatment would often be restrictive with regular use of urine tests, quarantines for using illegal drugs and standardised methadone doses. From the late 1990s, MMT has become less restrictive but the conflicts and controversies surrounding the co-construction of substitution drugs continue, now with heroin and other drugs such as buprenorphine as the contested substances.

Conflict of interest statement

I certify that there has been no conflict of interest with any financial organization regarding the material discussed in this manuscript.

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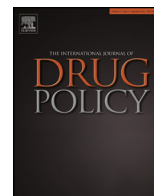
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Research paper

Work and the journey to recovery: Exploring the implications of welfare reform for methadone maintenance clients



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ABSTRACT

Background: An emphasis on welfare reform has been a shared concern of recent UK governments, with the project of transforming the provision of welfare gathering pace over the past six years. Replicating active labour market policies pursued across the globe, successive governments have used welfare-to-work programmes as mechanisms to address worklessness. Since 2008, problem drug users (PDUs) have been added to a list of groups for whom intervention is deemed necessary to encourage, enable, and sometimes coerce them into paid employment. This approach is underpinned by three beliefs relating to paid work: it sustains recovery, has a transformative potential and should be the primary duty of the responsible citizen.

Using policy developments in the UK as a case study, the article explores the implications for methadone maintenance clients of connecting drug policy (premised on the belief that work is central to recovery) with welfare policy (which at present is preoccupied with reducing worklessness).

Methods: A critical analysis of policy documents, including drug strategies, Green and White papers and welfare reform legislation, alongside a review of relevant academic literature.

Results: The 'work first' approach which underpins current labour market activation policies in the UK and elsewhere is insufficiently flexible to accommodate the diverse needs of PDUs in recovery, and is particularly problematic when combined with a 'social deficit' model which concentrates on individual rather than structural barriers to employability. The use of payment-by-results mechanisms to provide employment services, coupled with the use of sanctions for those who do not engage, is likely to be particularly problematic for methadone maintenance clients.

Conclusion: Welfare reform in the UK is likely to undermine the recovery of methadone maintenance clients. Further research is urgently needed to explore its impact on this sub-group of PDUs, alongside comparative studies to determine best practice in integrating drug and welfare policies.

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Introduction

An emphasis on welfare reform has been a shared concern of recent UK governments, with the project of transforming the provision of welfare gathering pace over the past six years with the implementation of three Welfare Reform Acts. Replicating active labour market policies pursued in Europe, Australia and the United States (Daguerre and Etherington, 2009; Martin, 1998; Mead, 1997; Nickell, 1997), the New Labour (1997–2010) and Conservative-Liberal Democrat (since 2010) governments have demonstrated a strong commitment to using welfare-to-work programmes as policy mechanisms to encourage, enable, and sometimes coerce,

workless citizens to obtain paid employment (see Deacon & Patrick, 2011). Programmes were piloted initially on young people (aged up to 25), before being utilised for other groups including the disabled and lone parents (see Miller, 2000). These programmes aim to enhance the employability of such groups through training, subsidised employment and voluntary work. Since 2008, problem drug users (PDUs) have been added to a list of groups for whom intervention was now necessary if an (overly ambitious) government target of 80 per cent employment (DWP, 2005) was to be met. Consequently it is possible to argue, as Deacon and Patrick (2011) do, that the welfare state is now built around work. Only those of working-age who are assessed as having an illness or disability which impacts negatively on their ability to carry out work are permitted not to do so. The poor physical and mental health of PDUs is well-documented (Gossop et al., 1998; Neale, 2002) so some may be assessed as unfit to work but PDUs are not automatically exempted from this expectation unless they are participating in residential rehabilitation programmes (currently around two

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per cent of people in adult drug treatment ([National Treatment Agency \(NTA\), 2012](#)). This has clear implications, as we shall see, for PDUs undergoing community-based methadone maintenance treatment.

From 2008, policy attention has focused on the estimated 267,000 PDUs accessing the main welfare benefits in England, which equates to four-fifths of PDUs ([Hay & Bauld, 2008](#)). Despite only comprising seven per cent of benefit claimants, a series of measures have focused on this group, targeted in particular at the 100,000 PDUs claiming benefits but not accessing treatment. These measures are underpinned by three beliefs; first, that employment can unproblematically sustain recovery, despite as we shall see later in the paper the contested evidence-base for such a claim (see also [Bauld, Hay, McKell, & Carroll, 2010](#)); second that paid work has a transformative potential, reducing poverty and social exclusion and enhancing health and well-being ([Deacon & Patrick, 2011](#)), and third, that when applicable, paid work should be the primary duty of the responsible citizen ([Patrick, 2012](#)). There is also a further dimension: successive governments have made little attempt to disguise that the high proportion of PDUs claiming welfare benefits is morally unacceptable, as well as detrimental to recovery; justifying policy interventions transferred from the field of criminal justice which make PDUs face 'tough choices' between accessing drug treatment or facing the consequences in the form of (benefit) sanctions. This reflects a broader strategy of stepping up the 're-moralisation' agenda for 'problematic' workless populations ([Brown & Patrick, 2012](#)). Despite the policy focus on PDUs that are not in treatment claiming out-of-work benefits, recent estimates suggest there is a larger group of PDUs who are in treatment and accessing benefits. The majority of these will be undertaking methadone maintenance programmes. Consequently, our analysis of the interactions between welfare reform and drug policy will focus on this group.

Using social security systems to channel PDUs into treatment is not new and various schemes have operated since 2001 ([Dorsett, Hudson, & McKinnon, 2007](#)). However, participation in early schemes was voluntary, and unwillingness to take part did not result in non-payment of benefits. Linking welfare reform to drug policy is also not unique to the UK since examples can be found in a number of other jurisdictions. The earliest example is the Personal Responsibility and Work Opportunity Act 1996, which uses the US welfare system to punish drug offenders by denying them access to benefits. More recently, in April 2012, a Welfare Testing Bill was introduced to the US Congress, which would permit the drug testing of benefit claimants using the threat of financial sanctions to 'encourage' PDUs to desist. Similar proposals have appeared before US state legislatures in the recent past but most have been challenged successfully, particularly on ethical and legal grounds. The pursuit of such policies however is not peculiar to the US and the UK. For example, New Zealand has attempted to introduce measures ([Government of New Zealand, 2013](#)) which have provoked similar levels of controversy.

In the UK the initial proposals, which effectively introduced quasi-compulsory treatment for PDUs wishing to claim benefits ([DWP, 2008a, 2008b](#); [HM Government, 2008](#)) were subject to extensive critique from academics ([Grover & Paylor, 2010](#); [Stevens, 2011](#); [Wincup, forthcoming](#)) and drugs sector organisations ([UKDPC, 2008a](#); [Release, 2009](#); [Nutt and Macken, 2011](#)). Following a defeat in the House of Lords, they were subsequently abandoned in favour of a 'watered down' recovery pilot which made attending a treatment awareness programme and an assessment mandatory rather than treatment itself. The aim of the pilot was to enhance the employability of those enrolled, and it sought compliance through the use of financial sanctions: failing to fulfil its requirements in most instances would lead to the loss of benefits. Whilst this targeted approach might be viewed positively

as ensuring that 'no-one is written off', the title of the Green Paper ([DWP, 2008b](#)) which preceded the Welfare Reform Act 2009, it has understandably led to concerns being expressed that the expectation of paid work for some groups (including PDUs) is unrealistic and with its moralistic overtone echoes previous debates concerning the underclass ([Prideaux, 2010](#)).

When the Coalition government assumed power in 2010, they moved away from bespoke welfare-to-work provision for PDUs and abandoned the recovery pilots ([HM Government, 2010](#)). Under current rules, drug treatment for PDUs is not mandatory and consequently, PDUs claiming benefits cannot be sanctioned for failing to participate in drug treatment activities but can if they do not engage in mandatory work-related activities. In May 2012, press reports (for example, [Watt, 2012](#)) indicated that Iain Duncan-Smith, the Work and Pensions Secretary, was attempting to reverse this as part of the wide-ranging benefit reforms associated with the introduction of Universal Credit. Gradually phased in from April 2013, this is a single payment for people who are either looking for work or living on a low income, which replaces almost all welfare benefits and tax credits. To date, it is unclear whether mandatory drug treatment for PDUs will become a condition of Universal Credit. As it stands, PDUs may be referred by a Jobcentre Plus adviser for a voluntary discussion with a drug treatment provider. What is mandatory – with few exceptions – are activities relating to obtaining employment specified in their claimant commitment (a written agreement entered into by the claimant as a condition of benefit receipt which outlines the work-related activities they should engage in or risk being sanctioned). Activities are personally tailored to each individual's circumstances and there have been repeated suggestions that participation in drug treatment might form part of the claimant commitment (see for example, [Drugscope, undated](#)). Even if this is not realised in practice, PDUs will need to negotiate a benefits system in which conditionality has become deepened through more intense work-related requirements.

In this article we focus on the implications of current welfare reforms for those undertaking methadone maintenance programmes. In particular, we will draw out the implications of the Work Programme. Introduced in 2011, this aims to 'provide personalised support for claimants who need more help looking for and staying in work (HM Government, 2013). Using policy developments in the UK as a case study, we will explore both the consequences (intended or otherwise) of the Coalition's welfare reform measures for this sub-group of PDUs. We do this first by considering how work has become central to UK drug policy through the concept of recovery. We will then move on to examine the impact of recent welfare reforms on recovery for PDUs. In so doing, we will make use of the limited amount of studies available on methadone users' experiences of obtaining and retaining employment. Whilst methadone treatment has a 'vast research base' ([Harris and McElrath, 2012: 810](#)), as others have noted the emphasis has been oriented more towards treatment outcomes than client perspectives ([De Maeyer et al., 2011](#)). Consequently, whilst international evidence does suggest that methadone maintenance treatment can improve the likelihood of obtaining and retaining employment (see [National Institute on Drug Abuse, 2006](#); [NTA, 2004](#)), relatively little is known about how PDUs experience employment, or more accurately search for it given that relatively few are employed, or how employers perceive this group. The article ends by emphasising the need for further research, both in the UK and elsewhere.

Recovery as the goal of UK drug policy: considering the role of work

The notion of 'recovery capital' has been influential in discussions about enabling recovery. Academics, from the US and UK, have

developed this concept, drawing inspiration from the work of Bourdieu (Best & Laudet, 2010; Cloud & Granfield, 2009; White and Cloud, 2008). Essentially, recovery capital comprises four dimensions: social (building and maintaining relationships), physical (obtaining resources such as money and accommodation), human (developing personal resources such as skills and improved health) and cultural (embedding the desired values, beliefs and attitudes to achieve recovery). Work – the focus of this article – is most closely related to human capital, although the types are interrelated. For instance, those with stable accommodation (physical capital) are likely to find it easier to obtain and retain employment, and those with a supportive network of family and friends in employment (social capital) might be able to exploit them in their search for employment and they may also be exposed to a strong work ethic (cultural capital). In terms of working with PDUs, the concept of recovery is often far from clear (Best & Laudet, 2010), but the United Kingdom Drug Policy Commission's (UKDPC) consensus statement provides some clarity. Developed by commissioners, practitioners and recovering PDUs and their families, they defined recovery as 'voluntarily-sustained control over substance use which maximises health and well-being, and participation in the rights, roles and responsibilities of society' (UKDPC, 2008b). In policy terms, and certainly in the UK, recovery has been explicitly linked to abstinence, albeit more at the level of rhetoric than reality (Monaghan, 2012).

It is worth pausing to discuss the recent history of such ideas in UK policy circles. Informed by this thinking, but providing relatively little detail on how recovery capital (as a theoretical concept) might be operationalised, New Labour's final drug strategy (HM Government, 2010) included among its four aims a commitment to delivering new approaches to reintegrating PDUs back into society. Substitute prescribing is viewed as a first step on a journey to recovery through enabling individuals to stabilise their drug use, alongside aiding detoxification. A similar position was also advanced more recently in the document *Putting Full Recovery First*, produced by the *Inter-Ministerial Group on Drugs* (2012).

The 2008 strategy paid especial attention to addressing worklessness in recognition of high levels of labour market inactivity among PDU (estimated to be as high as 9 in 10 in a recent study of those entering drug treatment; Donmall, Jones, Davies, & Barnard, 2009) and well-documented barriers to employability (see for example, Bauld et al., 2010; Sutton, Cebulla, Heaver, & Smith, 2004). The available literature consistently points to a range of barriers, which Klee, McLean, and Yavorsky (2002) helpfully divide into two categories. The first are individual ones, some of which relate to the impact of earlier disadvantage (for example, disrupted education or lack of a work history) whilst others relate to their current situation (for example, ongoing health problems, or involvement in crime). In essence they have few personal resources, which impacts adversely on both their search for employment and the likelihood of a successful recovery. The second category refers to systemic (or structural) barriers to employability, which include the reluctance of employers to appoint PDUs (see also Spencer, Deakin, Seddon, Ralphs, & Boyle, 2008).

If PDUs are able to secure employment, the evidence suggests that if the work is meaningful it can have therapeutic value and promote social inclusion, thus helping to promote recovery and avoid relapse (South, Akhtar, Nightingale, & Stewart, 2001). Potentially employment can play an instrumental role (for example, providing a source of income) plus an expressive one (for example developing self-esteem) (see Neale & Kemp, 2010). It also allows recovering PDUs to replace their old sense of identity (being a PDU) with one related to legitimate social activities, and similarly to use work (rather than drug use) as an organisational framework for structuring their lives. In part, the role of work in facilitating social reintegration is related to perceptions of paid work in contemporary society. As we have already noted, it has become integral to

citizenship with those who do not work increasingly being viewed as failing to acknowledge their responsibilities, which in turn can lead to feelings of marginalisation. Entering the labour market can help recovering PDUs feel part of a society from which they may have been excluded. Our concern, as we will explore below, is not whether recovering PDUs should be expected to seek employment. Having a job is an aspiration of many PDUs since it contributes to a good quality of life (see for example, De Maeyer et al., 2011) and the brief review of the evidence above suggests that work can be beneficial. Instead, our focus is on the appropriateness of the policies currently in place to channel PDUs into employment and the extent to which they support the recovery of PDUs.

When policy agenda collide: can the welfare system promote the recovery of methadone maintenance clients?

In this section, we will focus on the Work Programme, a five-year welfare-to-work initiative described as a 'step forward' (DWP, 2011: 2) when compared to New Labour's programme of promoting active welfare. PDUs can have early access to the programme (after 13 weeks rather than nine months if aged 18–25 or one year if aged 25 or over) if they are willing to disclose their drug use to Jobcentre Plus advisors. PDUs released from custody are expected to access a specialist programme immediately. It is not our intention to provide a wide-ranging critical overview of the Work Programme. Instead, our discussion below concentrates on what we regard as the most pertinent issues when examining the relationship between welfare and drug policy; which have resonance beyond the UK. We begin by detailing the 'work first' model which pervades social security systems in much of the 'western' hemisphere, arguing that it is problematic for recovering PDUs.

Large-scale initiatives such as the Work Programme – despite the rhetoric of personalisation – find it difficult to be responsive to the different attitudes of PDUs about the relative positioning of employment and drug treatment in their journey to recovery. The Work Programme is entering new territory here since previous state-sponsored initiatives for drug users such as *progress2work* worked solely with stabilised or recovered drug users (Dorsett et al., 2007). The Work Programme by contrast adopts a 'one size fits all', 'work first' approach. By expecting those on methadone maintenance programmes to participate in the Work Programme, there is no space for PDUs to choose to focus on becoming drug free prior to seeking employment. Bauld et al., 2010; Bauld, McKell, Carroll, Hay, & Smith, 2012 found that whilst some PDUs felt that securing employment at an early stage would allow them to reduce their use of substitute medication, if not abstain completely, for the majority becoming drug-free had to be the initial stage. In a similar vein, the focus on paid work runs the risk of prioritising this over other outcomes which might be more appropriate for individual PDUs. These might include allowing a PDU to re-establish a relationship with a child aged over five, the age at which a parent is expected to return to work if they are claiming welfare benefits. It also makes it more difficult for PDUs to engage in voluntary work, which the PDUs interviewed by Bauld et al. (2012) valued both in its own right and as a stepping stone to paid employment. Such activities allow PDUs to build up social capital, one of the four components of recovery. In sum, PDUs are expected to conform to a particular journey towards recovery in which particular forms of recovery capital are emphasised over others. Those unable to do so are likely to face financial sanctions – an issue we shall return to shortly – which diminishes further their recovery capital.

For PDUs engaging in methadone maintenance programmes, their treatment can limit both the work that can be done and their availability for work. Methadone, like many forms of medication, is associated with a number of side effects including drowsiness and dizziness. Consequently, it is difficult for those

participating in methadone maintenance programmes to undertake some forms of employment, for example, those involving driving or using heavy machinery, due to the consequential health and safety risks (UKDPC, 2008b). There are, of course, numerous forms of employment for which this is unproblematic and therefore a more challenging issue for PDUs on such programmes is combining work with the demands of their treatment programme. Methadone maintenance programmes have been described as the most regulated and controlled treatment intervention (Harris & McElrath, 2012). Pooling four separate studies of clients' experiences of methadone maintenance treatment, Harris and McElrath (2012) found that among respondents who had obtained and retained employment whilst participating in methadone maintenance programmes (particularly in a study based in the Republic of Ireland), many noted the 'hassle' of presenting at specific times for treatment and how this is often at odds with employment hours. Similarly, Radcliffe and Stevens (2008) point out how being on a programme of substitute prescribing can make leading a 'normal' life problematic. Included in the concept of a normal life is not only the capacity to work, but the more general ability of being 'organised'. This is because, in effect, being part of a methadone regime, as we have witnessed, 'creates a scenario where lives are organised around the pharmacy dispensing hours and weekly appointments for testing and counselling, restricting the possibility for alternative activities, whether work, study or training' (Radcliffe and Stevens, 2008: 1070).

For PDUs to undertake work a degree of flexibility is required in terms of the hours worked to ensure they have timely access to the medication they need and the type of work which can be undertaken, alongside a willingness to disclose their drug use to employers. It is also likely that most employers (or those contracted to deliver employment services) will know very little about the impact of substitute medication and the types of activities that people on such medication could or should not do (UKDPC, 2008b). Consequently, PDUs have little choice but to disclose their use of methadone unless they are able to negotiate 'take home' medication or secure employment which is compatible with their need to access medication at fixed times. Disclosure is likely to have severe consequences since there is some evidence that the 'recovery first' approach is also favoured by employers. A fairly recent report noted that even those employers (including treatment agencies, public sector organisations and voluntary agencies) who were willing to recruit PDUs – and the majority were not as we will explore shortly – indicated that they would require long periods of abstinence from all drugs (including methadone) before considering employing a recovering PDU, or even taking them on in a voluntary or work placement capacity (Spencer et al., 2008).

For Harris and McElrath (2012), methadone maintenance treatment potentially reinforces stigma; for example, through sending out a message to employers that PDUs cannot be trusted with a large amount of medication. In this way it creates what Goffman (1963) has referred to as 'spoiled identities' which could undermine the fourth dimension of recovery capital: values, beliefs and attitudes. This is but one of many ways that stigma can be experienced by PDUs. Lloyd (2013) demonstrates how stigmatising views towards PDUs exist among the general public (including employers), health professionals, pharmacy staff, police officers and even among PDUs themselves. Although these views are by no means universal and there are always occasions when a more positive and understanding response to PDUs has been apparent, stigma tends to pervade the consciousness of PDUs and the experience of stigmatisation can be extreme.

Consideration of stigma allows us to consider the barriers to securing employment faced by PDUs. As we have seen, in the literature on employability an important distinction is made between individual and structural barriers. The general thrust of

employability activities is to focus on the former, putting in place mechanisms for unemployed individuals to develop human capital (for example, developing skills or obtaining qualifications) and to a lesser extent social capital (for example, promoting access to employers who are willing to work with PDUs). In contrast there has been relatively little attempt to overcome structural barriers, which includes working with employers to encourage them to take on recovering and recovered PDUs. The available evidence suggests that this is a challenging task. A survey of employers conducted in 2008, prior to the onset of the current global recession, found little willingness to recruit PDUs. The majority clearly indicated that they would not consider employing current or former users of heroin or crack cocaine (Spencer et al., 2008). Indeed only 35 of 135 suggested that they would 'unreservedly' make an offer of employment to someone with a history of drug use on the grounds that employers largely felt that current or recovered users were not 'fit-for-the-job'. Consequently, it can be reasonably deduced that the difficulties faced by PDUs have heightened as competition for jobs has become fierce and employers can afford to be more selective. The recently published review of the 2010 drug strategy identifies overcoming stigmatisation as a priority for 2012/13 (HM Government, 2012) but provides little detail on how this might be realised in practice. The net effects of such exclusion when considered alongside the other barriers to employability we have discussed are that methadone maintenance clients are likely to be one of the most difficult groups to place since they do not represent an attractive option as a prospective employee. This has particular implications because of the way the Work Programme is delivered and funded.

The Work Programme is delivered by contracted providers, who are paid through a payment-by-results funding (PbR model). The use of contracted-out employment services (provided by the private and third sector) is not unique to the UK and has been used extensively elsewhere (Finn, 2009a; Grover, 2009). It is envisaged that the focus on outcomes coupled with encouraging competitiveness between potential providers will promote value for money and lead to better outcomes. Mirroring practices already deployed for the provision of health services, a small initial fee is awarded to the service provider for each new starter and further payments are dependent upon their success in supporting individuals to obtain and retain employment. Payments are funded through the savings associated with someone ceasing to claim out-of-work benefits and then contributing financially through the payment of tax and national insurance to the government. Differential pricing is used to encourage providers to work with those least likely to succeed, but to date PDUs have not been identified explicitly as a group for whom providers will receive a higher payment. Faced with this, organisations contracted to deliver the Work Programme may well 'cream off' those with least distance to travel to the labour market whilst 'parking' those most removed from it, such as methadone maintenance treatment clients. This practice is well-documented as a risk associated with contracted out employment programmes (Finn, 2009b).

Whilst the government is responsible for commissioning service providers and setting national minimum delivery standards, service providers are largely free to deliver at a local level what they consider to be the most appropriate interventions to help individuals overcome the barriers to entering the labour market and remaining within it. Requirements are set by the prime providers – mostly from the private sector – who are delivering the Work Programme and who have the authority to refer clients back to Jobcentre Plus for sanctioning if they fail to comply. These prime providers are expected to subcontract other organisations to provide specialist employment support, for example, to disabled people. For individuals who are mandated to participate in such programmes (which last up to two years) as a condition of claiming

Universal Credit, the ‘carrot’ of employment support – which may not be deemed appropriate at that particular point in time – is accompanied by a ‘stick’, the loss of benefits if requirements attached to participating in the programme are not fulfilled.

The Work Programme is relatively new but there is evidence that sanctions are being used for a significant minority of participants (DWP, 2012). Between June 2011 and January 2012, 565,000 claimants were referred to the programme and 92 per cent of them were ‘attached’ to the programme. During the same period, there were 91,000 referrals for sanctions, of which 38 per cent resulted in an immediate ‘adverse’ decision (i.e. loss of benefits). In total, 22,260 individuals were sanctioned i.e. approximately four per cent of those ‘attached’ to the programme. Although data are broken down by different categories of claimant, it is not possible to look specifically at PDUs but evidence from research studies on the use of sanctions suggests that this group are more likely to be sanctioned with harmful consequences not only for these individuals but their families and wider society (see Wincup, forthcoming). Withdrawing benefit payments, wholly or in part, from PDUs will almost inevitably lead to hardship and place considerable financial pressure on families supporting PDUs. It furthermore, could be a contradictory policy and could undermine the ‘recovery capital’ of the individual that is now seen as essential to helping PDUs on their recovery journey and into paid employment. It could also run the risk of PDUs resorting to (re-)offending in order to compensate for lost income and might hinder them from either engaging with the benefit system in the first instance or after being sanctioned, thus denying them access to the necessary support to tackle the considerable barriers they might face in obtaining employment. In essence, sanctions are likely to be counterproductive, further excluding PDUs rather than promoting their social reintegration (Wincup, forthcoming).

Concluding comments

This article has reflected upon the implications for methadone maintenance clients of connecting drug policy (premised on the belief that work is central to recovery) with welfare policy (which at present is preoccupied with reducing worklessness). In short, our exploration of the potential impact of welfare reform, and specifically the Work Programme, on methadone maintenance clients suggests that the government’s commitment to transforming the provision of welfare may well undermine its efforts to promote recovery from drug use. We have argued that welfare reform has yet to promote the recovery of PDUs participating in methadone maintenance programmes. It has been acknowledged that PDUs face multiple barriers to employment, including stigmatisation, which necessitates solutions that are tailored at an individual level and at a structural level. There are real concerns, however, about whether the Work Programme can be appropriately responsive to the particular, and to some extent unique, needs of PDUs undertaking methadone maintenance treatment and whether it can impact upon discriminatory workplace practices. In other words, the ‘work first’ approach is insufficiently flexible to accommodate the needs of individual drug users in recovery, and is combined with a ‘social deficit’ model which limits the role of the state (or their contracted provider) to offering opportunities such as skills training or work experience schemes rather than tackling the thorny issue of addressing the systematic exclusion of PDUs from the paid labour market.

We have argued that the introduction of PbR into this contentious area has the potential to exacerbate the problems described above. The rather crude funding system militates against the provision of personalised support since it encourages contracted organisations to ‘park’ those on methadone maintenance programmes who, comprise only a minority of the jobseekers

expected to participate in the Work Programme each year. There is also the risk that employment support will be divorced from drug treatment since the former will be provided through the Work Programme and the latter through community-based drug agencies. This runs the risk of a fragmented approach, representing a shift away from the partnership working in the drugs field which has become accepted as the most effective means to produce positive treatment outcomes (NTA, 2004). In addition, the UK government’s pursuit of its localism agenda means that those engaged in methadone maintenance programmes could receive very different forms of provision dependent on area of residence, which may not be consistent with best practice.

In terms of further research agendas, more needs to be done to develop the evidence base in this area, both in the UK and elsewhere. Despite the substantial sums of money invested in sweeping reforms of welfare in the UK, there is little by the way of funding to allow clients to voice their experiences of the lived realities of entering or re-entering the labour market and interacting with the benefits system. Nor does there seem to be an inclination to undertake evaluation research to be able to decipher what best practice might be. Comparative analysis of what works or does not work in other jurisdictions may, of course, yield useful knowledge. This may be evidence relating to alternative forms of treatment such as heroin prescription rather than methadone maintenance. As ever, though, such evidence would have to battle against a strong, increasingly global political tide favouring increased, often tough, conditionality to tackle worklessness and a concomitant reluctance to be seen to be accommodating the behaviours of so-called problematic populations.

Conflict of interest

The authors have no conflict of interest.

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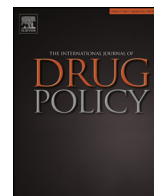
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Response

Response to Chandler et al., Substance, structure and stigma: Parents in the UK accounting for opioid substitution therapy during the antenatal and postnatal periods

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Amy Chandler and colleagues highlight and gives new voice to the fears of parents undergoing opioid substitution treatment (OST). She reports that parents on OST programs are often highly motivated by the desire to be good parents, a finding in keeping with previous research on the subject (Marsh & Cao, 2005; Taplin, Mattick, & de Vel Palumbo, 2010). These motivations are tempered by anxieties that they will be judged as inadequate parents, and their children removed. As Chandler et al.'s paper shows, parents undergoing OST are highly mindful not only of the importance of being a 'good enough' parent (Rhodes, Bernays, & Houmoller, 2010) but of the prejudice against the idea that good enough parenting is ever possible for parents using illicit drugs or undergoing treatment.

Child protection statistics go some way towards showing why these parents have good reason to be fearful. In the majority of cases where children are removed by child protection authorities, a parent's alcohol or other drug issues, mental illness or family violence (Scott, 2009) is the precipitating cause. Yet while these risk factors recur endlessly in the child protection literature, it is only rarely that the meaning of 'alcohol or other drug issues' in this context is investigated. When this does occur, it becomes clear that the impairment of parental capacity comes not from 'drugs' per se, but from the dangers associated with intoxication and withdrawal while caring for a child; extreme financial stress; and the 'complex interplay' between drug use and mental health, social support, and family environments (Dawe & Harnett, 2007: 381–2). It is in these arenas that OST can deliver some of its greatest benefits, and it is because of the capacity of OST to address the costs associated with erratic supply, withdrawal, and the financial costs of illicit drugs

that it so successful. So why, when OST precisely addresses the areas of concern around parental drug use, do the parents described in Chandler et al.'s paper, and in other research, feel pressure to remove themselves from OST?

One answer is given in OST dosing regimes, described in Chandler et al.'s paper and elsewhere (Fraser & valentine, 2008) as disruptive and stigmatising. Another is given in the inconsistent and punitive practices of (some) child protection regimes. In our own recent experience, a colleague related that a child had been removed by authorities from her family. The child was removed from their parents' care over concerns regarding one parent's possible hepatitis C status (the parent does not in fact have hepatitis C). This parent was also an OST client. Access to the case documents revealed, amongst other things, that the child had been 'vaccinated' for hepatitis C. This is, of course, not possible as no vaccine exists for hepatitis C. In this case it appears that case workers who primarily deal with parents presenting with drug and alcohol issues were unaware of basic information about hepatitis C and that the court readily accepted this incorrect evidence. In similar situations, children have been subject to care and protection orders or removed from their parents simply because case workers impose 'zero tolerance' rules about drug use.

These cases exemplify the child protection mess. Child protection systems are dominated by the twin problems of over-inclusion or false positives, whereby 'some children and families are dragged into the child protection system and are subject to unnecessary adversarial and forensic investigation'; and under-inclusion or false negatives, whereby 'some children and families that should be involved with the child protection system are not' (Parton, 2009: 61). When OST clients are brought into contact with the child protection system simply because they are MMT clients, this is an instance of over-inclusion. Under-inclusion is associated with the most notorious examples of child protection harms, when children

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die because they are not removed from dangerous environments. Over-inclusion is associated with cumulative, cascading harms. Unnecessary involvement with child protection systems is distressing for children and parents, and removal of children from parents can have life-long effects. At a systemic level, the problem of false positives is connected to the problem of false negatives. Child protection systems have finite resources, and any unnecessary investigation into families who protect their children requires resources that should be directed at protecting children who are at real risk of harm.

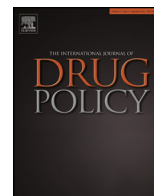
The harms done to children and parents by the incapacity of child protection systems, and health and welfare services, to respond sensitively and justly are well known (Radcliffe, 2011b). Yet while it is important that discriminatory practices in child protection and OST are identified and criticised, there are also broader forces at work. Child protection and OST are important instances of the structuring of risks and harms by social and political forces, and the embodied experience of such harms. In their reliance on technologies of risk assessment and investigation that are insensitive to the real needs of children and families, including the 'last resort' response of removing children from their parents, child protection systems structure the environment in which disadvantaged parents live. The interrelations between child protection and OST form an environment in which the benefits of OST for parents are counter-balanced by the risks to parents of surveillance, misunderstanding and unwarranted intervention.

As Chandler et al.'s paper shows, the relationship between parents and OST is intensely ambivalent. The benefits of OST in fostering 'normality', including the strategic benefits of undertaking

OST to 'prove' parenting capacity (Radcliffe, 2011a), are at odds with the social norms that define OST as other than, and less than, normal. The poignancy of this is revealed in the accounts of the parents, who are willing to tolerate the indignities of OST because of their desires to be good parents. Yet their participation in drug treatment programs brings them into contact with child protection systems of surveillance and monitoring that are much better at identifying 'risk factors', and categorising parents as deficient, than at providing meaningful assistance.

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Viewpoint

The marketing of methadone: How an effective medication became unpopular



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Introduction

Over 45 years ago Vincent Dole and Marie Nyswander published a seminal paper in JAMA that heralded the arrival of a medication for opioid dependence – a disease that previously was felt to be rarely treatable (Dole & Nyswander, 1965). Countless trials have been conducted on multiple continents and the results are always similar – methadone remains one of the most effective medications for the treatment of opioid dependence (Bruce, 2010). Despite these substantial benefits to individuals struggling with the medical problem of addiction and to the overall public health, methadone maintenance remains unpopular in the United States and in other countries. Former Mayor Guiliani of New York City, for example, voiced this unpopularity when he announced in 1998 the end of methadone in the city, accusing methadone programs of substituting one addiction for another (Swarns, 1998). What happened to methadone such that it became so unpopular and what needs to happen to change the social marketing of methadone to improve its uptake among individuals who desperately need it?

What happened?

Methadone, as an opioid, presented a problem for US regulators. The Harrison Narcotic Act of 1914, as interpreted by the courts, allowed physicians to prescribe opioids except in the case of addiction treatment. As an increasing number of individuals returned from World War II with heroin dependence, addiction related problems quickly began to escalate (Andima, Krug, Bergner, Patrick, & Whitman, 1973). In New York City, for example, between 1950 and 1961, heroin was the leading cause of death among individuals aged 15–31 (Halpern & Rho, 1966). Amidst this growing crisis, an effective treatment was needed. Dole's paper 51 years after the Harrison Narcotic Act provided data that the opioid methadone should be prescribed for the treatment of heroin addiction. The initial enthusiasm for methadone as a treatment for those deemed untreatable has waned, although the problem with opioids has not. In the US, for example, unintentional poisoning, often by opioids, is only

surpassed by automobile collisions for death caused by accidental injury (Beletsky, Burris, & Kral, 2009).

Several key issues regarding the history of methadone are critical for our understanding of the demonization of methadone in America and abroad. Individuals interested in a more detailed description of the history of methadone in the US are referred to Joseph and colleagues excellent review of this topic (Joseph, Stancliff, & Langrod, 2000). In summary, methadone was associated with (1) “hard core addicts”, (2) “criminals”, and (3) was segregated from the rest of medical care creating a perception that methadone was dangerous and should be kept out of mainstream medicine.

Early on methadone was associated with “hard core heroin addicts” – not the social marketing that would endear a medication to the nation. This association was partly the result of the stringent admission criteria necessary to start methadone. Although less stringent now, it was particularly rigid in the early days. Patients had to have 4 years of prior narcotic addiction and have failed previous treatment (Joseph et al., 2000). Although not intentional, the underlying message was that methadone is dangerous (because it is an opioid and has to be restricted to special programs) and only the ‘hard-core’ heroin addicts should be offered this treatment – in essence, methadone was a “necessary evil” and so only those “worst off” should partake.

Because so many individuals were sitting in New York City jails with heroin addiction, Dole and colleagues were asked to address this critical issue. Three years after the initial paper on methadone, Dole and others reported on the successful treatment of 750 “criminals” (Dole, Nyswander, & Warner, 1968). The association of methadone with individuals with criminal histories and the requirements that methadone be utilized only with patients of the most severe drug addiction generated a negative connotation for methadone. Rather than being seen, for example, as the medicine that can treat an affliction (as one might think of an antibiotic and pneumonia), methadone was viewed as a “necessary evil” that had to be tolerated until better things could come to light. This later view persists today when “newer” medications such as buprenorphine and depo-naltrexone are viewed as more acceptable than methadone—largely because they are less stigmatizing.

The other horrible miss-step in the marketing of methadone was the complete misunderstanding of how methadone works among some of the addiction community. Overtime the idea that methadone is simply “substituting one addiction for another”

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belied a misunderstanding of addiction and of methadone. Addiction is a neurobiological disease that is treatable with appropriate medications and behavioural therapy (Bruce, 2011; Nestler, 2001).

Finally, the requirement in the US that methadone be dispensed in special clinics with special licenses in special areas only added to the aura of methadone as dangerous and needing to be sequestered from the rest of the community. Because methadone clinics focused on the hardest to treat patients – those “hard-core” cases – a large amount of poly drug use existed in this methadone population. On going drug and alcohol use was blamed on methadone – “methadone made me crave crack” – and all things negative began to be blamed upon the medication.

The end result was a public perception that only the most desperate of addicts who are likely criminals should be allowed this dangerous medication that should be kept away from the public eye. With such a social view, why would anyone want this life saving medication?

What needs to be done?

The perception of methadone has to change. A public health campaign needs to begin that educates the public both on addiction and its treatment, including methadone as a healthy part of that treatment. Appropriate message framing is critical to this end where the message changes, for example, from “only hard core addicts should be on methadone” to “save your child’s life – use methadone.” And we should change the view from “criminals should be on methadone” to “methadone helps keep your child from going to prison”.

The inaccessibility of methadone only contributed to the negative social marketing – it was dangerous and should be restricted for the most severe cases. Methadone must be more accessible to those who need it, meaning that it should be available for the treatment of opioid dependence within primary care settings – something currently unavailable in the US. Data exists that methadone patients can do well in primary care practices (Fiellin et al., 2001). Many countries have done this successfully. It is time for the rest of the world to do it. And it is time for the US, where methadone had its debut in the treatment of heroin addiction, to expand treatment to a level that makes a difference. With opioid overdoses on the rise, further delay in expanding treatment means more deaths (Beletsky et al., 2009). How many people have to die before we expand treatment?

If methadone is allowed the opportunity to break free from the chains of the past, it can save more lives. As long as methadone

remains out of favour, however, men and women suffering with opioid dependence will continue to engage in HIV risk, criminal behaviour, and activities which hurt themselves individually and society at large.

We confirm that the manuscript has been read and approved by all the authors and that there are no other persons who satisfied the criteria for authorship but are not listed. We further confirm that the order of authors listed in the manuscript has been approved by all of us.

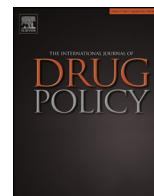
We confirm that we have given due consideration to the protection of intellectual property associated with this work.

Conflict of interest

We wish to confirm that there are no known conflicts of interest associated with this publication and there has been no significant financial support for this work that could have influenced the outcome.

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Research paper

Methadone treatment improves tuberculosis treatment among hospitalized opioid dependent patients in Ukraine

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ABSTRACT

Background: Ukraine's volatile syndemics of tuberculosis (TB) and HIV among people who inject drugs (PWIDs) introduces numerous treatment challenges for each condition, including high mortality and development of multi-drug resistant TB (MDR-TB).

Methods: A prospective, non-randomized 90-day observational study was conducted in six Ukrainian TB treatment sites to assess the effectiveness of integrating methadone maintenance (MMT) with TB treatment using: (1) 90-day TB treatment retention; (2) time to treatment discontinuation; (3) TB medication adherence; and (4) subject disposition, including mortality. Of the 110 participants enrolled, 57 received MMT and 53 did not (non-MMT).

Results: All of the primary outcomes were significantly better in MMT versus non-MMT groups, including 90-day TB treatment completion (89.5% versus 73.6%; $p = 0.031$), time to TB treatment discontinuation ($p = 0.039$) and TB medication adherence (97.1% versus 86.2%; $p < 0.001$) after controlling for death. The major reasons for treatment non-completion in the non-MMT group included death ($N = 3$), administrative discharge from the clinic ($N = 5$), loss to follow-up ($N = 2$), and arrest ($N = 4$). Overall, 90-day mortality was high (8.2%). After controlling for covariates differing between the two groups at baseline, the only independent predictor of completing 90 days of TB treatment was receipt of MMT in an integrated treatment setting (AOR = 3.05; 95% CI 1.08–8.66).

Conclusions: MMT integrated into inpatient TB treatment significantly improves retention in TB treatment and TB medication adherence among PWIDs. These findings call for policy change to increase the number of MMT sites in TB facilities and make MMT a low-threshold treatment option for opioid dependence in Ukraine.

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Background

With nearly 2 billion people infected worldwide (Glaziou, Floyd, & Raviglione, 2009), tuberculosis (TB) remains a major global public health problem and contributes significantly to morbidity and mortality. In 2010, there were 8.8 million incident TB cases, of which there were 1.1 million TB-related deaths among people not infected with HIV. Co-infection with HIV and TB, however, creates challenges in both diagnosis and treatment, thus contributing to worse treatment outcomes and mortality rates exceeding 13%. Globally, the absolute annual number of incident TB cases has continued to decrease since 2006, with incidence decreasing by 1.3% annually since 2002. Though these findings are seen across all six global reporting regions, there has been little improvement in these findings in many countries of the former Soviet Union (FSU), including

Eastern Europe and Central Asia – a region where both HIV and TB are high among drug using populations and MDR-TB is expanding (World Health Organization, 2011).

People who inject drugs (PWIDs) remain at high risk for tuberculosis (TB), including in low-, middle- and high-income countries. As a result, the twin epidemics of drug use and TB coexist in a number of countries globally. Treatment of TB among PWIDs poses a unique set of challenges for TB diagnosis and control efforts. In recognition of this special relationship the World Health Organization, the Joint United Nations Programme on HIV/AIDS, and the United Nations Office on Drugs and Crime, released guidelines to improve coordinated care for TB among PWIDs (World Health Organization, 2008). Among the recommendations is to integrate TB treatment with medication-assisted therapy for opioid dependence, and if indicated, with HIV treatment services (Sylla, Bruce, Kamarulzaman, & Altice, 2007; World Health Organization, 2008).

Ukraine, a country facing multiple challenges in the context of volatile epidemics of TB and HIV among PWIDs, faces a number of

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important challenges in optimizing treatment outcomes for each condition, including the development of multi-drug resistant TB (MDR-TB) (Dubrovina et al., 2008; Granich, 2008; Hurley, 2010; Kruglov et al., 2008; Kruk et al., 2011; Wolfe, Carrieri, & Shepard, 2010). Though Ukrainian MDR-TB rates are not fully known, one regional study conducted in 2006 identified a range from 15.5% to 41.5% among newly identified and previously treated TB cases in community settings, respectively (Dubrovina et al., 2008). HIV prevalence among PWIDs in Ukraine is estimated to be 21.5% (Ministry of Health of Ukraine, 2012), while TB prevalence data among PWIDs in Ukraine are currently not available, since no comprehensive assessment has been done. Nonetheless, PWIDs remain at high risk of developing active TB, especially in settings with high HIV and TB prevalence (Deiss, Rodwell, & Garfein, 2009; Getahun, Gunneberg, Sculier, Verster, & Raviglione, 2012). Officially reported TB case notification rate in Ukraine, likely an under-representation of the true epidemic, was 74 per 100,000 population in 2010 – more than twice the average rate for the European region that same year (World Health Organization, 2011). Though multiple factors contribute to the development of MDR-TB among PWIDs, poor adherence to therapy and discontinuation of treatment may all contribute to poor outcomes and such factors have been described as consequences of the lifestyle patterns of PWIDs, including the need to procure drugs on daily basis (Pablos-Mendez, Knirsch, Barr, Lerner, & Frieden, 1997; Story, Murad, Roberts, Verheyen, & Hayward, 2007).

In recognition that opioid dependence is a chronic, relapsing condition, this study compared the concomitant treatment of TB and opioid dependence using MMT, an evidence-based pharmacological treatment for opioid dependence, with TB patients not receiving MMT. To describe and understand better how to optimally organize TB treatment among PWIDs in Ukraine, the research compared 90-day treatment completion, time to TB treatment discontinuation, TB medication adherence and treatment disposition (including death) among hospitalized pulmonary TB patients with co-morbid opioid dependence being treated in an integrated care setting.

Methods

Study sites

A 90-day observational study was conducted in six TB treatment sites in Ukraine between December 2011 and April 2012. Directly observed therapy (DOT) is required for all TB patients in Ukraine according to the Ministry of Health guidelines. Unlike in other countries, the Ukrainian guidelines allow for TB patients who are deemed “unstable” (homeless, active drug users, previous treatment defaulters, etc.) or who have MDR-TB to be forcibly “hospitalized” for prolonged periods of time to reduce risk of transmission to others. This approach is the standard of care and common in most FSU countries. Medication acceptance and adherence, however, remains voluntary but is a condition for community release. As part of Ukraine’s new efforts to expand MMT throughout the country, it was made available in some TB hospital sites. MMT sites in Mykolayiv, Odesa and Kherson were selected because of the availability of comprehensive and integrated care sites that included the additional provision of MMT for hospitalized pulmonary TB patients. The comparison group was recruited from TB treatment hospitals in Kyiv, Donetsk, and Dnipropetrovsk where MMT was not provided within TB treatment settings. The standard of care includes consultation with a drug addiction specialist, if agreed by the TB doctor, and detoxification is prescribed by the doctor if indicated and agreed upon by the patient.

Study participants

A total of 110 participants were enrolled and prospectively followed for 90 days: $N=57$ in the study (MMT) group and $N=53$ in the comparison (non-MMT) group. All study participants met the following inclusion criteria: (1) were ≥ 18 years; (2) met ICD-10 criteria for opioid dependence (Janca, Ustun, Early, & Sartorius, 1993); (3) had confirmed pulmonary TB diagnosis; (4) were prescribed at least 90 days of inpatient TB treatment from baseline enrolment; and (5) provided written informed consent. The fourth criterion was established in order to standardize outcome measurement, given that the TB status of patients may differ based on factors such as new or repeated treatment, different levels of underlying drug resistance, and duration and severity of TB disease which were not fully measured in this study.

Our final analytical sample compared those who were prescribed MMT with those who were not. No minimum MMT dose was required for study entry and dose varied considerably. All MMT was initiated at the time of pulmonary TB diagnosis in the integrated care site. Eight study participants in Odessa, Mykolayiv and Kherson, however, were ultimately analysed in the non-MMT group because they either refused MMT or did not meet legally established eligibility criteria for MMT enrolment in Ukraine (at least two previous documented unsuccessful treatment attempts using behavioural counselling). Assigning them to MMT would have incorrectly examined the impact of MMT (which they never received) and removing them from the analysis did not alter the final outcomes. All individuals enrolled in the study were assigned an anonymous code, which was linked with the data collection instruments. Participants were paid 80 UAH (~\$10 USD, 2012 exchange rate) for completion of interviews.

Data collection

Data were collected at baseline and throughout 90 days of observation. Baseline interviews included patient demographic and social characteristics, drug and alcohol use, psychiatric conditions, previous HIV testing and current status, prescription of antiretroviral therapy (ART), previous TB treatment history and attitudes toward TB treatment (both groups) and MMT (MMT group only). Drug use portions were adapted from the Addiction Severity Index (ASI-lite), modified to include local Ukrainian drug use (McLellan, Luborsky, Woody, & O’Brien, 1980).

Chart reviews after 90 days recorded HIV testing, ART prescription, DOT record of taking observed TB and methadone medications, and reasons for treatment discontinuation (recorded by the TB doctor). Adverse side effects were not systematically recorded or obtained.

The TB treatment outcomes (dependent variables) included: (1) percentage of patients completing 90 days of TB treatment and continuing with treatment at the end of the study; (2) time to discontinuation of TB treatment; (3) percentage of dosage of TB medications taken over the 90 days of observation; and (4) disposition of study participants, including death and the reasons for drop-out. For the purpose of this study, treatment discontinuation was defined as not receiving TB medications for two weeks or more. For time-based measurements, the date of the last dose of TB medication taken was used for the date of treatment discontinuation.

Data analysis

Statistical analyses were performed using SPSS software for Windows (version 19.0, Chicago, IL). Characteristics of study subjects were mostly analysed as categorical variables, and collapsed where frequencies were small. Age, duration of drug use, number of TB medications prescribed, and number of days of hospitalization in

the current treatment episode before the baseline assessment were dichotomized by their median values. The significance of difference between the MMT and non-MMT groups was analysed using Chi-square test or independent sample *T*-test as appropriate.

Kaplan–Meier analysis was performed for the two groups to depict time (number of days) to treatment discontinuation over 90 days of observation. Log rank (Mantel–Cox) test of equality of survival distributions was used to analyse the significance of survival difference between the MMT and non-MMT groups.

The bivariate and multivariate binary logistic regression analysis was conducted to test the association between the 90-day TB treatment completion prevalence and a number of independent covariates, including receiving MMT, and those baseline characteristics that were significantly different at $p < 0.05$ between the MMT and non-MMT groups. For the final multivariate regression model presented below, a p -value of 0.1 was used to enter a model and 0.05 to retain a covariate variable as significant. In all tables, the p -values are bolded if $p < 0.05$.

Ethical statement

All participants provided signed informed consent and were assigned a unique identifier. After 90 days of observation, the links between the unique identifier and the patient identifier were destroyed. The Institutional Review Board at the Ukrainian Institute on Public Health Policy approved the study.

Results

The baseline characteristics of the total study sample, MMT and non-MMT groups are presented in Table 1. The sample was mostly men (80.1%) in their mid-30s (median age = 36.0 years). The MMT group, compared to the non-MMT group, was significantly older (61.4% vs. 35.8% over 36 years old, $p = 0.007$), and had a longer average lifetime duration of drug use (64.9% vs. 32.1% had used drugs for more than 17 years, $p = 0.001$). The most commonly used opioid was liquid opioid prepared from acetylated poppy straw. A higher percentage of non-MMT study participants had been using amphetamines during the 30 days prior to hospitalization (24.5% vs. 5.3%, $p = 0.004$).

The mean baseline methadone dose in the MMT group was 81.2 ± 40.0 mg (range: 12–225 mg). During the study period no methadone side effects were recorded, no changes in dosage prescribed, and MMT adherence among this group was 100% (data not shown). Patients on MMT generally assessed the quality of treatment positively: 52.6% were fully satisfied with the program, 45.6% were partially satisfied, and only 1.8% were dissatisfied. Nearly three quarters (73.7%) said that MMT was very helpful in reducing illegal drug use while 19.3% indicated it was somewhat helpful, and 7.0% reported it was not helpful at all (data not shown).

Of all participants, only 19.1% were newly diagnosed TB cases (similar between groups), with the remaining sample having been previously treated for TB (previous defaulters). Overall, 37.3% of the study participants were prescribed at least one second-line TB medication. It is unknown whether treatment regimens were tailored to drug resistance profile in this sample; however there were several cases with documented MDR-TB, for which isoniazid and/or rifampicin were prescribed. On average, the MMT group was prescribed significantly fewer TB medications (mean = 3.8 ± 1.2 vs. 4.4 ± 1.0 medications in the non-MMT group, $p = 0.015$) and had remained in the hospital longer than the comparison group (mean = 173.1 ± 170.4 days vs. 73.5 ± 90.2 days, respectively, $p < 0.001$).

The prevalence of HIV in this sample was very high – 68.2% self-reported being HIV-infected or were tested HIV-positive

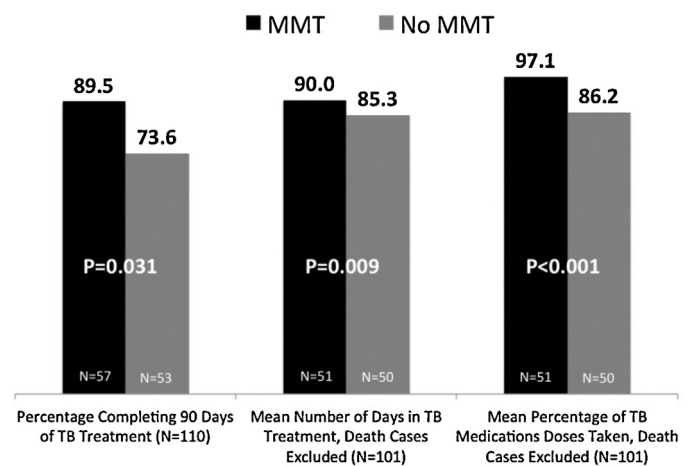


Fig. 1. Tuberculosis treatment outcomes, stratified by receipt of methadone.

during hospitalization, while the status of 18.2% of participants was unknown. Two thirds (66.7%) of patients known to be HIV-infected were prescribed ART.

All three primary outcomes differed significantly between the MMT and non-MMT groups (Fig. 1). The percentage of patients completing at least 90 days of treatment was higher in the MMT than non-MMT group (89.5% vs. 73.6%; $p = 0.031$). In the MMT group, the remaining 10.5% ($N = 6$) of participants who did not complete 90 days of treatment died during the study period, and aside from death, retention was 100%. In the comparison group, however, 5.7% ($N = 3$) patients died, while 20.7% ($N = 11$) dropped out for the following reasons: arrested ($N = 4$), discharged from hospital due to violation of rules ($N = 5$), and lost to follow-up ($N = 2$). All hospital violations resulting in discharge involved use of alcohol or illegal drugs, and alleged violence towards clinic personnel in one case.

The mean number of days receiving TB treatment and mean percentage of prescribed TB medication dosages taken differed significantly between the two groups (Fig. 1, death cases excluded). Excluding death, MMT patients remained in treatment significantly, though modestly longer than non-MMT patients (90.0 ± 0 vs. 85.3 ± 12.1 days respectively; $p = 0.009$). Similarly, MMT patients had significantly higher adherence to prescribed TB medications than the non-MMT group (mean = $97.1 \pm 5.2\%$ vs. $86.2 \pm 14.4\%$ of TB medication doses taken; $p < 0.001$; death cases excluded). Even after excluding both mortality and drop-outs, adherence to prescribed TB medications still differed significantly between the two groups (mean = $97.1 \pm 5.2\%$ vs. $91.3 \pm 7.2\%$ of doses taken respectively, $p < 0.001$ (data not shown).

The time to discontinuation of TB treatment differed significantly between the two groups and is depicted in Fig. 2. Of note, retention in the non-MMT group dropped sharply after the 60th day of observation.

After controlling for all covariates significantly different at baseline, receipt of MMT was the only predictor significantly associated with 90-day TB treatment completion (Table 2) and while having used drugs for shorter duration approached significance for being negatively correlated with this outcome, it was collinear with receipt of MMT and affected the magnitude of the impact of MMT. These findings were robust irrespective of whether the 8 patients from MMT/TB settings who refused or were ineligible for MMT were assigned to the non-MMT group (data not shown).

Though there were no objective measures of improvement with regard to TB disease progression, the MMT group was significantly more likely than their counterparts to subjectively report that they believed their TB had improved after 90 days of treatment (80.4% vs. 62.4%; $p = 0.036$, data not shown).

Table 1
Characteristics of study participants (N = 110).

Characteristic	Total sample (N = 110)	MMT (N = 57)	No MMT (N = 53)	p-value
Site				
Mykolayiv	20 (18.2%)	16 (28.1%)	4 (7.5%)	<0.001
Odessa	25 (22.7%)	22 (38.6%)	3 (5.7%)	
Kherson	20 (18.2%)	19 (33.3%)	1 (1.9%)	
Kyiv	12 (10.9%)	0 (0%)	12 (22.6%)	
Donetsk	13 (11.8%)	0 (0%)	13 (24.5%)	
Dnipropetrovsk	20 (18.2%)	0 (0%)	20 (37.7%)	
Age (median = 36.0 years)				
≤36 years old	56 (50.9%)	22 (38.6%)	34 (64.2%)	0.007
>36 years old	54 (49.1%)	35 (61.4%)	19 (35.8%)	
Gender				
Female	21 (19.1%)	10 (17.5%)	11 (20.8%)	0.669
Male	89 (80.9%)	47 (82.5%)	42 (79.2%)	
Education ^a				
5–9 years	30 (27.3%)	12 (21.1%)	18 (34.0%)	0.311
10–12 years	38 (34.5%)	21 (36.8%)	17 (32.1%)	
Higher education or professional technical	42 (38.2%)	24 (42.1%)	18 (34.0%)	
Married ^b				
Yes	27 (24.5%)	14 (24.6%)	13 (24.5%)	0.997
No	83 (75.5%)	43 (75.4%)	40 (75.5%)	
Employed when hospitalized				
Yes	24 (21.8%)	13 (22.8%)	11 (20.8%)	0.838
No	86 (78.2%)	44 (77.2%)	42 (79.2%)	
Income				
None	35 (31.8%)	19 (33.3%)	16 (30.2%)	0.723
Any	75 (68.2%)	38 (66.7%)	37 (69.8%)	
Living arrangements when hospitalized				
Alone	17 (15.5%)	8 (14.0%)	9 (17.0%)	0.747
With partner	31 (28.2%)	15 (26.3%)	16 (30.2%)	
With relatives/friends	58 (52.7%)	31 (54.4%)	27 (50.9%)	
Homeless/lives in hospital	4 (3.6%)	3 (5.3%)	1 (1.9%)	
Lifetime duration of drug use (median = 17.0 years)				
≤17 years	56 (50.9%)	20 (35.1%)	36 (67.9%)	0.001
>17 years	54 (49.1%)	37 (64.9%)	17 (32.1%)	
Any lifetime amphetamines use				
Yes	45 (40.9%)	20 (35.1%)	25 (47.2%)	0.198
No	65 (59.1%)	37 (64.9%)	28 (52.8%)	
Amphetamines use 30 days prior to hospitalization				
Yes	16 (14.5%)	3 (5.3%)	13 (24.5%)	0.004
No	94 (85.5%)	54 (94.7%)	40 (75.5%)	
HIV status				
Positive	75 (68.2%)	39 (68.4%)	36 (67.9%)	0.679
Negative	15 (13.6%)	9 (15.8%)	6 (11.3%)	
Status unknown	20 (18.2%)	9 (15.8%)	11 (20.8%)	
Ever received antiretroviral therapy (N = 75)				
Yes	50 (66.7%)	23 (59.0%)	27 (75.0%)	0.141
No	25 (33.3%)	16 (41.0%)	9 (25.0%)	
History of incarcerations				
Yes	94 (85.5%)	50 (87.7%)	44 (83.0%)	0.485
No	16 (14.5%)	7 (12.3%)	9 (17.0%)	
Mean number of incarcerations (±SD), among those, who have ever been incarcerated (N = 94, Range: 1–12)	2.87 ± 2.01	2.98 ± 2.18	2.75 ± 1.82	0.583
Tuberculosis treatment status				
New diagnosis	21 (19.1%)	10 (17.5%)	11 (20.8%)	0.669
Previously treated	89 (80.9%)	47 (82.5%)	42 (79.2%)	
Prescribed TB treatment				
First line (or unknown)	69 (62.7%)	38 (66.7%)	31 (58.5%)	0.376
At least one second line medication	41 (37.3%)	19 (33.3%)	22 (41.5%)	
Number of TB medications prescribed at baseline (median = 4 drugs, N = 108)				
<4 drugs (2–3 drugs)	31 (28.7%)	22 (38.6%)	9 (17.6%)	0.016
≥4 drugs (4–6 drugs)	77 (71.3%)	35 (61.4%)	42 (82.4%)	
Mean number of TB medications prescribed at baseline (± SD), (Range: 2–6)	4.07 ± 1.13	3.82 ± 1.17	4.35 ± 1.04	0.015

Table 1 (Continued)

Characteristic	Total sample (N = 110)	MMT (N = 57)	No MMT (N = 53)	p-value
Duration of inpatient stay at the baseline date (median = 75.0 days)				
≤75 days	55 (50.0%)	16 (28.1%)	39 (73.6%)	<0.001
>75 days	55 (50.0%)	41 (71.9%)	14 (26.4%)	
Mean duration of inpatient stay at the baseline date (days, ±SD), (Range: 0–706)	125.1 ± 145.9	173.1 ± 170.4	73.5 ± 90.2	<0.001
Mean methadone dose (mg, ±SD), (Range: 12–225)	–	81.2 ± 40.0	–	–

Results are significant at the 0.05 level.

^a Indicated highest level of education attained.

^b Registered, unregistered marriage and having a partner; Unmarried, single, separated or widowed, including unknown status.

Though not a primary outcome for this study, 90-day mortality was 8.2% (N=9); of these patients, six were HIV-infected, one was HIV-negative, and two had unknown HIV status. None of HIV-infected patients who died during the course of the study was prescribed ART (Table 3). The cause of death was not documented. Moreover, though not a pre-determined outcome for this study, many patients, especially those who died, were receiving regimens deemed insufficient to treat their TB, especially for those with MDR-TB.

Discussion

Public health would dictate that successful TB treatment should be tailored to meet the needs of all patients with active disease. Thus, in settings like Ukraine where HIV, TB and opioid dependence are syndemic, successful TB treatment strategies to curtail its epidemic spread among PWIDs and the general community must simultaneously address all three conditions to optimize treatment outcomes. Failure to complete treatment for active TB and poor or intermittent compliance with all medications in multi-drug regimens are two principal causes of treatment failure and the emergence of MDR-TB (Mahmoudi & Iseman, 1993). Such outcomes are especially concerning for PWIDs as HIV infection and crowded living conditions co-exist in congregate settings like prisons (reported by 85% of our sample). These are prevalent and

magnify the risks associated with increased transmission and resistant disease.

To the best of our knowledge, this is the first study assessing the 'real-world' effectiveness of MMT in improving a number of TB treatment outcomes among PWIDs. This is especially crucial in Ukraine, a country with an emerging MDR-TB epidemic and where HIV and opioid dependence are common co-occurrences (Dubrovina et al., 2008; Granich, 2008; Ministry of Health of Ukraine, 2012). First and foremost, MMT improved 90-day treatment completion and duration of TB treatment. Absolute adherence to TB medications was also significantly higher in those receiving MMT, even after censoring for deaths and drop-outs. These findings have important implications for treating patients with at least two co-morbid conditions, specifically TB and opioid dependence, and in many cases including HIV. They support the need for integration of services previously described by Sylla et al. (2007) and recommended by international authorities (World Health Organization, 2008). Recent data from Ukraine suggest that compared to non-integrated, integrated care sites collectively result in a number of quality healthcare indicators, and also improve outcomes independently for HIV, TB or opioid dependence (Bachireddy et al., 2013).

Though a number of studies confirm that PWIDs are more likely to have latent and active TB (Deiss et al., 2009; Getahun et al.,

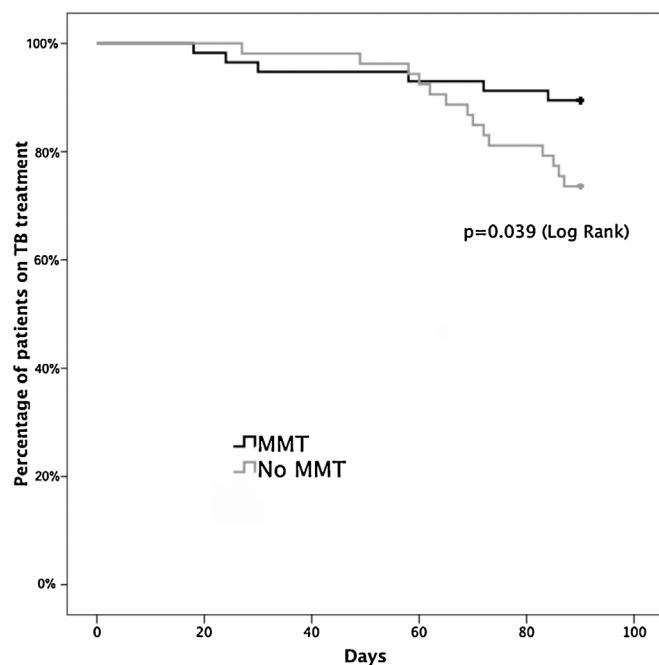


Fig. 2. Time to discontinuation of TB treatment over 90-day observation period.

Table 2

Predictors of 90-day retention on tuberculosis treatment.

Covariates	Bivariate association OR (95% CI)	Adjusted OR (95% CI)
Methadone maintenance treatment		
No	Referent	Referent
Yes	3.05 (1.08–8.66)	3.05 (1.08–8.66)
Site		
Kherson	Referent	
Mykolayiv	2.25 (0.36–13.97)	
Odessa	N/A (100% completion)	
Kyiv	0.25 (0.05–1.21)	
Donetsk	0.40 (0.08–1.91)	
Dnipropetrovsk	1.42 (0.27–7.34)	
Age		
>36 years old	Referent	
≤36 years old	0.64 (0.24–1.71)	
Lifetime duration of drug use (in years)		
>17 years	Referent	
≤17 years	0.38 (0.13–1.06)	
Amphetamines use 30 days prior to hospitalization		
Yes	Referent	
No	1.63 (0.64–5.69)	
Number of tuberculosis medications prescribed at baseline		
≥4 (4–6 drugs)	Referent	
<4 (2–3 drugs)	1.36 (0.45–4.10)	
Duration of inpatient stay before the study observation period (days)		
>75 days	Referent	
≤75 days	0.78 (0.30–2.07)	

Results are significant at the 0.05 level.

Table 3
Selected characteristic of mortality cases among study participants.

#	MMT	Site	Number of days in hospital before the study	Number of days in study before death	HIV-status	ART prescription	TB case status	Drug resistance status	Prescribed TB medications
1	Yes	Mykolayiv	101	72	Negative	N/A	Previously treated	MDR-TB	H, R
2	Yes	Mykolayiv	180	58	Positive	No	Previously treated	MDR-TB	E, Z, Ox, Km, PAS, Pt
3	Yes	Kherson	14	84	Unknown	N/A	Previously treated	MDR-TB ^a	H, E, Z, Lx
4	Yes	Kherson	429	18	Positive	No	Previously treated	MDR-TB ^a	H, Z, PAS
5	Yes	Kherson	45	24	Positive	No	New diagnosis	Unknown	S, H, E, Z, Ox
6	Yes	Kherson	470	30	Unknown	N/A	Previously treated	MDR-TB ^a	H, Lx
7	No	Kyiv	14	73	Positive	No	Previously treated	MDR-TB ^a	H, R, Z, E, S
8	No	Donetsk	0	58	Positive	No	Previously treated	Unknown	H, R, Z, E, S
9	No	Dnipropetrovsk	87	60	Positive	No	Previously treated	MDR-TB	H, R, Z, E, Km

MMT, methadone maintenance treatment; N/A, not applicable; ART, antiretroviral therapy; TB, tuberculosis; H, isoniazid; R, rifampicin; E, ethambutol; Z, pyrazinamide; Ox, ofloxacin; Km, kanamycin; PAS, para-aminosalicylate sodium; Pt, protionamide; Lx, levofloxacin; S, streptomycin.

^a Clinically suspected.

2012), one study from New York showed that PWIDs and those who were homeless were independently associated with TB treatment non-adherence and non-adherent patients not only took longer to treat, but were more likely to develop MDR-TB (Pablos-Mendez et al., 1997). Thus, the findings from this study suggest that in the absence of MMT, PWIDs are more likely to have poorer short-term TB treatment outcomes and longer studies are warranted to determine if such differences extend beyond the 90 day observation in this study.

Also, to our knowledge, integrating MMT and DOT for active TB has not previously been examined, unlike the case for latent TB infection. In one study of patients with latent TB infection (LTBI), providing MMT with onsite DOT was associated with a four-fold improvement of isoniazid preventive treatment (IPT) completion (Batki, Gruber, Bradley, Bradley, & Delucchi, 2002). In another New York-based study, providing IPT for LTBI and DOT in MMT programs in the U.S. has been shown to be both an effective (Gourevitch, Wasserman, Panero, & Selwyn, 1996) and cost-effective TB prevention intervention (Snyder et al., 1999) among PWIDs. Description of TB treatment for patients receiving and not receiving MMT, aside from a small sample ($N = 12$) in the U.S. (Gourevitch et al., 1996), has not been empirically assessed until now. MMT through its reduction in illicit opioid use and related reductions in illegal behaviours and improvements in retention in care is a crucial strategy for managing TB and other co-morbid conditions among PWIDs (Altice, Kamarulzaman, Soriano, Schechter, & Friedland, 2010). Thus, these findings provide empiric support for and further galvanize international recommendations that TB services, including treatment of active TB, should be integrated with MMT programs.

A number of baseline differences were noted between our two study groups. The MMT group was older, had used drugs longer, was prescribed fewer TB medications, had longer previous hospitalization for TB, and lower use of amphetamines in the 30 days before hospitalization. In the final multivariate model where all of these differences were controlled, however, only receipt of MMT remained associated with higher retention in TB treatment. These differences raise important policy implications for future TB treatment among PWIDs.

Though buprenorphine maintenance treatment was started earlier in Ukraine (Bruce, Dvoryak, Sylla, & Altice, 2007), MMT began in 2008, and the first MMT program integrated into a TB-facility was launched in 2009. Out of 109 inpatient TB clinics in Ukraine, only 11 provide MMT, with the majority having only a few clients each. According to Ukrainian legislation, the distribution of methadone is under very strict control, and can be organized only with the permission of the Ministry of Health. Moreover, the penalties for violations of the Law on Narcotic Drugs Turnover by prescribing physicians in Ukraine are very serious (Hurley, 2010). Even minor technical mistakes made by medical staff can have serious

consequences for the medics involved. Police also create additional difficulties for MMT clients (Mimiaga et al., 2010) and threaten medical staff (United States Department of State, 2011). For these reasons, the administrators of the majority of TB facilities in Ukraine prefer not to establish MMT sites within their clinics. In addition to the strict control over medical personnel, Ukrainian regulations regarding prescription of MMT require patients to have failed supervised opioid withdrawal (i.e. detoxification) at least twice previously and to be officially registered by the Narcology Centres where employment restrictions exist and driver's licenses can be revoked (Izenberg & Altice, 2010; Bojko, Dvoriak, & Altice, 2013). As such, Ukrainian MMT patients tend to be older and with longer-term drug use. After controlling for such variables in our study, however, neither age nor duration of drug use affected retention in TB treatment. This raises the important issue of changing current regulations to relax eligibility criteria and to remove mandatory registration practices. It also highlights the need to increase the number of sites where MMT and TB treatment are co-located and more closely aligned with international standards. Research suggests that individuals dependent on opioids for two years or longer or whose opioid use severity has resulted in drug injection fare better when prescribed MMT (Amato et al., 2005).

Though not a primary outcome, the 90-day mortality of 8.2% observed in this study is exceedingly high—amortized 32.8% annual mortality since mortality occurred at all observed time points. This finding is disturbingly in line with the overall high death rate recorded in the cohorts of patients with TB in Ukraine. In 2009, up to 13% of new smear-positive and 14% of previously treated TB patients died during the course of treatment (the duration of treatment may vary, but the standard duration is six to eight months). In comparison, death rates among new and previously treated TB cases in Romania were 4% and 10%, in Poland – 5% and 5%, and in Georgia – 3% and 5%, respectively (World Health Organization, 2011). The high mortality overall may have been related to a number of factors, including co-morbid HIV infection and the high prevalence of MDR-TB (Table 1). Why mortality was significantly higher in the MMT group, however, may have been related to patients being more ill, as evidenced by a longer previous hospitalization, having been prescribed fewer or insufficient TB medications in settings with probable MDR-TB and the lack of provision of ART in the setting of HIV/TB co-infection (Table 3). Larger sample sizes and more detailed exploration of causes of death are warranted to provide further insight.

This study is the first to demonstrate that provision of MMT for patients with pulmonary TB results in improved short-term TB treatment outcomes. A number of important limitations should be noted, including a non-random sample, recruitment from among hospitalized patients, relatively small sample size and baseline differences in patients and sites. While it would have been optimal

to randomize patients to MMT, this was not feasible due to ethical concerns about the need to provide MMT to all eligible patients as treatment for opioid dependence. Instead, sites were selected based on the availability of integrated care or non-availability of MMT. Despite the many differences noted between study participants in both groups, we were able to control for baseline differences in our analyses. Though the sample only included 110 study participants, to our knowledge, it is the largest observational sample examined to date of patients with pulmonary TB and opioid dependence and provides the first empirical evidence of prescribing MMT concomitant with TB treatment. Globally, most patients with pulmonary TB do not remain hospitalized for prolonged periods and this reduces the generalizability of the study findings. The TB treatment approach described here, however, is common throughout countries of the FSU in Eastern Europe and Central Asia, especially where there are emerging serious MDR-TB issues among PWIDs.

We were unable to disentangle the impact of MMT retention or MMT dose on TB treatment outcomes for a number of reasons. First, MMT adherence among those prescribed was essentially 100%. Second, while it would be seductive to stratify by MMT dose, (dose ranged between 12 and 225 mg), it is well-known that rifampicin markedly reduces methadone levels (Altice et al., 2010; Niemi, Backman, Fromm, Neuvonen, & Kivisto, 2003) and not all patients were on rifampicin due to high levels of MDR-TB. Thus, future studies should disentangle the impact of quality of prescription of MMT on TB treatment outcomes either through enrolment of larger sample sizes and/or measuring the impact of methadone dose on TB treatment outcomes.

Despite the social stabilization intended through hospitalization of patients who would otherwise be deemed at high risk for discontinuing therapy, this study demonstrated significantly improved TB-related outcomes by providing MMT in addition to addressing other destabilizing factors like homelessness. As such, our findings represent the most conservative possible outcome given the added stability found in a supervised setting. Future studies should examine patients who transition from hospitals to community to determine if MMT continues to improve outpatient TB treatment outcomes. Also important is examination of the reduction within hospital of TB transmission, to compare with TB treatment outcomes for those whose TB is managed simultaneously through provision of MMT in community-based settings. Similar studies of HIV-infected opioid dependent prisoners who are transitioning to community affirm the benefit of buprenorphine treatment in improving HIV treatment outcomes (Springer, Qiu, Saber-Tehrani, & Altice, 2012). Also, integration of buprenorphine into HIV treatment settings improves a number of HIV treatment outcomes, including receipt of ART, improvements in CD4 and levels of viral suppression (Altice et al., 2011). Together, these findings build on previous work where simultaneous management of both conditions optimizes the effectiveness of treatment. Importantly, we cannot comment whether organizational factors associated with integrating MMT into TB treatment settings may explain some of the outcomes. Organizational issues for MMT, HIV and TB integration have been previously described (Sylla et al., 2007) and recent data suggest improved quality health indicators for all three conditions when MMT is provided in integrated treatment settings in Ukraine (Bachireddy et al., 2013).

Another topic for future research is the overall assessment of the quality and appropriateness of TB treatment in Ukraine, with a focus on PWIDs and especially those who are co-infected with HIV. Based on the observations from this study, we hypothesize that the quality of TB treatment might undermine health outcomes of such patients. Notwithstanding these limitations, this study provides empiric support for providing MMT (or other evidence-based treatment for opioid dependence) for TB patients who also have opioid dependence. For MMT to provide benefit, however, it must

be expanded more broadly to patients in TB treatment settings and to those who do not currently meet extremely stringent criteria for MMT in Ukraine.

Conclusions

The study demonstrates that MMT integrated with inpatient TB treatment significantly improves retention in TB treatment and adherence to TB medications among PWIDs. After controlling for potential confounders, the receipt of MMT remained the only predictor of improved 90-day TB treatment completion. These results are generally in line with the findings about the role of MMT in improving adherence to HIV treatment and treatment of LTBI among PWIDs elsewhere. The results of this study highlight a need for policy changes to increase the number of MMT sites available within TB treatment facilities and to make MMT a low-threshold treatment option for opioid dependence for TB patients in Ukraine.

Author contributions

S.D. and O.M. conceived and designed the experiments; S.D. performed the experiments; O.M. and F.L.A. analysed and interpreted the data; O.M., F.L.A., and S.D. wrote the paper.

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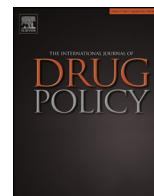
Conflict of interest statement

The authors report no conflict of interests.

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Research paper

Excusing exclusion: Accounting for rule-breaking and sanctions in a Swedish methadone clinic



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ABSTRACT

Background: Methadone maintenance treatment has been subjected to much debate and controversy in Sweden during the last decades. Thresholds for getting access are high and control policies strict within the programmes. This article analyses how professionals working in a Swedish methadone clinic discuss and decide on appropriate responses to clients' rule-breaking behaviour.

Methods: The research data consist of field notes from observations of three interprofessional team meetings where different clients' illicit drug use is discussed. A micro-sociological approach and accounts analysis was applied to the data.

Results: During their decision-oriented talk at the meetings, the professionals account for: (1) sanctions, (2) nonsanction, (3) mildness. In accounting for (2) and (3), they also account for clients' rule-breaking behaviour. Analysis shows how these ways of accounting are concerned with locating blame and responsibility for the act in question, as well as with constructing excuses and justifications for the clients and for the professionals themselves.

Conclusion: In general, these results demonstrate that maintenance treatment in everyday professional decision-making, far from being a neutral evidence-based practice, involves a substantial amount of professional discretion and moral judgements. Sanctions are chosen according to the way in which a deviance from the rules is explained and, in doing so, a certain behaviour is deemed to be serious, dangerous and unacceptable – or excusable.

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Introduction

Methadone maintenance treatment (MMT), where people addicted to heroin are prescribed a drug that replaces and blocks the pharmacological effects of opiates, has been subjected to much debate and disagreement in Sweden during the last decades. The knowledge regarding MMT is primarily based on medical research, where there is strong support for methadone being the most efficient one (Ward, Mattick, & Hall, 1994). It is the only evidence-based treatment for opiate addiction that is recommended by the Swedish National Board of Health and Welfare (NBHW, 2007). However, limited attention has been paid to the everyday practices of local methadone clinics. Previous research on participants' experiences of MMT indicates that it is regarded as a controlling, stigmatizing and patronizing practice (Fraser, 2006; Järvinen & Miller, 2010). Furthermore, research shows that there is a discrepancy between the attitudes of the clients and those of the staff concerning e.g. treatment goals and treatment focus (Fraser & Valentine, 2008). However, scant attention has been paid to how the regulatory

framework governing MMT is interpreted and implemented in the everyday work at local methadone clinics (Dahl, 2007). The experiences of staff and clients of the delivery and the receipt of counselling and support services have been investigated (Lilly, Quirk, Rhodes, & Stimson, 1999), but the processes involved in professional decision-making regarding individual clients have received very little attention.

This study aims at filling some of the gaps in the research literature by taking a close look at a local methadone maintenance setting in Sweden. More specifically, the aim of the article is to analyse how clinic staff in their weekly team meetings, make and account for decisions on whether or not to give sanctions to rule-breaking clients. This study follows a social constructionist approach that addresses the institutional construction of clients and clienthoods as *social problems work* (Holstein & Miller, 1993, p. 169), a notion which focuses on “both interpretive structures and practice as they jointly produce everyday instances of social problems”. Within this research genre, there is a rich literature on professional/client interaction of various kinds (e.g. Mäkitalo, 2003; Silverman, 1987), and a smaller amount of studies focusing decision-oriented talk between professionals (e.g. Nikander, 2003; Taylor & White, 2000). When studying MMT as social problems work, this article is concerned with language function and use in social life, and I attempt to draw

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upon prior work examining micro level practices of client categorization in institutional settings (Juhila, Hall, & Raitakari, 2010; Juhila & Raitakari, 2010; White, 2002). Making sense of and applying nation- and organization-level policies to individual cases takes place throughout the health and welfare practices in all western welfare regimes. Indeed, “discretion is not some incidental feature; it is fundamental to the operation of any ‘viable system’” (Wastell, White, Broadhurst, Peckover, & Pithouse, 2010). Therefore, it is my contention that the ideas presented in this article are relevant not only in relation to MMT, but across human services and professional groups.

In the next section, the context, data and methodology of the research are presented and discussed. In the subsequent sections, the analysis focuses on how decisions regarding sanctions related to violations of clinic policy on the use of illicit drugs are discussed and accounted for by the professional staff in three client cases. At the outset, the three cases seem quite similar in terms of rule violations. However, as we will see, the same kind of rule-breaking behaviour can be accounted for in different ways and hence lead to different consequences. In the concluding discussion, I will elaborate on the impact of moral judgements and discretion on excluding clients, as well as discuss the implications of my study for both policy and practice.

Research context and data

After decades of conflict and disagreement, MMT was finally accepted in Sweden at the end of the 1980s (Johnson, 2007). However, it remains highly questioned and controversial. Thresholds for gaining access are high and control policies strict within the programmes. The design of Swedish methadone treatment and its regulatory framework are to a great extent the result of Sweden’s strict drug policy, with a drug free society as its ultimate goal. All use of narcotic substances without prescription is illegal. In this context, treating drug users with drugs conflicts with the national policy of a drug free society. The NBHW has published binding guidelines, including criteria for inclusion in and exclusion from the maintenance programs. To be accepted, applicants have to be at least 20 years old, have a verified duration of opiate addiction of a minimum of one year, and to have a permanent accommodation, before being admitted into treatment. Once in treatment, the control measures are initially very strict. Although MMT-clients are supposed to be treated as ordinary patients within Swedish medical care, they are surrounded by a variety of control mechanisms that have no equivalence in other areas of medicine. During the first six months, clients must visit the clinic every day to take their medication under surveillance and to deliver three urine samples per week, under the supervision of staff. No “leave” is permitted during the first year in treatment.

In an international comparison, supplementary drug use is not usually a reason for discharge from maintenance treatment. In Swedish MMT however, use of illicit drugs or prescribed medications (such as tranquilisers or sleeping pills) obtained outside the programmes is not accepted. Repeated use of supplementary drugs, even if they are prescribed by doctors outside the methadone clinic, repeated cheating with drug tests, or excessive alcohol use result in discharge from the program and three months suspension from such treatment in the whole country. The suspension, or ban, means that care responsibility for the client is transferred to the social services, where compulsory care (without methadone or buprenorphine) according to the Swedish LVM act are applicable. Research shows that these repressive elements are not limited to a Swedish context (Dahl, 2007; Fraser & Valentine, 2008). The banning period, however, is a Swedish phenomenon that has no equivalent in the international MMT environment.

Although the regulation governing Swedish MMT is the same all over the country, the operational cultures vary substantially between clinics and counties. Several clinics have adopted a zero tolerance attitude to supplementary illicit drug use, so-called relapses. This means that one single positive urine test can lead to termination of the treatment. The situation for those who are involuntarily discharged is very grave, and accidental deaths due to overdoses are not uncommon (Svensson & Andersson, 2012).

The context of this study is a methadone clinic situated in a large Swedish city. The clinic is part of the public psychiatric care of the county and the professionals employed at the facility are nurses, psychologists, social workers and a psychiatrist. In 2011 around 120 clients visited the outpatient-clinic regularly. Officially, the clinic claim to hold a flexible stance regarding illicit drug use. Nevertheless, it is not unusual that clients are discharged due to “repeated relapses”.

The data analysed in this article are a part of my thesis (Petersson, 2013), where a more detailed description of the method is outlined. It consists of detailed field notes from non-participant observations carried out at three interprofessional team meetings at the methadone clinic. In this kind of weekly meetings, individual clients’ progress is discussed and decisions about their treatment are made, in the absence of the clients. Each observed team meeting lasted for approximately two hours. Transcribed recordings of conversations are undoubtedly the best way of conveying grammatical detail, word order and semantics of the original (Nikander, 2008). However, since tape-recording of the conversations was not permitted I chose to write fieldnotes. This of course has its implications. Paying attention to everything going on in a specific setting is an impossible mission for a single researcher, who is also taking notes. Choices regarding what to focus on and what to leave out have to be made. When writing the field notes, my ambition was to stay as close to the conversation as possible, through following a dialogue scheme, jotting down phrases and using abbreviations. Immediately after the observations, the field notes were written up in more detail. Inevitably, the data has been “cleaned”, speech has been given a conventional spelling and non-verbal interaction has to a great extent been left out. While recognising these shortcomings, I would argue that the advantages outweigh the disadvantages.

Ethical approval for this project was given by the Regional ethical review board in Gothenburg, Sweden [ref number 049-10].

Accounts analysis

Since Scott and Lyman (1968) coined the term accounts, drawing attention to talk as “the fundamental material of human relations” (p. 46), much has been written on accounts and related forms of social accountability (e.g. Edwards & Potter, 1993; Orbuch, 1997). Some definitions of the concept include broader ranges of discourse than Scott & Lyman’s notion, such as self-presentation (e.g. Antaki, 1994; Järvinen, 2001), and treat accounts as an on-going, sense-making function of peoples’ interaction (Garfinkel, 1967). In this study I will follow the tradition emerging from Austin (1979/1961) focusing on accounts as “a statement made by a social actor to explain unanticipated or untoward behaviour” (Scott & Lyman, 1968, p. 46), and developed by Buttny (1993) who emphasizes the importance of attending to the local context, the “folk logic” (p. 170), when analysing the construction of accounts. Similar to C. Wright Mill’s (1940) classical concept of “vocabularies of motive”, this perspective on accounts is concerned with language as a means by which people communicate explanations of the “gap between action and expectations” (Juhila et al., 2010, p. 62).

Accounts can be divided into two main kinds: excuses and justifications. Both are invoked when somebody involved in face-to-face interaction is potentially accused of some kind of untoward

behaviour. Excuses involve admitting the negative implications of the act, but denying full responsibility for it. According to Austin (1979/1961), the main function of excuses is to shift part of the responsibility for an illicit act to factors and/or actors surrounding the event. Justifications involve accepting responsibility for the event in question, but at the same time “it was a good thing, or the right or sensible thing, or a permissible thing to do, either in general or at least in the special circumstances of the occasion” (Austin, 1979/1961, p. 176).

Accounts can explain both one’s own and someone else’s behaviour, and this study concentrates on both of these kinds. This means that I will focus on accounts given by the professionals both for their own actions, as well as for the clients’. Buttny (1993) stresses the underlying notion of responsibility when giving accounts. For instance, an individual suffering from mental illness cannot exercise the free will that is a necessary condition for being held responsible. Hence, lacking cognitive or mental skills is an obstacle for acting responsibly, and, consequently, serves to excuse unruly behaviour. The code of ethics adopted by Swedish nurses and social workers aim to promote the well-being of clients, and the need to avoid or off-set harm. I argue that deciding on negative sanctions, such as involuntary discharge from treatment, conflicts with these codes in a profound way, triggering the need for accounts. Additionally, decisions that entail deviance from the NBHW’s rules – i.e. refraining from punishing clients’ rule-breaking behaviour – calls for accounts. Thus, at the meetings, the professionals account both for the clients rule-breaking behaviour and for their own. This line of thought resonates with the work of Juhila et al. (2010) and Juhila and Raitakari (2010). The accounts analysis carried out in this study is inspired by this work, but differs in that my analysis is more sharply focused on the professionals’ way of accounting for both the clients’ and their own rule-breaking behaviour.

At the observed meetings 51 different clients were discussed. As a first analytical step, I identified what kind of issues that brought the clients up for discussion at the meetings. I found that the most common reason was illicit drug use, either detected through urine screening (8 cases) or suspected (3 cases). Beside this, the professionals’ client-talk frequently related to illicit drug use in relation to other areas, such as housing problems (3 cases), applications for leave (4 cases), requests for tranquilizers (4 cases) and late arrival at the clinic on repeated occasions (2 cases). Thus, at the meetings the professionals use a lot of time discussing issues related to the clients’ presumed illicit drug use. The next stage of analysis focused on episodes in the discussions regarding clients’ illicit drug use (detected through urine screening) where decisions were negotiated and made. The analysis showed that in their discussions the professionals were accounting for two interconnected phenomena: the clients’ illicit drug use, and the sanctions that should follow. It was possible to discern three themes accounted for by the team members: (1) decisions on not following the sanction rules, (2) the clients’ relapse episodes, and (3) decisions regarding exclusion of clients. Three episodes of discussion relating to the identified themes will be presented below. The excerpts are chosen for their typicality, as they represent commonly occurring case discussions where clients are reported as having repeatedly broken the clinic rules regarding illicit drug use.

The real names of the clients have been changed into fictitious ones. The original language in the meetings is Swedish, but the excerpts have in this article been translated to English. In all the excerpts, each turn is given a number and the following transcription symbols are being used:

P1, P2, etc. = Participant at the team meeting.
MP = Medically responsible psychiatrist.

(...) = Omitted part of text.
((angry tone)) = Observer’s comment.

Accounting for mildness: justifying warning as a milder sanction than exclusion

In the first excerpt, the topic of discussion is Charlie, who has recently been expelled from his shelter. In the following piece of conversation, there is a disagreement among the professionals regarding what sanctions Charlie’s behaviour should entail.

Excerpt 1

1. P1: Charlie has been thrown out of his shelter. The staff called, they had found aluminium foil and empty bottles of liquor in his room. So now he’s been expelled. The staff also found bloody syringes and pills. He’s now living at some friend’s place.
2. P2: Do we know who this friend is?
3. P1: No. That doesn’t feel good. We have a scheduled patient care planning meeting together with his social worker next week. I want to give him a discharge warning.
4. P3: Yes, of course.
5. P4: Didn’t we agree when Charlie was accepted that we would not allow any relapses in drug use? That if he did, he would be immediately excluded from the programme?
6. P1: A discharge warning is better.
7. P3: But when he was included, we said we wouldn’t accept this behaviour at all. Then we had a zero tolerance approach.
8. P1: Yes, but we are stretching the limits for many clients.
9. P3: I think that we should be consistent if zero tolerance is written in his record. It doesn’t matter in his case, there will be a discharge no matter what.
10. MP: Write the discharge warning distinctly and clearly, that only zero tolerance is acceptable in his case from now on. And that he must have a place to live.
11. P4: It’s written in his medical record that the social services are responsible for his accommodation.
12. MP: We settle for a warning today.

The discussion begins with P1 telling of a problematic situation, which triggers the need for accounts. That the information about Charlie’s situation is enough to bring on a discharge warning is evident (turn 3 and 4). P3’s “Yes, of course” draws upon a shared understanding among the team members, making visible an unwritten institutional rule regarding what counts as an unacceptable level of illicit drug use at the clinic. The conversation then takes another direction as P4 reminds the others that Charlie has been discussed at a previous meeting by the staff, which resulted in a decision to apply a zero tolerance approach to any possible future drug use (turn 5). The claim that a discharge warning is better (turn 6) is not accepted as a justification for not following the zero tolerance line, as we can see from the following turn (7). Here, explaining the problematic behaviour could proceed by producing excuses related to, for example, the clients inadequate cognitive skills or mental health issues, implying that his acting was a matter of ignorance or incompetence, rather than intentional (Juhila et al., 2010). But in the following turn, P1 counters through making a shift from the particular (the individual client) to the general (many clients), a recurrent feature of client categorizations in meeting talk (Nikander, 2003). The discursive shift serves here as a justification through explaining why an exception to the former agreement may be in order, as a kind of sub-rule or habit. Supported by other fellow workers, MP then defines Charlie as a particular client that needs to be exempted from the earlier agreement, but states at the same time that it will hold in the future (turn 10). Not once in the

discussion is information by Charlie on the situation introduced; no one mentions him being asked to explain what has happened.

In the end of the excerpt the need for a proper accommodation is mentioned explicitly and the responsibility for this is allocated to the social services. In this way of accounting, the professionals implicitly blame parts of Charlie's formal network for his troublesome situation, producing an excuse for his illicit drug use. The last turn in the excerpt though, suggests that his case will be under continued surveillance.

Accounting for non-sanction: excusing relapses and justifying non-sanction

In the second excerpt, the professionals are discussing Daniel. He has recently been admitted to the program and immediately tested positive for illicit drug use.

Excerpt 2

1. P1: Daniel can't handle a single night without relapsing.
2. P2: His latest urine sample showed positive for cannabis. And he smoked heroin this weekend. When we confronted him, he denied it and said that he had only been taking benzos. Later when we received the screened urine tests he admitted having smoked heroin. "I had to try it, to see if I liked it", he said. "But I didn't get any effect." Still, he tested positive for opiates the following weekend. I told him how serious this was and he said: "Yes, I'll keep that in mind." But now he's tested positive for cannabis, opiates and benzodiazepines.
3. P3: I must say this: I'm very fond of Daniel. It's hard for him, he's retarded. He can't read, hardly even write his name. I think it's a shame that the social services treat him the way they do, not offering more.
4. P4: He doesn't seem to understand what we are saying.
5. P2: There's a care planning scheduled for tomorrow. He needs more interventions. He's entitled to disability support.
6. P3: Our social worker will assist.
7. P2: He doesn't understand it without someone helping him.
8. P4: But why does Daniel relapse? Is it because he's keeping company with other drug addicts? Or do they contact him, and he's incapable of defending himself? Or does he actively seek contact with those people?
9. P3: The social services have placed him in a shelter with active drug users. Totally inappropriate.

Taking illicit drugs in the way described in the second turn could easily live up to the NBHW's criteria for exclusion due to repeated relapse episodes. If we return to the previous discussion regarding Charlie, then Daniel's behaviour should at least entail a discharge warning. But judging from the staffs' conversation, his illicit drug use has not led to any sanctions, not even a warning. Immediately after P2's description of the situation, P3 joins the discussion and without questioning the previous narration switches focus. "I must say" is a hint of an upcoming excuse regarding Daniel's behaviour, and through repetition in several stages (turns 3, 4 and 7) Daniel is being constructed as a person lacking basic cognitive skills. P3 is using powerful expressions like "retarded", and presents concrete examples in telling about his disability – he can neither read nor write his own name. In addition, the social services (as in the discussion regarding Charlie) are blamed for his current situation (turn 9), providing an excuse for his relapses. P4 and P2 provide further accounts (turns 4 and 7) supporting P3's construction of Daniel as lacking sufficient cognitive skills, consequently excusing his relapses and implicitly justifying non-sanction.

There is also a self-reflective element in this excerpt, when P2 suggests that the clinic cannot provide sufficient support and care

for Daniel (turn 5). In this way, his relapses are excused by shifting blame to the professionals themselves (Juhila & Raitakari, 2010). In the way of accounting analysed above, the client is constructed as a person who is unable to change his behaviour, even if he wanted to. With suitable help and support he would be able to act properly, but since he is not getting this support, he cannot be blamed for his non-compliance. This shifting of responsibility enables staff to take a more tolerant approach.

Daniel's own accountings for the relapse episodes (turn 2) are neither credited nor dismissed, but simply ignored by the professionals. It has been noted elsewhere that there is a hierarchy of accounts, based upon how credible the speaker is perceived to be by others (Buttny, 1993). Daniel offers accounts that are improper according to the situational and culturally established background expectations, something that often is taken as a sign of mental illness (Smith, 1978). Daniel's repeated intake of illicit substances is interpreted by the professionals as a consequence of him being "retarded" and used as an excuse for his disobedience. Following this logic, his accounts are not necessary for the professionals to honour. Instead they offer other excuses for his rule-breaking. This accounting episode can also be understood as making explicit an implicit institutional assumption: drugs are not taken for pleasurable purposes or just for fun.

Accounting for exclusion: excusing exclusion and justifying toughness

In the last excerpt the issue at stake is how to handle the client Alan. On an earlier occasion, he has received a discharge warning due to excessive use of benzodiazepines. Despite this, his latest urine screening has shown signs of illicit substances. As we enter the conversation, the staff have turned to the National Drug Administration Index and found out that Alan recently picked up yet another "illicit" prescription of pills.

Excerpt 3

1. MP: It says here that Alan got a prescription of zopiklon [benzodiazepine] last week. ((reading from the computer screen))
2. P2: That must result in exclusion from the program!
3. MP: During this month he's been collecting several prescriptions of zopiklon.
4. P2: "It's because of my sleeping problems", he says. ((ironically))
5. P3: Either that, or he tells some story about being threatened with a gun. ((rolling her eyes))
6. P4: It might be necessary with a discharge, it is a pity if you ask me.
7. MP: He received a discharge warning two weeks ago. One week after that he visits the pharmacy with a new prescription of zopiklon.
8. P5: He's so full of bullshit. ((annoyed tone))
9. MP: He has been told that if he acquired it ((the benzo)) himself, then he shall also detoxify himself. He said that he'll do this. His saying so, and then picking up more zopiklon anyway, shows that he is not serious. Ten positive, out of thirteen screened urine samples. Exclusion, is that the opinion of the meeting?
10. P6: I think it's difficult.
11. P4: What can we do for him?
12. P2: Exclusion, that's my opinion.
13. P4: The way it is now, he's also a problem for the working environment. He's spinning around, tipping methadone bottles over, messing things up.
14. P2: And he's already been given a discharge warning.
15. MP: It will be a LVM. ((compulsory care))
16. P4: I guess he's excluded.

That Alan's behaviour is unacceptable in the clinic setting becomes evident in turn 2. From the ironic way in which the professionals are commenting on Alan's previous justifications for taking unauthorized pills (turns 4 and 5), we understand that his accounts are not deemed credible. His continued use of benzodiazepines is interpreted as breaking the rules of the clinic, rather than as an act of suppressing anxiety and/or insomnia. There is a resemblance between the argumentation in the discussion regarding Charlie and parts of the accounting that takes place in this excerpt (turns 7, 8 and 9). Alan is constructed as a dishonest, troublesome liar, and the sentences in turn 9 gives the impression that he ought to be punished for his behaviour, a justification for toughness.

It is also possible to read in this excerpt an emphasis being given to Alan's conscious decision to break the rules (turns 7 and 14). The mentioned previous discharge warning is depicted as evidence that Alan has been informed about the risk of being discharged due to his behaviours. Thereby he has been given the chance to straighten up and change his situation and because he did not take this chance, he is defined as being personally responsible for the exclusion from the program. According to Silverman (1987), once clients have been constructed as active decision-makers, they also become morally responsible for their actions. This is exactly what is happening. The team members jointly construct Alan as blameworthy and, in addition, engage in justification of the exclusion, describing him as a problem for the working environment, and emphasizing that he has already been given a discharge warning. These two types of justification accounts work in different ways. The first one refers to the need for protection of other people, in this case the clinic staff need to be protected from Alan. The second justification, which refers to Alan already having been warned, is of a more disciplinary kind. Exclusion is both excused and justified by placing the responsibility for the situation on Alan. He has been given a warning regarding his illicit drug use, and still he has not changed his behaviour (justification). At the same time it serves as an excuse, since it is constructed as Alan's own decision. In addition, the logic of the rules demands exclusion after a clear warning (excuse). Implied in this argumentation is that Alan could abstain from taking the benzodiazepines, if he only wanted to. Instead, he persists in risking his place in the program by taking the illicit pills. Consequently, the decision of discharge is justified, as well as excused.

What kinds of argument are sufficient for an exclusion? No one explicitly answers the physicians question if he should be discharged, even if some reluctance is expressed (turns 6, 10 and 11). Instead, we can see (from turn 12) how the professionals support each other in their accounting, establishing a cumulative effect, which eventually leads to him being discharged. Rhetorically, there is a lack of an active agent actually excluding Alan. In the discharge decision-making process regarding Alan, the accounting is somehow transformed into an obvious fact. The outcome is simply following logically from the professionals' case discussion and treated as evident. In this way, excluding the client becomes constructed not as a decision, but rather as an unavoidable consequence of the clients' supplementary drug use. And hence the staff is not to be blamed for it: exclusion is excused.

Discussion

It was mentioned earlier in this paper that MMT is attributed status of evidence-based practice for opiate addiction by the NBHW. This assumes that clinic practice should rely on solid, summarised knowledge external to the practitioner, and hence "insulated from the murkier domains of subjectivity" (White, 2002, p. 432). My analysis shows, however, how the regulatory framework governing MMT is actively tested, negotiated and reinforced by the professionals in their on-going meeting talk. Similar observations about

policy making in action have been made by a variety of commentators (e.g. Feldman, 1994; Nikander, 2003; Wastell et al., 2010). What I hope that this paper has shown, is that examining on-going professional decision-making in specific institutional settings may open up for a better understanding of the dynamics and logics of inter-professional work. Focusing on the "micro level" does not exclude the "macro level", but provides a link to "how state- and organisation-level policies are present in the 'here and now' action, and how dilemmas related to these policies are negotiated, and with what consequences, in street-level social welfare practices" (Hjörne, Juhila, & van Nijntatten, 2010, p. 303).

In correspondence with the findings of Juhila et al. (2010) my results show that when accounting, the professionals are concerned with locating blame and responsibility for the act in question. In doing so, they are inevitably making moral judgements and, as was pointed out earlier, moral judgements are tied to the notion of responsibility. When individuals are deemed responsible for their actions they are also morally obliged to answer for their doings and for improving their situation. If not, they are likely to be morally judged as careless and blameworthy. Additionally, if clients are perceived as lacking a feeling of responsibility, this justifies more disciplinary sanctions. However, in line with the findings of Juhila et al. (2010), the same kind of disobedient client behaviour can be accounted for in different ways, and hence lead to different outcomes for the clients. For instance, Alan's claim on having been subjected to physical threats and experiencing sleeping problems, a "sad tale" justification (Goffman, 1961), is by the professionals considered as illegitimate. In the meeting talk he is being constructed as a notorious liar who is deliberately violating the clinic's rules. Implicitly in this argumentation lies an assumption about blameworthiness, thus disciplinary interventions are more easily argued for.

When accounting for Daniel's relapse episodes however, the professionals refer to the social services that are deemed blameworthy due to their decision to place him in a shelter together with other drug addicts. Because of Daniel's alleged lacking cognitive skills, you cannot demand of him to keep "clean" if put in a "tempting" situation. Hence, he should not be morally judged, the argument goes, implicitly justifying non-sanction. Still, this way of accounting may bring about other consequences. Even if the client labelled "retarded" does not face the threat of exclusion, he may be subjected to a loss of autonomy and paternalistic treatment.

Given the critical life situation facing clients that are excluded from the programme, the high amount of accounting taking place at the team meetings might not come as a surprise. Interestingly, in this study the NBHW's regulatory framework do not emerge as pivotal references in the staff's discussion. Instead, referring to local rules and earlier discharge warnings serves as excuses for making exclusion from the program unavoidable. Another prominent feature when accounting for exclusion is the absence of agency with the professionals themselves. Statements such as "I guess he's excluded" and "There will be a discharge no matter what", indicate that the staff are not active in making the decision to terminate the treatment, it is simply the logic of the rules that demands exclusion after a clear warning. By moving focus from their own individual assessments to the rule-breaking clients' behaviour or the local regulatory framework, exclusion is constructed not as a decision but rather as an unavoidable consequence of the clients' illicit drug use, given the rules.

At the methadone clinic the professionals have significant discretion over clients' experiences. Accounts offered in team-meetings, where clients themselves are absent, are likely to differ significantly from the ones presented in other contexts, such as in care planning sessions where clients take part. Very likely, if clients were to be present the staff would account for the events in a different way (e.g. Mäkitalo, 2003). Generally, my data show

that when recited during team-meetings, client accounts are either not listened to, i.e. deemed untruthful or unreasonable, or treated as illegitimate. Formally, each decision on discharge is made by the psychiatrist in charge, but in clinical practice it seems as if the staff has an active and decisive role in the decision-making process. My analysis suggests that the staff's discretion is similar to the one of street-level bureaucrats, such as social workers or employment officers. Sanctions are chosen according to the way in which a deviance from the rules is explained and, in doing so, a certain behaviour is deemed to be serious, dangerous and unacceptable – or excusable.

Conclusions

This study has implications for both policy and practice. The NHBW's regulatory structure might provide a supportive tool for the staff when making decisions regarding clients' rule-breaking behaviour. However, my analysis shows that discretion and moral judgements are other important factors that condition MMT practice and the implementation of regulatory policy. This process of making sense of complex and difficult events is an intrinsic part of all human service practices, since policy level guidelines and local regulations "must be talked into existence in everyday communication" (Juhila et al., 2010, p. 74). Moving back to the Swedish MMT-context, the clinics are situated in a field of tension between being attributed status as the "golden standard" treatment for opiate dependence on the one hand, and constantly questioned and criticized as a treatment approach on the other, since it conflicts with the national principle to strive for a drug-free society. In particular, the workers have to struggle with extensive criticism from the municipality and "the general public" regarding alleged diversion (so-called "leakage") of methadone and buprenorphine from the programmes. This tension is to a high degree reflected in clinic practice, where professionals are facing the arduous task of caring for the clients on the one hand, and exercise control to mitigate the risks of supplementary drug use and "leakage" on the other hand. It is not the purpose of this paper to evaluate or judge the veracity of the decision-making processes related to the cases discussed. Rather I have tried to open up the "black box" of MMT policy making in action, to scrutiny the question of how professionals construct plausible accounts and justify their actions in their everyday work. It is my hope that the results of the present study will prove relevant and fruitful in analysing and debating MMT-practice among clients, professionals, researchers and policymakers. Furthermore, it is my contention that a critical discussion of the purpose, content and consequences of the Swedish regulatory framework surrounding MMT is needed. Keeping in mind that clients who are discharged from methadone treatment often return to the same destructive heroin addiction they left when enrolled in the programme, the discharge practice of the methadone clinic contains a serious ethical dilemma – not least since discharge from Swedish MMT entails a banning period.

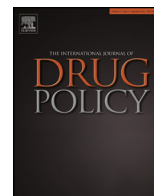
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Research methods

Impact of methadone maintenance on health utility, health care utilization and expenditure in drug users with HIV/AIDS

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ABSTRACT

Background: This study assessed the impact of methadone maintenance treatment (MMT) on health utility, health care service utilization, and out-of-pocket (OOP) health expenditure in drug users with HIV/AIDS in Vietnam.

Methods: Using the 2012 Vietnam HIV Service Users Survey data, a post-evaluation was designed to compare 121 MMT patients with 347 non-MMT patients who were matched using propensity scores of MMT covariates. Health utility was measured using the EuroQOL – five dimensions – five levels (EQ-5D-5L) and a visual analogue scale (EQ-VAS).

Results: The mean EQ-5D-5L single index and EQ-VAS score of MMT patients were 0.68 (95% CI = 0.64–0.73) and 71.5% (95% CI = 68.2–74.9). Compared with the control group, the adjusted differences in health utility were 0.08 and 4.43% ($p = 0.07$), equivalent to 12.1% and 6.5% increases during MMT. There was a 45.9% decrease in the frequency of health care service utilization that was attributable to MMT. Although, antiretroviral treatment and MMT services were free-of-charge, MMT and non-MMT patients still paid their OOP for health care for averagely US\$ 16.3/month and US\$ 28.9/month. The adjusted difference between the two groups was US\$ 19.3/month (\$ 231.6/year) that equivalents to a reduction of 66.7% in OOP health expenditure related to MMT.

Conclusion: MMT was associated with a clinically important difference in health utility, large reductions in health care service utilization and OOP health expenditure in HIV-positive drug users. Scaling up MMT in large drug-using population could help improve the outcomes of HIV/AIDS interventions and reduce economic vulnerability of affected households.

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Introduction

A major driver of the rapid expansion of HIV in Asia is injecting drug use. It is estimated that 13 million drug users live in Asia, accounting for about half of the drug-using population worldwide (The Commission on Aids in Asia, 2008). This sizable high-risk population has been a challenge to prevent HIV transmission as well as manage HIV/AIDS care and treatment services (Tran et al., 2012d). Recent studies have expressed a considerable interest in the role of methadone maintenance treatment (MMT) for opioid users. In various Asian settings, MMT helped reduce the frequency of opioid use, and facilitate earlier access and better adherence to antiretroviral treatment (ART) among those patients who were living with HIV/AIDS (Mojtabai & Zivin, 2003; Tran et al., 2012a, 2012f, 2012g; Warren et al., 2006). To support the expansion of MMT services,

economic evaluations are essential to inform decision making and resource allocations.

Impacts of MMT programs in Asia have been evaluated in longitudinal studies (Musa, Abu Bakar, & Ali Khan, 2012; Tran et al., 2012e, 2012g; Wang et al., 2012; Xing et al., 2012; Yen, Wang, Wang, Chen, & Chang, 2011). The primary measures of health outcomes basically included changes in drug use behaviours and health-related quality of life (HRQOL). Although these cohort designs possibly have some advantages in estimating trajectories and inferring causality, there have been several limitations. First, none of them utilized a non-MMT control group of drug users who were recruited from an identical population. Second, HRQOL have been measured using mostly the WHOQOL-BREF, a generic health status profile, thus, might not be further incorporated into economic evaluations. Meanwhile, evidence on the impact of MMT on health utility (preference-based HRQOL), an integral part of the quality-adjusted life years, is still very limited (Feeny, 2000). Moreover, in a systematic review of 22 economic evaluations of MMT, the author found no studies investigating the changes in healthcare service utilization and out-of-pocket (OOP) health expenditure in

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the presence of MMT (Alistar, Owens, & Brandeau, 2011; Barnett, 1999a, 1999b; Barnett & Hui, 2000; Barnett, Zaric, & Brandeau, 2001; Dijkgraaf et al., 2005; Doran, 2005; Doran et al., 2003; French, 2001; Hartz et al., 1999; Masson et al., 2004; Mojtabai & Zivin, 2003; Negrin & Vazquez-Polo, 2006; Shanahan et al., 2006; Sindelar, Olmstead, & Peirce, 2007; Tran et al., 2012b, 2012f; Vanagas, Padaiga, & Bagdonas, 2010; Wammes et al., 2012; Warren et al., 2006; Xing et al., 2012; Zaric, Barnett, & Brandeau, 2000).

The HIV epidemic in Vietnam is still in a concentrated stage; however, a very high prevalence was seen in high-risk populations, and drug injection remains a major force driving the epidemic (Tran et al., 2012g). Approximately 320,000 people are estimated to have contracted HIV, among whom 70% have a history of drug injection, and 20% are at an advanced HIV stage (Do et al., 2012). By the end of 2012, 70,000 patients have been receiving ART, of whom, about 60% had a history of drug injection (Vietnam Authority of HIV/AIDS Control, 2013). The majority (90%) of drug users in Vietnam are currently addicted to heroin or other opiates. Since 2008, the Ministry of Health has piloted the first national opioid substitution therapy program using methadone, and subjecting to cover 80,000 drug users by 2015 (Tran et al., 2012a, 2012f). Findings of previous works that evaluated the pilot MMT program have been made available (Tran et al., 2012a, 2012b, 2012e). The purpose of this study was to assess the impact of MMT on health utility, health care utilization, and OOP health expenditure among HIV-positive drug users using a post-evaluation design with a propensity score matched control group.

Methods

Study setting and design

The study is based on data from the 2012 Vietnam HIV Services Users Survey (HSUS). This is a cross-sectional survey conducted in three metropolitan areas with the largest HIV epidemics in Vietnam, including Ha Noi, Hai Phong, and Ho Chi Minh City (Tran et al., 2012d). Seven sites were purposively selected, including one central hospital (National Hospital of Tropical Diseases), three provincial hospitals (Dong Da, Viet Tiep, and Ho Chi Minh Hospital for Tropical Diseases), and three district health centres (Tu Liem, Binh Tan, and Le Chan District Health Centres). Selection of respondents was on a convenient basis. Inpatients and outpatients who were HIV-positive, registering for care or taking ART at selected sites were invited to participate in the study. All clinics are integrated into general health care facilities; therefore, if patients with HIV/AIDS have other health problems than AIDS-related ones (opportunistic infections, ART side effects, or HIV counselling), they will be admitted to corresponding departments. Thus, inpatients at ART clinics mostly came with opportunistic infections, and usually stayed for short periods. Patients who were present at the clinics during the study period were recruited until we reached a sufficient sample size that was approximately 100 patients per each district and provincial site and 200 patients per each central site (Tran, 2012; Tran, Nguyen, Nguyen, Hoang, & Hwang, 2013). A total of 1016 patients were interviewed, accounting for 17% of total HIV/AIDS patients who were registering in selected sites. Using a sub-group of all 468 HIV-positive drug users recruited in the HSUS, this post-evaluation study was designed to compare those patients who were taking MMT ($n = 121$) with those without MMT ($n = 347$).

Measures and instruments

Socioeconomic and HIV-related characteristics of respondents were collected by face-to-face interviews using structured questionnaires. The outcomes of interest included health utility, health

care service utilization, and out-of-pocket health expenditure that were self-reported. *Health Utility* was measured using the EuroQOL – five dimensions – five levels (EQ-5D-5L), a self-reported multi-attribute instrument. It consisted of a weighted sum of five dimensions: Mobility, Self-care, Usual activities, Pain/Discomfort and Anxiety/Depression, which provided a simple descriptive profile and a single index value for health status (EuroQOL Group, 2013). The recently developed version, EQ-5D-5L, includes five level response options: no problems, slight problems, moderate problems, severe problems, and extreme problems (Herdman et al., 2011). It produces an index score that represents the utility of 3125 health states. Since population reference of Vietnam was not available, an interim scoring for EQ-5D-5L from the crosswalk value set of Thailand was employed (EuroQOL Group, 2011). Besides, the EQ-5D-5L also includes a visual analogue scale (EQ-VAS) that recorded the patient's self-rated health on a 20 cm vertical scale. EQ-VAS scores range from 0, the worst imaginable health state, to 100, the best imaginable health state. The EQ-5D-5L showed a good measurement properties in HIV/AIDS patients in Vietnam (Tran, Ohinmaa, & Nguyen, 2012h). *Health care service utilization* included any in-patient and out-patient care that respondents had received during the past three months before the interview. For this analysis, the frequency of health care services use was converted for a year. *Out-of-pocket health expenditure* was estimated for the last inpatient- and outpatient care. OOP payments refer to the payments made by households at the point they received health services. Patients were asked about any expenses that had been incurred during their illness, including (a) medical expenditures (non ARV medications, lab tests, hospital fees, and others) and (b) non-medical expenditures (transportations, accommodation, and special meals if any) (Tran et al., 2012c). It is important to notice that during the period of this study, patients were provided ART and MMT services free-of-charge, and these service costs are presented elsewhere (Tran et al., 2012b). The scope of this cost analysis included all OOP expenses paid by the patients, and excluded those expenses subsidized by the National HIV/AIDS programs or other projects financed by international donors. Besides, cost-savings were hypothesized to occur when drug users with HIV/AIDS taking MMT became abstinent to or less frequently used opioid; and this facilitated better adherence to HIV/AIDS care and treatment, prevented opportunistic infections and drug-related health problems, and reduced their need for health care and frequency of service utilization (Tran et al., 2012b, 2012f). Finally, expenses and savings related to the use of opioid were not included.

Statistical analysis

Socio-demographic and HIV-related characteristics were described for MMT and non-MMT group. Chi-square and Student's *t*-test were used to examine the differences between proportions and means. *Multivariable linear regression* was used to estimate the differences in outcomes of interest between drug users taking MMT with the non-MMT group. The EQ-5D-5L single index and VAS ranged at (−0.452; 1) and (0; 100) which were left- and right-censored; therefore, Tobit regression models was applied (Twisk & Rijmen, 2009). Since the number of participants and their observed characteristics was disproportionate between MMT and non-MMT group, estimability of the models could be biased. To compensate this, *propensity scoring* was applied to reduce the pre-existing differences to a single dimension (Linden & Adams, 2010). A propensity score is defined as the conditional probability of belonging to MMT group given a vector of observed covariates which summarizes information across potential confounders (Lu, 2005). Propensity scores of taking MMT were estimated using logistic regression with candidate independent variables included socioeconomic and HIV-related characteristics of respondents.

Patients in the MMT and non-MMT group were matched one-on-one. Collinearity was examined using the variance inflation factors. We applied a stepwise forward model building strategy, which selected variables based on the log-likelihood ratio test at a p -value < 0.1 , and excluded variables at p -values > 0.2 (Hosmer & Lemeshow, 2000).

Ethical considerations

The study protocol was developed, and health care workers and investigators were well trained prior to conducting the survey. Patients were invited to participate in the survey during their health care service visits. Written informed consent was obtained from all participants after a clear explanation of the survey. Respondents could refuse to participate or withdraw from the interview at any time, and this did not affect their use of health care services. The response rate was 85–90%. Confidentiality was assured using codes of patient's information, and secured storage was prepared for both paper questionnaires and electronic dataset. Patients received US\$ 2.5 remuneration for transportation. This survey is a part of the research project on "Cost and cost-effectiveness of HIV/AIDS care

and treatment policy options in Vietnam". The use of data for this analysis was approved by the Authority of HIV/AIDS Control, Ministry of Health of Vietnam. Ethical approval was granted by the University of Alberta's Health Research Ethics Board.

Results

Characteristics of participants

Of 468 patients, mean age was 35 (SD = 6.4), 22.4% were female, 43.6% had finished high school, 63.9% were living with spouses or partners, and more than 70% were freelancers or had stable jobs. The average household's monthly income was US\$ 351 or US 101 per capita. The household's monthly expense was US\$ 266 on average, of which, US\$ 104 for food, and US\$ 123 for non-food expenses (excluding health expenses). Prior to the study, patients had been detoxified for opioid dependence for an average of 3.1 times (95% CI = 2.8–3.4). The average length of MMT patients had taken was 17.7 months (95% CI = 15.1–20.3 months). There was 87% of drug users reported abstinent to opioid use at the period of study; and only 8% (10/121) of MMT patients reported concurrent opioid use.

Table 1
Characteristics of respondents with and without MMT.

	Total		Non-MMT		MMT		<i>p</i> -Value
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	
Sex							
Male	363	77.6	260	74.9	103	85.1	0.02
Female	105	22.4	87	25.1	18	14.9	
Education							
Below high school	264	56.4	199	57.4	65	53.7	0.49
High school and above	204	43.6	148	42.7	56	46.3	
Marital status							
Single	74	15.8	59	17.0	15	12.4	0.24
Live with spouse/partners	299	63.9	223	64.3	76	62.8	
Widow (er), divorced	95	20.3	65	18.7	30	24.8	
Employment							
Unemployed	99	21.2	72	20.8	27	22.3	0.53
Free lancer	256	54.7	190	54.8	66	54.6	
Stable jobs	77	16.5	61	17.6	16	13.2	
Others	36	7.7	24	6.9	12	9.9	
HIV stage							
Asymptomatic	51	10.9	32	9.2	19	15.7	0.11
Symptomatic	231	49.4	178	51.3	53	43.8	
AIDS	186	39.7	137	39.5	49	40.5	
CD4 cell count							
≤ 200	116	31.7	84	30.7	32	34.8	0.01
$200 < cd4 \leq 350$	112	30.6	95	34.7	17	18.5	
$350 < cd4 \leq 500$	88	24.0	64	23.4	24	26.1	
> 500	50	13.7	31	11.3	19	20.7	
Duration of ART							
Not-yet	51	10.9	34	9.8	17	14.1	0.44
≤ 1 year	86	18.4	67	19.3	19	15.7	
1; ≤ 2	69	14.7	48	13.8	21	17.4	
2; ≤ 4	136	29.1	100	28.8	36	29.8	
4; ≤ 7	126	26.9	98	28.2	28	23.1	
	Mean	SD	Mean	SD	Mean	SD	
Age	35.0	6.4	34.9	6.4	35.1	6.2	0.37
Household's income (USD)							
Total	351.4	279.2	346.7	270.3	365.4	305.6	0.72
Income per capita	101.8	80.1	100.3	78.5	106.5	84.8	0.75
Household's expenses (USD)							
Total	266.1	212.4	261.2	215.8	284.0	200.2	0.78
Food	104.3	121.8	107.9	129.5	94.1	95.9	0.14
Non-food	123.0	135.1	118.4	129.9	139.5	152.4	0.87

1 USD = 20,500 Vietnam Dong in 2011.

Table 2
Impact of MMT on health utility, health care service utilization and OOP health expenditure.

	Non-MMT		MMT		Unadjusted differences			Differences adjusted for propensity score of MMT		
	Mean	95% CI	Mean	95% CI	Mean	Changes (%)	p-Value	Mean	Changes (%)	p-Value
Health utility										
EQ-5D-5L index	0.63	0.60–0.66	0.68	0.64–0.73	0.05	8.7	0.03	0.08	12.1	0.07
VAS score	68.4	66.4–70.5	71.5	68.2–74.9	3.07	4.5	0.07	4.43	6.5	0.07
Health care service utilization (times/year)										
Total	5.4	4.8–6.1	3.6	2.7–4.5	–1.8	–33.2	0.00	–2.5	–45.6	0.02
In-patient services	0.4	0.3–0.5	0.2	0.1–0.3	–0.2	–48.2	0.01	–0.2	–50.6	0.05
Out-patient services	5.0	4.4–5.7	3.4	2.5–4.3	–1.6	–31.9	0.00	–2.2	–42.9	0.08
Out-of-pocket health expenditure for DUs with HIV/AIDS (US\$/month)										
Total	28.9	23.0–34.8	16.3	11.3–21.2	–12.7	–43.8	0.01	–19.3	–66.7	0.01
% total household's expenses	14.6%	11.2%–18.0%	8.0%	4.6%–11.3%	–6.6%	–45.4	0.02	–7.2%	–49.1	0.07

As seen in Table 1, most of patients were at advanced HIV/AIDS clinical stages, for example, 49.4% were symptomatic and 39.7% were diagnosed with AIDS. About two-thirds of patients had a CD4 cell count less than 350 cell/mL. Characteristics of MMT and non-MMT group were then compared. The two groups did differ in regard to their gender distribution and CD4 cell count. Specifically, a higher proportion of men were seen in MMT group than non-MMT group. In addition, 46.8% MMT patients had CD4 count > 350 cells/mL that was higher than 34.7% in non-MMT patients (Table 1).

Differences in health utility, health care utilization, and OOP health expenditure between MMT and non-MMT patients

Table 2 shows overall means and differences in outcomes of interest comparing the MMT group with the non-MMT group. Overall, MMT patients reported an EQ-5D-5L single index of 0.68 (95% CI = 0.64–0.73) and a VAS score of 71.5% (95% CI = 68.2–74.9%), that were significantly higher than non-MMT drug users (mean differences = 0.05 and 3.07%). In multivariate model, adjusting for propensity scores of taking MMT, the differences in health utility were 0.08 and 4.43% ($p=0.07$), equivalent to 12.1% and 6.5% increases in health utility of drug users during MMT. This result is about 0.5 standard deviation of population estimates of health utility in Vietnam that indicates a clinically important difference between the two groups (Tran, Ohinmaa, Nguyen, Nguyen, & Nguyen, 2011). The increment in health utility was

not statistically significantly associated with the length of MMT ($p=0.21$).

As for health care utilization, the proportion of MMT and non-MMT patients who had any hospitalizations in the previous three months was 63.6% and 69.2%, respectively. There was a large reduction in the frequency of both inpatient and outpatient care used by drug users in the MMT group (3.6 times/year) compared to the non-MMT group (5.4 times/year). The adjusted difference was as high as 2.5 times/year, in other words, 45.9% reduced in the frequency of health care service use that was attributable to MMT.

Regarding health expenditure, HIV-positive drug users without MMT paid OOP US\$ 297 and \$46 for an outpatient and inpatient care on average, and those with MMT paid OOP US\$ 320 and US\$ 39 for an outpatient and inpatient care, respectively. The components of OOP spending for an inpatient care were not significantly different between MMT and non-MMT patients (Fig. 1). However, MMT patients paid less for medication and transportation and more for lab tests than non-MMT patients (Fig. 2). In Table 2, the means of OOP payments of the MMT and non-MMT group was US\$ 16.3/month and US\$ 28.9/month, equivalent to 8.0% and 14.6% the total household's monthly expenses. The adjusted mean difference in OOP health expenditures between the MMT group and the matched non-MMT group was US\$ 19.3/month (\$231.6/year) that could be converted into a reduction of 66.7% OOP payment of HIV-positive drug users by taking MMT.

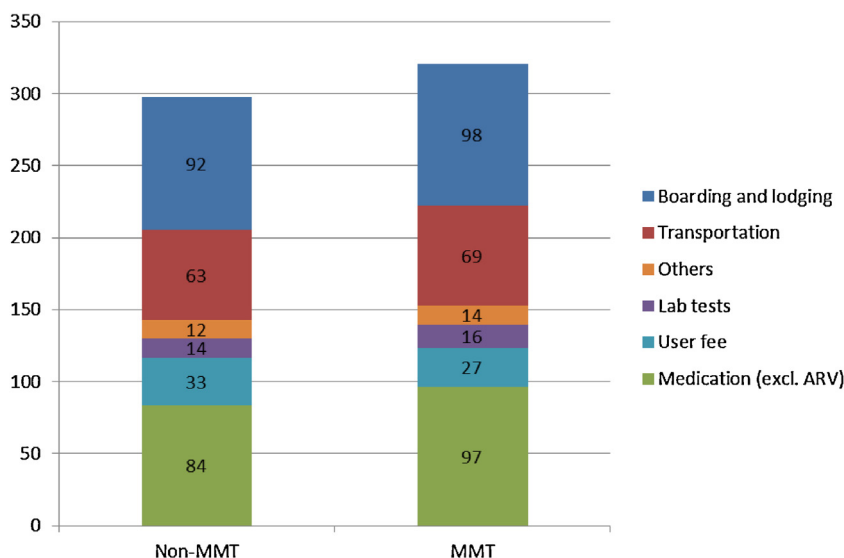


Fig. 1. Average OOP expenditure for an inpatient care (US\$).

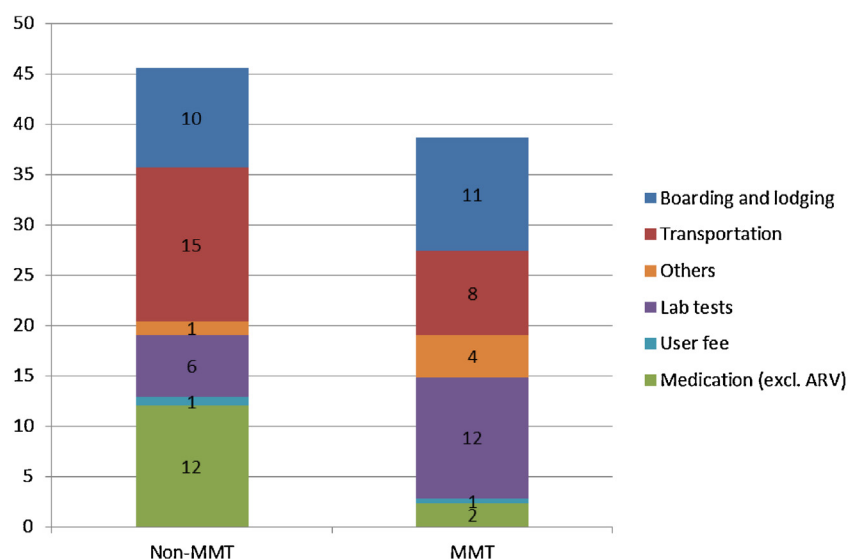


Fig. 2. Average OOP expenditure on outpatient care (US\$).

Discussion

This study utilized a post-only evaluation design to assess the impact of MMT on health utility, health care utilization, and OOP health expenditure in drug users with HIV/AIDS. It compared a group of HIV/AIDS patients taking MMT with a control group of non-MMT patients who were approached in the same clinics and matched using propensity scoring. The findings indicate that HIV/AIDS drug users receiving MMT had a significant increment in health outcomes, as measured by health utility scores, compared with the non-MMT group. In addition, MMT was associated with a large reduction in the frequency of health care service utilization as well as OOP health expenditure in drug users with HIV/AIDS.

Findings of this study confirmed the effectiveness of MMT for drug users with HIV/AIDS in Vietnam. It was in line with a previous study that assessed longitudinal changes in HRQOL among drug users taking MMT (Tran et al., 2012f). The difference in health utility observed in this cross-sectional comparison of MMT and non-MMT group (0.080) was similar to the estimated improvement in health utility within MMT groups over 9-month follow-up (0.076) (Tran et al., 2012e). Compared to international settings, health utility gained in Vietnam was slightly higher than what was found in the Netherlands (0.058) (Dijkgraaf et al., 2005), and comparable with findings from Canada (Nosyk et al., 2011). In the literature, trajectories of health outcomes under MMT were consistent. In Taiwan, Malaysia, China, the health-related quality of life of MMT patients, as measured using the WHOQOL-BREF – a generic health profile developed by the World Health Organization, increases gradually up to two years of MMT (Karow et al., 2010; Musa et al., 2012; Wang et al., 2012; Xiao, Wu, Luo, & Wei, 2010). Similarly, in this study, we found that the improvement in health utility that was attributable to MMT was independent on the length of taking MMT.

This study contributes to the literature on the impact of MMT on health care service utilization and OOP health expenditure in drug users with HIV/AIDS. MMT was found to be associated with a substantial reduction in the numbers of inpatient and outpatient clinic visits. Drug use was known to be associated with delayed access, severe co-morbidity, and poor adherence to and outcomes of ART for HIV/AIDS patients (Tran, 2012; Tran et al., 2012b, 2012i). Taking MMT, patients could have a lower risk of overdose and comorbidity, earlier access to health care services and optimal compliance to HIV/AIDS treatment. Therefore, scaling up MMT in injection-driven

HIV epidemics can help relieve some of the burden of HIV/AIDS-related care on the health system. Moreover, the study estimated US\$ 231.6/year that the cost patients would have paid for health care services without taking MMT. For these economically vulnerable households, MMT could, therefore, reduce the risk of falling into poverty. In fact, the saving in OOP health expenditure was similar to the average cost of MMT services in Vietnam (Tran et al., 2012e). In addition, MMT holds potentials in creating substantial societal benefits, for instance, reduced criminal activities and increased work productivity (Tran et al., 2012f). It implies the importance of scaling MMT for large drug-using populations in Vietnam in conjunction with other HIV/AIDS-related services (Tran & Nguyen, 2012).

The strengths of this study included a propensity score matched comparison group that accounted for potential confounders. However, there were some limitations that should be acknowledged. First, the selectivity might exist in the MMT cohort which was unlikely to be captured by the measured covariates. Second, the post-only evaluation design limits the causal inference between MMT and outcomes of interest. In addition, expenditures and heroin use were self-reported by the patients that subjects to biases. Moreover, the convenient sampling approach might restrict the generalization of findings to the entire HIV population. However, given the fact that recruiting an identical cohort of drug users for comparison was not feasible, this analysis is useful for evaluating different aspects of the MMT program in Vietnam, and serves as a basis for the economic evaluations of MMT intervention in injection-driven HIV epidemics.

In conclusion, MMT was found to be associated with a clinically important difference in health utility, large reductions in health care service utilization and OOP health expenditure in drug users with HIV/AIDS. Scaling up MMT in large drug-using population may improve the outcomes of HIV/AIDS interventions and reduce economic vulnerability of affected households.

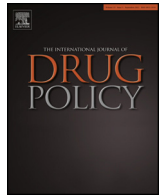
Conflict of interest

None declared.

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Short report

Non-prescribed use of substitution medication among German drug users—Prevalence, motives and availability



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Introduction

Although opioid substitution treatment (OST) is regarded as the most effective treatment option for opiate dependence (World Health Organization, 2008) leading to reductions in illicit drug use, injection use and criminal activity (Mattick, Breen, Kimber, & Davoli, 2009; Soyka et al., 2012), the non-prescribed use of substitution medication (NPU) may raise concerns. European estimates on the extent of NPU among drug users show considerable variation between countries. Rates for current NPU (i.e. within the previous 24 h) range from 5.6% in Portugal (Vale Andrade et al., 2007) to 73% in Finland (Alho et al., 2007).

Motives for NPU also vary, and comprise limited availability of either heroin or OST, a “lack of responsibility” among drug users as well as financial aspects, i.e. the lower prices of substitution medication compared to heroin (EMCDDA, 2005; Scherbaum, Kluwig, Meiering, & Gastpar, 2005).

In Germany, mainly office-based general practitioners, but also clinics and pharmacies dispense OST medication, and the legal framework allows take-home prescription for a dosage up to seven days (Michels, Stöver, & Gerlach, 2007). Concerning the extent of NPU, three German studies are currently available. One survey with 142 patients in a detoxification facility found a lifetime prevalence of 53.5% (Scherbaum et al., 2005). One study using long-term monitoring data from drug counselling centres reported an increasing portion of methadone/buprenorphine among currently misused medication from 6.9% in 2003 to 20.7% in 2006 (Rösner & Küfner, 2007). In a sample of 175 heroin users recruited in low-threshold services, lifetime prevalence of injection of substitution medication was 57.1%, and 26.9% in past 30 days (Leicht, 2005).

This study aimed to explore the extent of NPU among a larger sample of active drug users, the availability of substitution medication on the black market, and to reveal motives for NPU.

Methods

This study was conducted as cross-sectional survey on a German convenience sample in July and August 2008. 1230 questionnaires, to be administered face-to face by trained interviewers, were sent out to 16 institutions (low-threshold drug services, drug consumption rooms) in 13 German cities. We included all clients, who were willing and able to participate in a 30-minute interview (i.e. no acute intoxication, knowledge of German language). The institutions indicated participation rates of between 30% and 50% of their regular clients.

The survey comprised drug use history and current patterns, referring to past 30 days and past 24 h (using adapted items from the European Addiction Severity Index; Kokkevi & Hartgers, 1995), prevalence of NPU (lifetime, past 30 days, past 24 h) and underlying motives, also in relation to current OST status. Motives for NPU were gathered by means of a pre-defined list and free answers, and participants were asked to specify their main motives. We also assessed estimates of prices and availability of substitution medication on the black market, and other issues like physical and mental health, which are not reported here.

Overall, 806 interviews were conducted. As for 53 participants (6.6%), information on either NPU or OST was missing, we reduced our sample to $n = 753$ individuals. Possible biases of non-response were assessed by comparing the excluded individuals with the remaining sample on sociodemographics, OST and drug use data.

Analyses were performed using SPSS for Windows, version 16.0. According to scale level, group differences were determined via one-way ANOVAs or chi-square tests, and separate analyses of the factors OST and NPU were performed using chi-square tests or t -tests. OST by NPU interactions were assessed with the Breslow-day heterogeneity test or two-way ANOVAs. Fisher's exact test and Cochran Mantel Haenszel statistics were used if more than 20% of expected cell sizes were smaller than five. For ANOVAs, the assumption of homogeneity of variances was tested using Levene's F . As this was fulfilled also in two-way ANOVAs (across all level combinations of the factors), no further adjustments were made.

Results

NPU prevalence for lifetime, past 30 days, and past 24 h was 66.7%, 25.8%, and 9.3%. Among those reporting NPU in past 30 days,

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the substance most frequently used was D-/L-methadone (76.6%), followed by buprenorphine (37.8%), and buprenorphine + naloxone (6.1%).

42.4% of respondents were currently in OST, with a mean duration 50.0 months (± 52.6), ranging between <1 month and 20 years. Most of them reported receiving D-/L-methadone (80.9%), another 16.6% buprenorphine (or buprenorphine + naloxone), and 2.5% diamorphine or other drugs. In addition to sociodemographic differences (see Table 1), participants currently in OST reported significantly lower lifetime (61.8% vs. 70.3%, $p = .014$) and 30-day NPU (21.9% vs. 28.6%, $p = .040$), but no difference in NPU during past 24 h. Prevalence of NPU (lifetime, past 30 days, past 24 h) was unrelated to mean OST duration.

Drug use patterns describe a sample of highly active drug users, especially those not in OST. Individuals with NPU can be characterized as heavier drug users, including polydrug and injection use. No OST by NPU interactions emerged. Although injection use was prevalent in approximately two-thirds of the sample, only 9.5% reported to inject substitution medication.

The 53 excluded participants had, compared to those included, more often a history of migration (17 out of 40 respondents, 42.5% vs. 23.8%) and 93.2% (41 out of 44) stated having ever been in prison. No further differences in sociodemographic or drug use variables emerged, and overall, the 53 excluded had high rates of missing values also in other variables, which justifies exclusion.

Although 180 of 194 clients with NPU during past 30 days selected motives from a predefined list, only 152 indicated a main motive for NPU. Those 152 had a lower mean age (34.7 vs. 37.6, $p = .044$), lower age at onset of heroin use (19.6 vs. 21.9, $p = .028$) and lower OST rates (31.6% vs. 52.4%, $p = .013$).

The most frequently stated main motive was lack of heroin or other drugs (35.5%), followed by insufficient dosage of prescribed substitution medication (9.2%), lack of places in substitution programmes (8.6%), financial aspects (7.9%), long-lasting drug effect/better tolerability (7.9%), self-administered detoxification/heroin reduction (6.6%), avoidance of withdrawal symptoms (5.9%), self-administered substitution, e.g. due to problems with treatment setting and rules (5.3%), inability to comply with office hours (5.3%), better “kick” (3.9%), and other reasons, e.g. curiosity (3.9%).

Motives differed depending on OST status. For OST patients ($n = 48$), most important reasons were insufficient substitution dosage (29.2%) and inability to comply with office hours (14.6%), whereas for participants not in OST ($n = 104$), lack of heroin (46.2%) and financial aspects (10.6%) were most important.

The availability of both methadone and buprenorphine on the black market was rated as high: 84.3% stated that it is ‘very easy’ or ‘easy’ to acquire D-/L-methadone. This number was 79.8% for buprenorphine, and 51.5% for buprenorphine/naloxone. The availability of substitution medication was estimated to be higher than five years ago, while prices remained stable.

The average reported price was €12.58 (± 7.24 , $n = 533$), for 10 ml of methadone, and €7.95 (± 7.22 , $n = 447$) for an 8 mg buprenorphine tablet. 20.8% of our total sample gave no price estimates for any substance, predominately persons without NPU. This concerned 19 out of 194 individuals with NPU (9.8%). In sociodemographic and drug use characteristics, they differed from the total NPU sample only in the higher proportion of females (57.9% vs. 22.9%, $p = .002$). Prices notably differed between regions: the lowest price for methadone was found in Dortmund (€6.54 \pm 4.41, $n = 28$), the highest in Frankfurt (€24.33 \pm 5.29, $n = 52$). In the city of Saarbrücken, an 8 mg tablet of buprenorphine was cheapest (€5.38 \pm 1.36), followed by Münster (€5.44 \pm 4.41, $n = 34$) and Hamburg (€5.83 \pm 5.16, $n = 155$) whereas again the highest price for buprenorphine on the black market was paid in Frankfurt (€14.55 \pm 2.06, $n = 31$).

Discussion

In a large, multi-centre convenience sample recruited from low-threshold services and drug consumption rooms, we found that NPU occurred to a non negligible extent – also among persons in OST – although rates of injection use of substitution medication were low. Among the four groups defined in Table 1, participants with NPU without being in OST showed the highest prevalence of polydrug and injection use (including injection of substitution medication). However, also among those with NPU, being in OST contributes to reduce concomitant drug use, which is reflected by the lack of interactions between OST status and NPU.

We found a large heterogeneity of reasons for NPU: even the most frequently stated main motive, lack of heroin, only accounted for 35.5%. Along with previous findings (Scherbaum et al., 2005), financial aspects seemed to be important, at least among participants currently not in OST. Among OST patients, insufficient dosage and problems to comply with treatment regulations were the main reasons for NPU, which may point to a mismatch between patient expectations and the mode of OST delivery (Schulte, Gansefort, Stöver, & Reimer, 2009).

Methadone and buprenorphine were both perceived as easily available on the black market, a finding that is in line with data from other European countries (Roche, McCabe, & Smyth, 2008). Our prevalence findings fit in the overall heterogeneous pattern in Europe, ranging from 5.6% in Portugal (Vale Andrade et al., 2007) to 75% in Finland (Alho et al., 2007).

Compared with previous German studies on NPU, it is difficult to conclude any trends or developments. Lifetime NPU in our study was slightly higher than reported by Scherbaum et al. (2005). Although the increasing trend stated by Rösner and Küfner (2007) seems to be in line with our results, comparison is difficult, as their data refer to proportions of specified medications used in previous 6 months, and not to the number of individuals. Compared with Leicht (2005), we found lower rates of injection use of substitution medication. However, results are not fully comparable, because we assessed injection use for a “typical day” without explicitly asking for 30-day prevalence, which is a shortcoming of our study.

Some other limitations of this study should be discussed. All information is based on self-reports without the possibility of further validating the data. Further, we were not able to provide data on the effect of the introduction of buprenorphine + naloxone on misuse patterns, as the small market-share did not allow for a valid analysis. Another shortcoming of our assessment is the lack of distinction between prescribed and non-prescribed use of benzodiazepines. Moreover, we did not assess longer-term OST history. Thus, our data do not distinguish between patients with frequently changing OST status and those who never were in OST. Further, this study may not be representative of all opioid-addicted persons in Germany, especially not of all OST patients. As we recruited a rather marginalised sample of drug users, it is likely that samples of long-term OST patients with better social integration would show lower rates of NPU. In contrast, one could also argue that we did not include persons at the other end of the distribution: those without any contact to the treatment system. Thus, further research in the field should investigate these subgroup differences, e.g. by comparing clients from low-threshold services with long-term OST-patients, and also consider a longitudinal approach to identify trends in NPU over time.

Opiate addiction involves long-standing neuroplastic changes leading to altered neurocircuitry pathways (Ross & Peselow, 2009). Understanding addiction in this way, the ‘misuse’ of substitution medication can be regarded as part of a polydrug ‘use’ to meet the need for homeostasis in a brain altered through long-term opioid use (Ross and Peselow, 2009). This is also confirmed by our findings,

Table 1
Sample characteristics and drug use patterns.

	n	Total (n = 753)	OST+/NPU– (n = 249)	OST–/NPU– (n = 310)	OST+/NPU+ (n = 70)	OST–/NPU+ (n = 124)	p (group differences)	p OST	p NPU	p OST × NPU
Age	751	36.4 (±8.4)	38.0 (±8.0)	35.7 (±8.6)	36.5 (±8.0)	34.7 (±8.2)	.001	<.001	.045	n.s.
Gender (% male)	753	74.5%	71.9%	77.1%	61.4%	80.6%	.013	.008	n.s.	n.s.
History of migration	732	23.8%	15.8%	29.9%	25.8%	25.2%	.004	.002	n.s.	n.s.
Employed	740	20.4%	24.6%	16.4%	23.2%	20.5%	n.s.	.025	n.s.	n.s.
Education ≥ 10 years	744	40.1%	36.3%	40.3%	50.0%	41.5%	n.s.	n.s.	n.s.	n.s.
Stable housing	743	86.1%	94.3%	77.8%	94.2%	86.2%	<.001	<.001	n.s.	n.s.
Parenthood	743	44.7%	48.0%	41.7%	44.9%	45.5%	n.s.	n.s.	n.s.	n.s.
Ever in prison	742	77.8%	77.3%	79.9%	73.5%	75.6%	n.s.	n.s.	n.s.	n.s.
Drug arrest in past 12 months	676	39.3%	32.0%	41.9%	35.9%	49.5%	.012	.003	n.s.	n.s.
Age at onset of heroin use	730	20.9 (±6.3)	21.5 (±6.7)	21.0 (±6.2)	20.6 (±5.5)	19.9 (±6.2)	n.s.	n.s.	.044	n.s.
Heroin										
30 days	753	78.4%	59.4%	88.7%	71.4%	94.4%	<.001	<.001	.002	n.s.
24 h	753	68.0%	42.6%	83.2%	58.6%	86.3%	<.001	<.001	.004	n.s.
Cocaine/crack										
30 days	746	57.6%	41.4%	61.9%	58.8%	78.2%	<.001	<.001	<.001	n.s.
24 h	746	38.7%	25.8%	42.6%	39.7%	54.0%	<.001	<.001	.001	n.s.
Amphetamines										
30 days	735	8.4%	4.1%	8.9%	9.0%	15.6%	.003	.007	.006	n.s.
24 h	735	1.8%	1.2%	1.6%	1.5%	3.3%	n.s.	n.s.	n.s.	n.s.
Benzodiazepines ^a										
30 days	744	37.4%	35.4%	29.5%	48.5%	54.9%	<.001	n.s.	<.001	n.s.
24 h	744	20.6%	19.9%	16.2%	27.9%	28.7%	.013	n.s.	.002	n.s.
Polydrug use (≥ 3 substances ^b in past 24 h)	753	20.2%	14.1%	19.0%	24.3%	33.1%	<.001	.004	<.001	n.s.
Injection use (all substances ^c on a typical day ^d)	675	66.8%	55.6%	68.8%	71.7%	80.9%	<.001	<.001	.001	n.s.
Injection use of substitution medication – “on a typical day”	675	9.5%	10.7%	4.0% ^c	26.4%	13.6%	<.001	.002	<.001	n.s.

Abbreviations: OST: opiate substitution treatment; NPU: non-prescribed use of substitution medication; Group definitions: OST+/NPU–: currently in OST, without NPU (in past 30 days); OST–/NPU–: currently not in OST, with NPU, etc.

^a Prescribed and non-prescribed.

^b Heroin, Cocaine (Powder, Crack), Amphetamines, Cannabis, Benzodiazepines.

^c This number results from the NPU definition based on 30 day prevalence. Thus, these 4% are participants without NPU in the past 30 days, who however indicated injection use of substitution medication “on a typical day”.

^d “on a typical day”

as polydrug use in past 24 h was more prevalent among participants with NPU, even if they were in OST.

In Germany, strict OST regulations have already led to limited treatment accessibility, especially in rural regions (Schulte et al., 2009). Consumer orientation and shared-decision making may represent an approach to overcome some of the mismatch between patient expectations and OST delivery (Joosten, De Jong, de Weert-van Oene, Sensky, & van der Staak, 2011).

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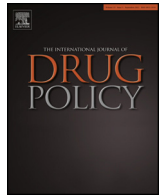
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Conflict of interest statement

Jens Reimer received study grants from Essex Pharma, was in the advisory board of Reckitt Benckiser and in the speakers' bureau of Sanofi-Aventis and Molteni Farmaceutici. Christiane Schmidt, Bernd Schulte, Christian Wickert, Katja Thane, Silke Kuhn, Uwe Verthein had no financial, personal or other relationships with other people or organizations within three years of beginning the submitted work that could have influenced, or could be perceived to have influenced, their work.

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Viewpoint

Methamphetamine use and methadone maintenance treatment: An emerging problem in the drug addiction treatment network in Iran



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In the last decade Iran has progressively expanded methadone maintenance therapy (MMT) with around 2700 active programs with over 160,000 active participants throughout the country. The monopoly of opiates in the drugs market in Iran, without the presence of any significant stimulants, made MMT a successful player without any serious rival in the drug use treatment network (Mokri & Schottenfeld, 2009). Methamphetamine use has been increasing in many parts of the world in the past two decades but it was not available in Iranian drug market before 2005 (UNODC, 2007). The growing availability of methamphetamine in Iran during recent years has raised serious concerns about its abuse among successful methadone maintenance participants (MMPs). Combined administration of opiates and stimulants is favoured among many substance dependent patients. The combination results in desired subjective effects (Trujillo, Smith, & Guaderrama, 2011). Both drugs increase extracellular synaptic dopamine levels and in combination produce greater effects than either drug alone. Co-administration of methamphetamine and opiates can decrease the side effects of each other and reduce the risk of overdose. The most common reported reasons for stimulant abuse during MMT are to feel good, to get high, for self-medication for depression and to achieve a high by shifting between different drug classes (Shaffer & LaSalvia, 1992). Methamphetamine abuse among MMPs has the potential to reduce the effectiveness of MMT programs. The emergence of methamphetamine dependence in a well-established MMT setting provides a unique situation, given the newness of the drug for successful MMP and clinicians inexperienced with methamphetamine. We have explored these issues in qualitative interviews with MMPs with a successful MMT history (over 6 months), who have started to use methamphetamine without any positive history of benzodiazepine, cocaine, or cannabis abuse during MMT. 11 male MMPs (mean age: 30 years, range: 24–39) participated. The duration

of MMT program was 7–84 months (mean=29.7) and duration of methamphetamine abuse during MMT was 3–24 months (mean=8.3). Most patients (9 out of 11) mentioned that they would first take a methadone pill and then use methamphetamine. Reasons for starting to use methamphetamine included negative attitudes toward methadone: some had started using methamphetamine for self-medication for detoxification from methadone dependency – for example a 34 years old, divorced, salesperson, 24 months on MMT and with 12 months methamphetamine use said that “A cousin talked about a new material [crystal meth] taking out methadone, no pain, no lassitude”. It was also used to counter methadone side-effects such as impaired sexual performance: a 22 years old, single, baker, 36 months on MMT and with 8 month methamphetamine use said that “Sex became a pain in the neck [during MMT], once a month, turned to once in two months”. The reported effects of methamphetamine included motor and cognitive performance; patients reported that using methamphetamine enhanced their motor activity and also had energizing effects: a 24 years old, divorced, photographer, 24 months on MMT and with 3 month methamphetamine use said: “I got workaholic, energetic, concentrating on things, never run down”. Some mentioned they had better attention and concentration and that methamphetamine improved their social skills: a 30 years old, single, clothing store owner, 24 months on MMT and with 12 months methamphetamine use said that “It made us talkative, I became such a chatterbox that didn’t let a customer leave unless buying something”. Some subjects mentioned increased pleasure “The only thing could give fun after methadone was crystal meth. I took methadone and other drugs, but little by little drugs got ineffective. Just crystal meth was effective.” and impact on sexual performance. Most MMPs in Iran are young, married, and employed (Shekarchizadeh, Ekhtiari, Khami, & Virtanen, 2012) therefore, sexual and performance are serious priorities for them and the side effects of methadone are dissatisfying (Zhang, Wang, Ma, Xu, & Li, 2011). Our interviews suggest MMPs tend to use methamphetamine to enhance their sexual performance. Integrating both medical and psychological interventions to deal with sexual deficits during MMT is a suggestion to protect them from methamphetamine use.

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There is a lack of epidemiological and clinical evidence to support the concerns we raise here. After the introduction of methadone in Iran, the experience of clinicians was that it had such a powerful effect on opiate dependence that they dismissed the need for psychological interventions. The emergence of parallel methamphetamine use and methadone, and the reasons given for methamphetamine use, indicate the need for psychosocial interventions and for revisions in treatment protocols.

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