

Medical Anthropology

Precarious livelihoods, precarious treatments: Making drug treatment work in northern Myanmar

Tim Rhodes, Khine Wut Yee Kyaw and Magdalena Harris

London School of Hygiene and Tropical Medicine, London, UK

CORRESPONDING AUTHOR

Tim Rhodes, London School of Hygiene and Tropical Medicine, 15-17 Tavistock Place, London, WC1E 8HT. Email: tim.rhodes@lshtm.ac.uk. ORCID: 0000-0003-2400-9838.

RUNNING HEAD

Drug treatment in Myanmar

MEDIA TEASER/TWITTER

How is access to drug dependency treatment made possible in a context characterized by conflict and pandemic?

and/or

We explore how methadone substitution treatment acts as an intervention of livelihood survival for people who use drugs in northern Myanmar.

Twitter profiles

@tim_rhodes

@pwidpride

ABSTRACT

We explore how precarious livelihoods intersect with precarious treatments for heroin dependency in a setting affected by longstanding conflicts and an illicit drug economy as well as by recent events of pandemic and political change. Working with 33 qualitative interviews with people who inject drugs in Kachin State, northern Myanmar, we explore how drug dependency treatment, especially methadone substitution, is made to work in efforts to sustain everyday livelihoods. Our analysis attends to the work that is done to enable therapeutic trajectories to emerge as “generous constraints” in precarity. We trace methadone substitution as an emergent intervention of livelihood survival.

KEYWORDS

Myanmar, drug dependency, generous constraints, livelihood, methadone, precarity.

Soe is 22 years old, a farmer, and first started using heroin when he was 15. His use of heroin started when he worked in the gold mines:

“Initially, I started using drugs because of the gold mine. I worked there as a gold miner. Back then, the drugs were very abundant. There were no arrests, people could use as much as they wanted and every gold mine had drugs. Back then, the bosses favored drug users because they can work proactively as long as they have enough drugs.”

Soe has not used heroin for the last six months:

“I have ended the addiction. The reason behind the change is, how do I put it, sometimes I feel unhappy. The people around me... they look down on me. I’ve lost my father. He has passed away. And one of my elder brothers, he’s not long been out from jail. He has travelled far away since I was a kid. He also is a user, of black opium. On the other side [of the river], in Tanai, he works in opium, black opium cultivation. He worked there and while he was dealing, he was arrested and put into jail. My eldest brother got married and he’s moved to another household. My older brother died from drugs. I also fell victim to drugs as well. And I kept thinking and thinking. And I gave up on it since I’m tired of myself. These are the reasons. And my mum, I also feel pity for her.”

Soe’s narrative entangles drug use and dependency, as well as recovery, with an account of family and livelihood, infused by a sense of loss and shame. In this article, we explore how drug dependency (mainly heroin) and drug treatment (mainly methadone substitution) interact with precarity. Our focus is how precarious livelihoods affected by drugs are navigated in relation to evolving methadone treatment in Kachin State, Northern Myanmar; a context shaped by longstanding conflicts as well as by recent events of pandemic and political change. Precarious livelihoods come together with precarious treatments, with drug treatment made to work as an adaption of its precarious situation. Our analysis accentuates the work that is done to make therapeutic trajectories possible in the face of constraints. We draw specific attention to how methadone treatment emerges as an intervention of livelihood security.

Lives affected by drugs and precarity

The livelihoods of many households in northern Myanmar intersect with poverty, illicit economies, drug dependency, as well as conflict (Htun 2018, Sadan 2016, Hedström 2017,

Kramer 2021). The first general election in Myanmar for 20 years, in 2010, gave renewed promise of a “triple transition” towards peace, democracy and a market-led economy (World Bank, 2019). The liberalization of parts of the economy, however, sit alongside a broader context of contested extraction of agricultural and natural resources in the northern borderlands (Jones 2014, Woods 2011, Lone and Cachia 2021). Through the ceasefire years of 1994 to 2011, land and legal reforms, along with foreign investments, contributed to the displacement of households reliant upon subsistence agriculture (Transnational Institute 2021, Smith 2010, Jones 2014, Kramer, 2021). Small-hold farming in northern Myanmar has become precarious as agricultural business has “opened up”, with shifts to farming opium offering an alternative means of livelihood in the face of poverty (Htun 2018, Meehan 2021, Lone and Cachia 2021). Many in Kachin State also rely on the jadeite mines and timber industries for income; work that is precarious as well as dangerous (Lin 2019, Sadan and Dan 2021). Opium, heroin and stimulant use can feature in these work environments, linked to mining, logging, construction and other forms of daily wage and hard labor, and living away from home, with workers sometimes part-paid in drugs, as in the case of methamphetamines (See also: Lasco, 2014). Through the ceasefire years (ending 2011), the production of opium has fluctuated, with heroin use and injection becoming more widespread (UNODC, 2020). Myanmar is one of the world’s largest producers of opium, with around 90 percent produced in the northern states (UNODC, 2020). In Kachin state, the spread of heroin use and injecting is said to affect most elements of society with few households untouched (Dan et al 2021).

The health and material effects of drug use and the drug economy, alongside poverty and longstanding conflict, have been far reaching, also linked to large-scale epidemics of HIV (National AIDS Program, 2019). This situation is made more fragile by the recent shocks of pandemic and political instability (UNDP 2021, World Bank 2021, Transnational Institute 2021, Rocha et al 2021). In February 2021, and one year into the COVID-19 pandemic, the army of Myanmar took political control of the country, over-turning the results of the 2020 elections. The fall-out of this event, compounded by the pandemic and associated travel, trade and work disruptions, led to reduced work opportunity, rising unemployment, income shortages, food insecurity, and intensifying household dependency on informal economies, including the farming of opium according to some reports (Fishbein et al 2022, UNDP 2021, World Bank 2021, Transnational Institute 2021).

Drug treatment and emergent methadone

One narrative that circulated in Kachin state is that drug dependency not only causes material disruption to the household but creates an existential threat and social harm, with the intimation that drug dependency is collateral damage linked to ethnic conflicts in the region, said to have intensified since the end of the ceasefire (Sadan 2016, Kiik 2016, Ko Ko and Braithwaite 2020). This has prompted faith-based social movements promoting harsh, including forced, crop eradication and drug detoxification (Dan et al 2021). Here, drug treatments promoting recovery towards a “drug free society” link with Christian religious movements which accentuate longstanding Burma national and Kachin ethnic identity differences (Sadan et al 2021). Enforced drug detoxifications coexist, uncomfortably, with evolving public health-oriented drug treatments, notably opioid substitution treatment (Oo et al 2021, Tun et al 2022). Whereas narratives of drug eradication and detoxification imagine a recovery which idealizes freedom from drugs, driven by a moral struggle, narratives of drug substitution foster a relative freedom in managing drug dependency, assisted by biomedicine. Each intervene in, and constitute, addiction differently, but both navigate a trajectory towards self and livelihood security borne out of a situation of precarity. An increased rhetorical emphasis on HIV prevention and public health pragmatism in drug policy in Myanmar (Ministry of Health 2021) is taking place in a region where the “drug free society” and “war on drugs” are popularized tropes (Lasco, 2020, Lunze et al 2018), affording methadone substitution treatment uneasy status.

Our primary focus here is on methadone, and how such treatment is made to work. Methadone is an agonist opioid substitution used in the treatment of opioid dependency. It is evidenced globally as an “essential medicine” in public health responses seeking to manage the health harms of opioid dependency (McArthur et al 2012, Degenhardt et al 2010, Sordo et al 2017). Methadone substitution treatment also enables participation in work, family and social life (Magura and Marshall 2020, Chang et al 2019). Qualitative research highlights how the feasibility and acceptability of methadone treatment implementation is localized, with the effects of treatment made multiple, as forms of enablement as well as governance (Bourgeois 2000, Fraser 2006, valentine 2007, Rhodes 2018).

Introduced in Myanmar in 2006 among 206 people (Tun et al 2021), methadone substitution treatment has expanded dramatically as an element of national HIV prevention responses (Oo et al 2021, Lum et al 2020). Over 26,000 people in Myanmar were registered for methadone treatment at the end of 2020, perhaps around a quarter of those injecting drugs in the country (Tun et al 2021, 2022). There are around 55 dispensing sites in Myanmar. A major practical

challenge is geographic accessibility, given the difficult to traverse terrain and long travel distances required to reach clinics, especially in the rural north. National policy frames methadone treatment primarily as a technology of HIV prevention and harm reduction (Ministry of Health of Myanmar 2021, National AIDS Program 2019). Our study draws attention to how methadone treatment is made to work in relation to everyday practices of survival.

In the areas of Waingmaw and Bhamo in Kachin state, our focus for this study, there are three methadone treatment centres in Waingmaw (with over 1000 clients registered at the main dispensing site of the general hospital), and two in Bhamo (with around 585 clients registered at the general hospital site) (Ministry of Health 2021). Journey times to clinics can take a number of hours for those living outside the townships. For instance, for the 200-300 people accessing methadone who live in Shwe Nhaung Pin village, south of Waingmaw, there is a usual journey time of around three hours. A significant move, introduced initially in 2012, and expanded in response to COVID-19, has been the provision of “take-home” methadone doses, for up to 14 days and sometimes more, for clients who adhere well to their treatment (Oo et al 2021). Whereas around 10 percent received take-home doses prior to the COVID-19 pandemic, estimates suggest that around 70 percent of approximately 20,000 people have been in regular receipt of take-home doses since the pandemic (Oo et al 2021). The pandemic has prompted the introduction of more flexible methadone dispensing in many countries (Grebely et al 2020, Frank et al 2021, Fanning Madden et al 2021). Methadone provision for new clients was stopped in both Waingmaw and Bhamo after the military took political control in February 2021, a constraint to service provision which lasted through the duration of our study.

Making treatment work in its situation

Sociological and anthropological work emphasizes drug dependency and its treatment as context-based matters of ontological movement rather than as pre-given or fixed (Raikhel and Garriott 2013, Duff 2014, Fraser 2020, Dennis et al 2020). This draws attention to treatment technologies and therapeutic trajectories as “in-the-making”, as always emergent in relation to their material situation (Rhodes 2018, Rhodes and Lancaster 2019). In this article, we trace drug treatment efforts, especially methadone substitution, as a “generous constraint” of precarity.

Following Gomart (2002), “generous constraints” are adaptive practices that are induced by, as well as entangled in, the limits of the social and material situation (Gomart 2002). We understand precarity as being produced at the intersection of localized vulnerability with broader structural shifts, including global developments (Rigg 2006, Han 2108, Whittle et al 2020). We are interested then, in how methadone treatment is made to work within the limits and potentials of its immediate situation; a situation which also connects with “big events” in the risk environment, from pandemics to political change to slower moving social and economic shifts affecting livelihoods (Friedman et al., 2009; Zolopa et al., 2021; Meehan, 2021; Meehan et al., 2022). Significantly, ideas of generous constraint envisage constraint not simply as a force of oppression, but as emergent agency; a relative freedom that is induced by the bounded situation, a “forced movement” which can produce a “positive” effect (Gomart, 2002; Zourabichvili, 1994). In her work on the implementation of opioid substitution treatment in France, Gomart traced how abstinence as a freedom from addiction became troubled by adaptations towards harm reduction in the face of HIV risk, in which the emergence of substitution treatments afforded a relative freedom in relation to drug dependency. She also showed how adaptations in opioid substitution treatment were induced by the challenges and constraints faced by clients, which gave rise to more flexible modes of prescribing and service delivery. Social studies of methadone and other opioid substitution treatments have emphasized how these treatments can govern through constraints as much as freedoms (Bourgeois, 2000; Fraser, 2006; valentine, 2007; Harris and Rhodes, 2013; Harris, 2015) as well as how they how are “made multiple” in practices (Gomart 2000, 2002, Rhodes 2018). Rather than envisaging human action as simply determined by structures, agency here is a recursive effect of constraining relations, in which the work that people do to navigate their situation is made noticeable:

“Human agency is tentatively and temporarily re-defined as the capacity not to act alone, but to deploy skillfully and cunningly the right conditions in order to allow action to arrive; to act because one was generously constrained.” (Gomart 2002: 546).

Situating our study

We imagined our study as an in-depth qualitative and ethnographic project. Our plans changed in light of two events: a pandemic, and political change brought about by military take-over. We spent the best part of 2020 in a holding position unable to travel, internationally or locally, given COVID-19 travel restrictions and safety protocols, waiting for a window of opportunity

outside the worst of the rainy season (given some of the mountainous locations of our planned fieldwork). We altered the design of our project to one that was easier to manage remotely and that could work around travel restrictions. After the military took political control in February 2021, we entered a new holding pattern of ongoing risk appraisal. We refashioned our project further, in keeping with rapid situation assessment methods (Rhodes et al 1999, Beebe 2001). This emphasized a pragmatic and adaptive approach, with safety as the overriding concern. First, we formed a local team of four interviewers. These were outreach, peer educators and health service staff who participated in a five-day research training. Second, we switched field sites from community locations in Shan and Kachin states to local community drop-in clinics in Waingmaw and Bhamo in Kachin state, to enable interviews on-site with in-person supervision and de-briefing.

Our fieldworkers undertook 33 qualitative interviews approximately one year into the COVID-19 pandemic and six months after the military took control; a period of intense uncertainty. All participants had current or recent (past three months) experience of heroin injection, except for one person who last used heroin six months ago. Interviews were undertaken in Waingmaw and Bhamo, both townships in Kachin state close to the Chinese border of Yunnan. Around half of our study participants live in these townships and half in surrounding villages. Most identify as men (five as women, and two as transgender). The sample averages 36 years old (17-57 years). They work as farmers (8), miners (4), and in other forms of daily wage labour, including timber logging, carpentry, welding, driving and sex work (12). One worked as a fire-fighter until giving up his job to join the methadone treatment programme. One is a shop owner and one a student, and four are without work. All but four in our sample are currently using heroin (all inject their heroin except two who smoke it), nine use the methamphetamine Yaba (three use Yaba only), and one person had recently stopped using drugs (heroin). In addition, there is black opium, as well as “formula”, which is a mix of opium and cough mixture, both used by a minority in our study. There is a tendency in participant accounts to talk generically about “drugs” and “addiction” rather than specifically in relation to particular substances. Informally acquired methadone is also bought and shared, with a minority (7) formally enrolled in methadone substitution treatment. The majority (23) have received a diagnosis of HIV infection (with many co-infected with hepatitis C, and some with tuberculosis). All participants received 5000 kyat (~3.5USD) as reimbursement for their time and travel. When working with interview data, we use pseudonyms.

Our interviews, all undertaken in Burmese, were facilitated by a topic guide. Our shift to interviewing people in community drop-in clinics likely situated the conversation differently than might have been the case otherwise, given that interviews took place as an adjunct to service provision (only three people interviewed were new to services). Interviews were audio-recorded, with consent, transcribed verbatim, then translated (with selected back translation) into English. We developed five categories of axial thematic interest (Charmaz 2006): drug transitions and changing contexts; work and livelihoods; drug treatments, medical and otherwise; community responses and social supports; and access to health care. Here, we work primarily across three of these (work and livelihoods, drug treatments, and drug transitions and changing contexts). We also undertook interviews with eight stakeholders with local project implementation and peer intervention experience.

Precarious livelihoods

Most in our study rely upon forms of daily wage labor, including farming, jade and gold mining, timber production, masonry, and mechanics. Work is precarious: “I work on whatever job is available”. Getting work depends largely on family and friendship connections, and “if there is no such job, I just don’t work”. The story of Mai, a 36 year old woman from Bhamo, gives a sense of the everyday juggle. Mai works on the land, to “plant the paddies”, but now they “throw the seeds”, so “they no longer hire people to plant” and “I don’t get to work”. She seeks out “general small tasks” on the farm. Like others in our study, her drug use shapes how she engages in her work. In Mai’s case, her work waits until she has had opportunity to source and use the heroin she needs (“I can only work after using drugs, if I don’t use, I can’t work”). She is careful that her heroin use does not become visible to her employers. This leads her to trying to make money by searching out “seasonal vegetables in the forest to sell”; work that can be done alone without fear of interruption (“Nobody would have a problem with that”). Mai tells us that her husband recently died. Her four young children live with her, and her eldest with her grandmother. Providing for herself and her family is a struggle. Like many in our study, her desire to cease drug use is cast as an effort to manage her precarious situation, for herself, but also for family:

“I want to quit drugs. It’s very difficult to find drugs and it’s difficult for my family. I want to quit drugs so bad. It’s so difficult. Since I am working to earn alone, I happen to spend more on the drugs. I want to quit so bad.”

Zin likewise accentuates the juggle of finding work sufficient to survive, for himself and for the household. Zin works, with about 20 others, loading trucks with bunches of bananas, from a farm where he has been living for around three years. He says we “also have to take care of our meals” from the “5000 kyat per day we earn”. Also, he only works “when the truck comes”, and “if there are ripe bananas in the farm”, otherwise “we have to stay jobless”, and “during this time we have to survive by borrowing”. The workers are only paid after a certain number of trucks are fully loaded, sometimes five, sometimes ten. It can “take 10-12 days to finish 5 trucks”. And “sometimes the head won’t make the payments”. Zin has a family, and his child has been sick. He borrows to afford the medicines he needs for his child because he “can’t afford to buy from outside pharmacies”. Like Mai, on “jobless days” he searches out vegetables for onwards sale, trying to find “water spinach, fireweeds” and other things. He also cuts firewood. In the good weather season, for around 5 months of the year, he also makes bricks. He sometimes works as a driver and as a mechanic locally, but since he “has no place to stay” he “can’t afford to get back to the village”. Like Mai, he also locates his “struggle” as a family concern:

“We cannot make ends-meet. I have to support them. I have to support my children’s school, education, clothing, meals. I cannot handle them all, we cannot make ends-meet, and I fail to restrain my mind.”

We can see here that Zin works hard to manage his constraining situation. We can also see that Zin invokes his precarious situation, and that of his family, as a failure linked to lack of restraint. This is a common articulation of drug dependency as a matter of self-blame, as a “disease of the will” (Valverde 1998): “I have become terrible. I cannot restrain my mind”. Zin acknowledges that “if I have 5000 kyat in my pocket, I must use drugs from this 5000, so I would use all of that for myself”, but equally “5000 kyat is essential to cook meals for my family”. He says, “after using and reaching my limit [tolerance], after I am satisfied, I would try to work and earn as fast as I can, for my family, in time”. He will do whatever job is available, “other people’s trivial tasks, whether they want, to make trenches or fix their houses, or if they want to clean the weeds, I will do it”. This is how he seeks to balance a precarious livelihood affected by heroin use.

Drugs, both opiates and stimulants, can also afford capacity for work in this setting, especially when the labor is arduous. In their different ways, opiates and stimulants enact relief, for

instance from aches and pain, and from fatigue, affording the energy and capacity to keeping going. For farmers and for timber workers, for example, it was said that “people must use these drugs to work”, that “without the drugs it is impossible to work”, and that “when my body starts to ache, I use”. Work and drugs entangle, productive of the other, especially in some work environments. Aung says that it was “when working in timber production, that I started smoking opium, and then I came to inject heroin”. Soe, as we earlier heard, first used opiates when starting work at the gold mine, at a time when such drug use was not discouraged by employers because of its productive labor potential.

Work, however, has become more precarious recently, with employers less inclined to engage people who use drugs. In a familiar description of felt stigma, we are told that “everybody looks down” on people who use drugs, that many employers “view them as thieves”, that they are not to be “trusted”, and that people who use drugs do not get accepted for “outside jobs, other than family business”. More specifically, narrowing work opportunity is linked to the COVID-19 pandemic and to uncertainty precipitated by political change (See also: UNDP 2021). As Soe comments, while it was once “great for work”, it has “now become very hard to find work”.^[20-M-22] He now “cannot make ends-meet”, as “daily wage jobs have become rare”. Aung also worries about the lack of work opportunity: “Since the political situation is not stable as before, jobs are rare, and it is difficult to work, I have less work”. There is insufficient work to get by, which also makes managing drug dependency harder: “Jobs are not working out enough to use drugs”.

A narrowing job market only leaves the more precarious, and dangerous, jobs available. People who use drugs are becoming a “last resort” for employers. A transition to working in illicit economies, including the farming of opium poppy, becomes necessary for some:

“Nobody wants to employ us because of drug use. Only timber production in the forest employs drug users. People resort to drug users only when there is no other person. Nobody likes a drug user. Jobs are very rare for users. They have to do jobs that no one wants to, jobs that are very dangerous.”

“Even people who did not sow poppy fields now start growing. [...] It is not the same anymore. If you say you are a drug user, you cannot get a job. Despite your skills,

mastery, you cannot get a job. [...] Now, with very limited daily wage job availability, I have to go around looking for jobs and work for whatever is available.”

At the same time as work opportunity is narrowing, some suggest easier access to heroin and opiates in recent months. Drug availability may have “increased a lot, due to this political instability, as there are less arrests, and the number of sellers and users increased”. The “police cannot give priority to drug users” as they once did, creating conditions that are “a little freer”, less constrained, for “those who deal with or use drugs”. Accessible, and some say cheaper, drugs combine with reducing work opportunity:

“It is easier to buy drugs during this time of political crisis. Drugs are also cheaper. But, due to the political escalations, there are a lot of drug sellers. If we had to spend 5000 kyat for a certain amount back then, we can now get the same amount with 2000 kyat.”

This pattern of apparent increasing heroin availability is not uniform however, and is also shaped by restrictions linked to COVID-19. Some villages are more affected by restrictions than others, especially those under armed control. For instance, “Due to this disease [COVID-19], it is no longer allowed to sell near the village. They try to sell around the woods, far from the village [as] the land owners do not allow them”. Because “villages restrict travel in or out of them” and “do not let strangers in”, accessing heroin now requires a “native villager” as a “broker”: “If you’re going to buy 5000 kyat worth of heroin, you have to give him 2000 kyat. You only get 3000 kyat worth of heroin.” The ‘balancing out’ of drugs and work entanglements are made even more unpredictable by the big events of pandemics and political change.

Precarious treatments

There are three main forms of drug treatment in this setting: self-detoxification, with or without medicated withdrawal relief; faith-based residential rehabilitation and/or education camps; and opioid (methadone) substitution. Our primary focus is the latter. Across interview accounts, drug dependency is largely presented as self-inflicted trouble, with drug treatment an effort of self-improvement. Whether through “quitting” via self-detoxification and faith-based intervention, or through “substitution” via methadone, treating drug dependency is presented as an opportunity to “live like normal people”, “to become a better person”, a “good person”, and to “return to normal”. This imagines drug treatment as a process of *self-change* towards *social restoration*. This is a common narrative of recovery (Valverde 1998, Nettleton et al

2013). Through such narration, the constraints of environment – including discourses of shame and practices of discipline enacting “addiction” as self-infliction – become internalized as problems of the affected (Rhodes et al 2007, Bourgois 2000, Harris 2020). Drug treatment affords promise of movement socially (enabling inclusion and acceptance) but also, as we appreciate here, materially (enabling work and livelihood).

Do-it-yourself treatment

Self-detoxification is common given limited treatment options. These efforts are often made without the help of others or medicines. The “the main thing” is “the self-determination to quit”. Do-it-yourself efforts locate the problem (including of social harms) in individuals, absolving blame to others or to other things: “Since I have substantially chosen this path, I am not to blame anyone. Also, it is not possible to request help for personal suffering, so I have not requested any help”. Do-it-yourself treatment can involve removing the self from its constraining situation while it sorts itself out. Min, for instance, describes his do-it-yourself treatment for his heroin dependency as both a removal, an isolation, and as a test of endurance, which in his case, he could not live through:

“Other people buy and take methadone and take medicines. I don’t buy and take medicines. Therefore, I just endure the pains. [...] I went to the forest, the hillside plantation, to live. I lived there for about a week. There was nothing, nowhere to go. I got sick. I grit my teeth and endured the fever. After a week living there, I began to have stomach pains and headaches. The pains were so severe that I came back home.”

While accounts of self-detoxification may enact treatment as an immediate concern of “getting by” and of “getting past” withdrawals, and do not always invite a longer-term or drug-free “recovery”, these efforts locate social restoration in relation to family livelihoods:

“I had to face the criticism of my surroundings. Not only on me, also relatives from my mother’s side, including my relatives, when I think about it. They felt small because of me, since they live in the village. With that, I couldn’t stand it, and I quit it, by myself.”

“When I told them [family] I was quitting drugs, they were happy. No matter what, their son, their brother, is becoming a better person. They were happy about that, and happily helped me.”

Detoxification is induced, in part, by family concern (“Dad and Mum, for them, it’s better to quit”; “No one in the family likes that kind of thing”), with self-detoxification efforts becoming a repeated feature (“If they ask me to quit, I quit. Once, twice, thrice, just like that, I try to quit”). Self-efforts to quit become repetitions because they often falter (“I couldn’t stop thinking about it. Couldn’t quit drugs. Couldn’t stop thinking about it. That’s the trouble”), enacting their own precarity of the will.

Religious correction

Accounts of faith-based residential rehabilitation also articulate efforts to quit as a suffering which the self has to endure. But here, detoxification (without medication) is presented as not enough, for restoration requires spiritual change. As Seng Nan suggests: “It is not easy to just quit, only because you have the desire. I think sticking to the values of religion can make people quit drugs forever. If not, people will eventually come back to drugs one day”. Though by no means all, some such residential camps are said to require force and detainment to work. The Pat Jasan, which has close ties to the Kachin Baptist Convention and Roman Catholic churches, and which in local Jinghpaw means to stop (*Pat*) and to cleanse (*Jasan*), is one such faith-based movement, and advocates forced drug eradication and recovery (Ko Ko and Braithwaite 2020, Sadan et al 2021). Here, treatment locates freedom from drugs with the saving of the Kachin peoples from harm, in a narrative which links the household harms of drug dependency to enduring ethnic conflicts and the extractive potentials of market-led developments in the region (Kiik 2016, Hedström 2017, Sadan et al 2021, Dan et al 2021). Treatment of the self is here located in a moral and political struggle in response to social dislocation (Hansen 2013).

For some, then, the Pat Jasan is a “good initiative to protect our own lineage, and family members from the danger of drugs”. Treatment is constituted as a “complete withdrawal”, a freedom from drugs, in which “force makes them stop”. For Jar, a 36 year-old man, his heroin use continues despite his best intentions to quit because, he says, “I cannot contain my urge”. A narrative of a failure of self-control presents as a need of force for change. Unlike generous constraints (Gomart, 2002), where the limits of the situation are worked-with to enable a relative agency to emerge, this is a discipline which disables maneuver of thought or action. As Jar proposes, “if you really want to quit, when having an urge, you need to be chained”. Here is one description of this process:

“The previous Pat Jasan hated us, the drug users, most. They were worse than cops. Cops won’t do anything if they don’t find drugs. But they [Pat Jasan] would beat you up whether or not drugs were found. And tie them with ropes, and put them into wooden stocks. The wooden stocks are no ordinary ones. They are at least this chair high. [...] And you are having drug withdrawal effects, and cannot do anything. They are not even going to allow you to take a shower.”

We are told that if people are not “caught” and “taken” into such treatment by the church, they are encouraged or coerced by their families “for the sake of [their] own good”. There are other forms of “biblical training” and “drug recovery school”, some described to us as Pat Jasan by other name, with the influence of Pat Jasan said to have declined recently, including post-pandemic (“everyone is having difficulties”). The human rights and evidence-based arguments against compulsory and enforced drug treatments in the south-east Asian region, which our interviewees also describe as “torture”, are synthesized elsewhere (See Werb et al 2016, Lunze et al 2018). Here, we note how personal narratives of self-change entangle with cultural scripts of drugs and dependency as existential threats wrought by enduring ethnic conflicts for which religious correction and enforced punishment is presented as therapeutic (Sadan et al 2021).

Quitting as social-material concern

Accounts of quitting – whether detoxification by self or by other means – present restoration at once as a social and material concern. Let us consider Kham’s account. Kham is 37 and lives with her mother and her two sons (now teenagers) on their hillside plantation where they grow rice and taro. She locates her heroin use in relation to problems of the household, especially food insecurity and her incapacity to work. She has married twice. Her first husband began using heroin when he “started panning for gold at the gold mine”. He died five years ago of HIV complications. Her current husband also uses drugs and lives with HIV, as does she. She worries about her sons as “they are spending the money they make on gambling”. Her drug use is felt as a family problem, and as source of family shame. Her father sees her as a “troublemaking daughter”, in need of discipline: “He talked to me on Monday, saying ‘When I get back, I, myself, will turn you into the police; we, the parents, can no longer handle you’”. She tries to hide her drug use from her family, and cannot face up to them: “[We] do not eat together, food is prepared, but we never eat meals together”. Drugs though, help sustain input into the household day-to-day: “Once I use drugs I feel active and fresh and have the will to work and do household chores”. But she sees herself as a source of “embarrassment” to the

family. She says that people “point fingers at them [her family], and look down on them” because of her. She says that “using drugs will keep my sons away from attaining social acceptance”, that they will “feel belittled”, and “constantly negatively judged by others”. She knows this because of how she is treated herself: “Neighbours and relatives look down on me, judge me, and look at me with the eyes of disgust”. And her mother tells her so:

“Look at your sons, your sons are ashamed of you! You are also looked down upon by others, even by the relatives. No one wants to talk to you’. [...] She says, ‘Other people’s kids are making themselves beautiful at church, wedding receptions, and other festivals. I gave birth to an only child, and look at yourself, sneaking around the corners to take [drugs].’”

It is at times like this, when Kham thinks of change: “I should get out of this”. She is conscious of her place within the household: “I should be helping my parents as much as I can, since they can’t work much”. Similarly, for Zin, his efforts to quit drug use are induced by livelihood constraints, also expressed as family concerns:

“Before I die, I want to support my family. I want to have more time to work. [...] My family has been facing poverty and difficulties because of me. It is my view. I am incapable. My family can no longer eat like others, cannot dress like others. [...] I want to stop. I, myself, do not want to use this heroin anymore. [...] I cannot do anything for my family.”

Methadone substitution

Distinct from narratives of “quitting”, recently introduced methadone treatment emphasizes “substitution” as a relative freedom from drug dependency and other constraints. Substitution infuses together social and material restorations, with methadone presented as an enabling force of relative normalcy in work and family life despite heroin dependency:

“The advantage of methadone is that you can work and live healthily as a normal person throughout the day after taking it. After taking methadone, you can live as a normal person unlike a drug user so it is good.”

“I can work more. I can lift things, like that. I have gained a better impression from my children and my wife. For my children, they come to think of me as a father again. For my wife, she comes to treat me as her husband again.”

Lun’s family, for instance, has come to understand methadone as an intervention of livelihood:

“They understand, because I’m in charge of the work. I work together with my parents. So, my father knows. As soon as I go to work in the morning, I don’t go anywhere, I take the medicine. [...] If you take methadone, you don’t need to spend extra money. It is good for the family and also ourselves.”

The capacity to work, and to provide for family, combines with a broader hope of social inclusion. As Zin explains “I can support my family with all my earnings”, which means “we can stay happy” and “afford to eat and drink”. Furthermore, he says, “I can participate, contribute, be included” in “community affairs, social activities, death incidents, ceremonies, occasions in the village”. Zin sees methadone substitution as creating the conditions where “I can contribute with both my money and my labor”. A difficult situation is adapted to allow action to arrive (Gomart 2002).

Yet, there are multiple interpretations, and tensions, in the narratives of methadone treatment that circulate locally, and these are elements of the constraining relations which affect the therapeutic trajectories of drug treatment. Most important here are addiction recovery narratives, like those of quitting described above, which imagine methadone as a “quick fix” medicine potentiating freedom through abstinence. We are told that people assume “that after taking it for a week you will be fine”, and that “we will be able to quit once we have had a little amount of this medicine”. A service provider comments, “They think they don’t need to continue taking methadone after one month or two months. No matter how much counselling we do, they still have this misconception”. Accordingly, this can “lead to poor adherence” as well as weakening family support, as recovery expectations wane:

“My family doesn’t like it, and I don’t use it anymore. They don’t like methadone. [...] They want me to quit without replacing it with other things.”

“Since we have been taking this medicine over time, our parents, families, have come to dislike it. Because, also, this is not like actually quitting.”

Narratives of substitution (which imagine relative freedom) entangle with narratives of quitting (which idealize complete freedom). While methadone expectations are shifting from enactments as a “quitting medicine” to a “substitution medicine”, there is talk of methadone being “despised” because it is not seen to solve the problem of dependency or act as a sufficient corrective on those who continue to use drugs. Accordingly, “if you take it, you will be ridiculed”. Here, methadone enacts a force of social constraint, reproducing discourses of shame linked to failed recovery expectation, with substitution ‘no better’ than drugs, and people who use methadone “no different”. As Seng remarks: “My mother, having heard about these different opinions, told me that people [on methadone] even went insane, and that it is worse than Number Four [heroin]”. Narratives which posit substitution as insufficient recovery position methadone as *too generous*, as insufficiently constraining. The treatment trajectories of substitution and quitting are in flux in this setting, with this negotiation played out through emergent methadone. We now turn below to how methadone substitution treatment is made to work in practice.

Making methadone substitution work

Of immediate practical concern when navigating the constraints of treatment opportunity is the combination of geography and cost. Getting to clinics can require travelling long distances, over many hours, involving bus, motorcycle or boat. The practical constraints of time and cost work against accessing daily methadone treatment for some. Here, Jar talks of the difficulty of getting to Bhamo town from the other side of the Ayeyarwady river, a round trip which can cost around 5000 kyat for those who own their own motorcycle and around 7000 kyat otherwise, given that the only bridge across the river is 58km from the town:

“I want to take methadone. I live on the other side [of the Ayeyarwady river]. Since I am living on the other side, I can’t come every day to take methadone. I can’t come because of financial issues. I can’t afford the bus fee for every day. Although I own a boat, I can’t afford the fuel. Yes, if methadone is given out on our side [of the river], I am OK if I have to walk. If it can be accessible by motorbike, I can go, even if far. But, on this side [we are] separated by water and I have difficulty getting here.”

People thus make remarkable efforts to access methadone daily given the constraints of their situation. A journey time of “two to three hours” to the clinic is presented to us by some as a “short time” because it is not a “whole day”. Accessing methadone takes *work*. Let us consider Zin’s account. His is a treatment induction success story which gives a sense of the challenges and work involved. He describes himself as “very addicted to heroin”, without “enough money for heroin, let alone for bus fees”. He therefore persuades a friend of his, a client of the methadone clinic, to allow him a free lift to the clinic on the auto rickshaw the clinic has provided as transport for clients from afar. The journey takes “over 3 hours, almost 4 hours”. Zin makes it to the clinic and registers. He is then asked to come back to the clinic in 3-4 days. This happens three times, once to bring in a witness, his wife, once for blood tests and to see a doctor, and once to collect the results of blood tests. He finds this process challenging given his withdrawals on long day trips. On one such trip he describes becoming so overcome by withdrawals that he collapses beside the train tracks on his afternoon journey home (he is helped by his wife). He comments that there are “too many rescheduled appointments”. He says of others attempting to register that they “couldn’t wait for days” and “won’t go back”. He though, perseveres. It took “20 days, 4 times, and around one month, just to be able to take methadone”. Upon his completed registration, methadone is made available for daily pick-up. With a “whole day” journey time, methadone treatment becomes “like a job”.

Here we see the potential that methadone treatment affords in relation to work and livelihood in tension with its disabling of such opportunity given the material constraints: “For the clients who came from far away, it seemed like they couldn’t do any work as they had to spend all day long to get methadone”. With work opportunities narrowing (see above), the time and effort to access methadone treatment exacerbates precarity. Rather than helping people to get by, it gets in the way:

“My family did want me to use [methadone]. On the other hand [they said] ‘Your thing [methadone] won’t allow you to travel. When gold is found there, you can’t go to pick gold’. [...] That thing [methadone] was like a job. I had to go there between 8 and 12. I had to go almost every day.”

Tinkering with methadone delivery

Clinics attempt to overcome some of these constraints by, for instance, assisting with patients’ registration at induction, especially for migrants without residency documents, and by assisting

with daily transport. To get started, would-be patients require a letter of recommendation from their local administrator if attending a clinic located away from home, and a witness or guardian on the day of registration. But these are hurdles that can be jumped: “The recommendation letter from the quarter administrator is not hard to get, just give tea money [small bribe]”, and “You bring someone, like an older sister, younger sister or parent”. Despite these tweaks, many do not get this far, especially women concerned that “neighbours, husbands and parents might find out”.

Access, once registered as a client, has become trickier in the face of COVID-19 and travel restrictions. The pandemic exacerbates an unstable political situation to extend constraining relations. Here is Seng Nan: “As the political climate gets worse, people cannot visit nearby towns any more. With already existing Covid-19 movement restrictions, this political situation is making things worse”. In response, the clinics have made dispensing more flexible for existing clients by providing and extending ‘take-home’ doses, after a period of one to three months of steady treatment: “Today, they start giving for 27 days. They said it is due to COVID-19”. This is an act of generous constraint precipitated by pandemic, a “good thing to come out of bad things”, a relative freedom, which manages the disruption of daily treatment journeys and protects fragile work opportunity:

“We give methadone as a take-away. When we give take-aways, the most is for two weeks. I give parcels for two weeks. So the person has to come and take methadone for only two days per month. The whole year, they only have to come for 24 days. [...] For people who have jobs, and for those who don’t, the transportation issue is solved. They only have to come once every two weeks. So that’s the good thing to come out of bad things.”

For existing clients, take-home doses help preserve methadone’s livelihood potential. Since the political instability of February, however, the clinics have stopped accepting new patients, partly due to reduced staff capacity (induced by a combination of civil disobedience and safety concern), and partly to protect existing service delivery in an atmosphere of increased surveillance and disruption. As Lu Seng remarks:

“Because of the political situation, it has been a long time since methadone has not been given to people. Even now [July], I thought of asking, but I have not. I wanted to ask if

methadone is now given to new people. [...] There are about over twenty people who have been asking me about it in my village. Since the beginning of the political chaos, they are not accepting new people.”

The closing-down of the methadone service to new clients coincides with the reduced capacity to earn, and thereby to afford drugs (see above). Treatment need in this setting is highly contingent upon livelihood and the capacity to earn. When income reduces, treatment demand increases. Methadone substitution is a response to, while delimited by, precarity:

“There are some people who really do not want to use, and in this period in which they have very low income, and when things go awry, they want to take this methadone instead, as they can no longer afford to use drugs.[...] We had to stop methadone. It’s already been six months that we stopped. So there are lots of people who inject drugs in Waingmaw who have financial problems, as there are work difficulties. With Covid, all the banana fields have also stopped. When they don’t even have a daily wage, most clients come and ask for methadone.”

Tinkering with methadone access

This situation of constraint prompts some would-be clients of methadone treatment, as well as some of those for whom navigating daily dispensing presents a practical challenge, to seek out methadone that is sold or shared, including in efforts to self-treat withdrawals. Sometimes mixed with water, diverted methadone is said to cost around 5000 kyat for “over two knuckle sizes”, equivalent to around “100 millilitres”. Methadone bought or shared is put to use according to its situation; as a “substitution” for managing withdrawals or as a tool for “quitting”:

“In the village, people have got this medicine, they have the methadone, and I purchased again from them, for 1000 kyat, 2000 kyat, and quit like that. [...] Sometimes I get sick and I just stay in bed. I can’t stay like that when I try to quit. So, when I see people who sell methadone, I ask my parents to find that money for me, and have to buy and drink it.”

In Tun’s case, the methadone clinic is only “20 minutes to 15 minutes by motorbike” but “new clients are not accepted”. He comments that the one-month minimum assessment period of

daily dispensing before the clinic will allow ‘take-home’ doses is problematic when working daily in the fields. Instead, he buys “two spoons” of methadone for 5000 kyat which he says is “helpful for my withdrawal”. He feels that many substitute with methadone in this way, perhaps “half” of those he knows, and that this makes the situation “better” day-to-day. Diverted methadone works as a do-it-yourself treatment of withdrawals in the face of treatment access constraints.

Discussion

In articulating human agency as emergent in relation to the material situation at hand, as never acting alone, Emilie Gomart (2002) uses the idea of “generous constraints” to trace how action is induced in constraining relations. Constraints then, are not only determining forces of oppression but also act as forces of movement to generate relative freedoms, even if these are tentative or temporary. The agency that is induced through constraint – for instance, in the work to navigate a localized situation of precarity – adapts conditions “in order for action to arrive” to make conditions liveable (Gomart 2002). We have explored how the drug treatment efforts of people who inject drugs in Kachin arise in the limits of their situation. A core matter of everyday concern in the constitution of drug treatment’s therapeutic potential is livelihood security. While methadone substitution treatment is predominantly enacted in policy as a technology of HIV prevention and harm reduction, here we see substitution treatment made to work, from below, as livelihood survival. This is a substitution that not merely affords movement between drugs – of methadone, heroin and other drugs – but between other forms substance and subsistence – in work and family social-material relations. Making methadone work in its situation, as we have seen, is a means of getting by, and of getting through, to moderate drug withdrawals and other constraints, enabling work and survival. This version of treatment is not a freedom from dependency that is idealized in desires to quit, but is a relative freedom, a generous constraint, that negotiates small movements to get by in the face of precarity. The work, the agency, the adaptation, the “forced movements”, that create the conditions that enable methadone treatment to act as a relative freedom are critical. Already precarious in its emergence, making methadone work is an adaptation made more fragile by the events of pandemic and political instability.

Tinkering

We have noted how emergent methadone substitution is “in the making” and “made to work” (Rhodes 2018), through local practices of adaptation and “tinkering” (Mol et al 2010). One

pragmatic adaptation, emerging in response to the challenges of pandemic and political instability, is the tinkering with dispensing to enable extended ‘take-home’ doses (Oo et al 2021). In addition to HIV prevention and harm reduction impacts, these adaptations afford methadone treatment’s potential to sustain work opportunity. Such tinkering also shifts delivery from a mode of supervised consumption towards coproduced care in which people who use drugs are enacted greater agency (Dennis et al 2020, Frank et al 2021). Tinkering with methadone’s delivery is a “forced movement”, described to us as a “good thing to come out of bad things”; a positive effect which needs to be protected post-pandemic rather than viewed as an emergency measure (Grebely et al 2020).

We also described how so-called diverted methadone is bought and shared, and put to use in do-it-yourself treatment efforts. While often problematized as a misuse of treatment as intended (Ritter and Di Natale 2005), these too are forms of treatment tinkering; generous constraints materialized by the limits of the situation. Acquiring methadone through informal and illicit means is a pragmatic response induced by clinic closures and movement restrictions. Again, methadone treatment, otherwise constrained, is made to work by creating the “right conditions in order to allow action to arrive” (Gomart 2002). Informally acquired methadone is ‘made to work’, for instance, by creating the conditions which make work possible to make precarious livelihoods more sustainable.

Though tinkering to methadone’s delivery and accessibility is made up of small and everyday adaptations, this does not detract from the sustained effort that goes in to make a treatment work. This is clear, for instance, in the efforts people made to navigate difficult geography, often over many hours, and at considerable cost, to reach methadone clinics and to navigate patient registration procedures. The relative freedoms afforded by methadone’s potential in helping people get by, as well as get back to work, are thus constrained by methadone treatment itself becoming “like a job”, especially when delivered via daily supervised prescriptions. Methadone’s potential is highly contingent. Ideas of generous constraint therefore allow us to notice agency as always emergent, as the becoming together of human and nonhuman actors, to caution against over-determined accounts of structural action by appreciating therapeutic trajectories as enactments which emerge in local practices (Gomart 2002, Duff 2016, Fraser 2020). Noticing the tinkering that is done to navigate constraining relations also guides the potential for social and structural change. One immediate pragmatic implication in response to constraints of geographic access, for example, is scaling-up geographically accessible and low-

threshold access methadone services, including perhaps via mobile facilities, combined with sustained take-home prescribing options.

Conclusion

In our study, drug treatment narratives of “substitution” entangle with narratives of “quitting”, with each imagining recovery, as well as freedom and constraint, differently. Efforts to quit idealize recovery as a complete freedom, a life without drugs, whereas substitution offers a relative freedom, a generous constraint. The treatment trajectories of substitution and quitting are in flux in this setting, with this negotiation played out through the emergence of methadone. In some enactments, methadone substitution is posited as too generous, and this itself becomes a constraint to navigate in methadone treatment’s precarity. Religious correction efforts promoting enforced drug eradication and detoxification are an extreme example of this (experienced as “torture” they nonetheless parade as treatment). Narratives of methadone treatment as improper, or as failing to produce a “quick fix” towards abstinence as some anticipate, are in play with the generous constraints afforded by the conditions of substitution. Importantly, we also see that substitution and quitting, despite their differences, can be enacted similarly in terms of therapeutic potential. Both versions of treatment find articulation as a form of self and social restoration which connects with livelihood survival. The embodiment of drug dependency as social harm, an internalization of shame, entangles with material situation and livelihood security. Just as narratives of drug dependency as self-infliction and moral struggle enact a symbolic violence that is materially embodied, so too does the precarity of the material situation enact a violence on livelihood that is also social in its effects. With methadone substitution’s emergence, narratives of drug treatment in this setting are perhaps in a process of slowly breaking free from an account of dependency and freedom which enacts a symbolic and material violence on those affected.

Acknowledgements

We thank our participants who generously gave their time to participate in this study. We are especially grateful to our team of trained interviewers, to Nicholas Thompson for research assistance and training input, and to our Project Advisory Group (which comprised global, national and local experts representing research, policy and community interests). We thank Patrick Meehan (University of London School of African and Oriental Studies) for comments on an earlier draft.

Funding

This work was supported by the Global Challenges Research Fund (GCRF) project ‘Drugs & (dis)order: building peacetime economies in the aftermath of war’ (ES/P011543/1).

Ethics approvals

This research was conducted with research ethics approvals and/or support from: London School of Hygiene and Tropical Medicine Observable Research Ethics Committee (Ref: 26713); and Government of the Republic of Myanmar, Ministry of Health and Sports, Department of Medical Research Ethics Committee (Ref: DMR/2020/069). The authors have no conflicts of interest to declare.

Notes on contributors

Tim Rhodes is a sociologist using qualitative methods to explore evidence-making practices in health and care. His current work draws on science and technology studies in the field of public health, concentrating on how environments affect health in relation to drug use. His research on drug use and health has focused on Russia and Eastern Europe, Kenya, Colombia and Myanmar. Tim holds professorial appointments in the sociology of health at the London School of Hygiene and Tropical Medicine (UK) and University of New South Wales (Australia).

Khine Wut Yee Kyaw is Honorary Research Fellow at the London School of Hygiene and Tropical Medicine (UK) and Affiliate Researcher at the Karolinska Institute (Stockholm, Sweden). Her focus is public health operational research in the field of infectious disease, including related to drug use. Her work at LSHTM has focused on Global Challenges Research Fund supported research in northern Myanmar, where she has coordinated qualitative and survey research in Kachin State.

Magdalena Harris is a sociologist working with qualitative methods in the social science of drug use, health and harm reduction. She works in partnership with community organisations, and through peer research, in the fields of hepatitis C, opioid and crack use, and opioid substitution treatment service delivery. Magdalena is Associate Professor at the London School of Hygiene and Tropical Medicine.

References

Beebe, J. (2001) *Rapid Assessment Process: An Introduction*, Walnut Creek, CA: AltaMira Press.

Bourgois, P. (2000) Disciplining addictions: The biopolitics of methadone and heroin in the United States, *Culture, Medicine and Psychiatry*, 24: 165–195.

Chan, B., Hoffman, K. A., Bougatsos, C., Grusing, S., Chou, R. and McCarty, D. (2021) Mobile methadone medication units: A brief history, scoping review and research opportunity, *Journal of Substance Abuse Treatment*, 129: 108483.

Chang, K. C., Lee, K. Y., Lu, T. H., Hwang, J. S., Lin, C. N., Ting, S. Y. et al (2019) Opioid agonist treatment reduces life expectancy in heroin users: Evidence from real world data, *Drug and Alcohol Dependence*, 201: 197-204.

Charmaz, K. (2006) *Constructing Grounded Theory*, London: Sage.

Dan, S. L., Maran, J. H. P., Sadan, M., Meehan, P. and Goodhand, J. (2021) The Pat Jasan eradication social movement in northern Myanmar: Origins and reactions, *International Journal of Drug Policy*, 89: 103181.

Degenhardt, L., Mathers, B., Vickerman, P., Rhodes, T., Latkin, C. and Hickman, M. (2010) Prevention of HIV infection for people who inject drugs: why individual, structural and combination approaches are needed, *Lancet*, 376: 285-301.

Dennis, F., Rhodes, T. and Harris, M. (2020) More-than-harm reduction: engaging with alternative ontologies of ‘movement’ in UK drug services, *International Journal of Drug Policy*, 82: 102771.

Duff, C. (2016) Atmospheres of recovery: Assemblages of health, *Environment and Planning A: Economy and Space*, 48: 58-74.

Fanning Madden, E., Christian, B. T., Lagisetty, P. A., Ray, B. R. and Sulzer, S. H. (2021) Treatment provider perceptions of take-home methadone regulation before and during COVID-19, *Drug and Alcohol Dependence*, 228: 109100.

Fishbein, E., Ang, Z. M. and Naw, J. (2021) Poverty, impunity and profits: Experts warn coup could lead to opium surge, *Frontier Myanmar*, January 5.

Frank, D., Mateau-Gelabert, P., Perlman, D. C., Walters, S. M., Curran, L. and Guarino, H. (2021) “It’s like liquid handcuffs”: The effects if take-home dosing policies on methadone maintenance treatment patients’ lives, *Harm Reduction Journal*, 18: 88.

Fraser, S. (2006) The chronotope of the queue: Methadone maintenance treatment and the making up of time, space and subjects, *International Journal of Drug Policy*, 17: 192–202.

Fraser, S. (2020) Doing ontopolitically oriented research: Synthesising concepts from the ontological turn for alcohol and other drug research and other social sciences, *International Journal of Drug Policy*, 82: 102610.

- Friedman, S. R., Rossi, D. and Braine, N. (2009) Theorising 'Big Events' as a potential risk environment for drug use, drug-related harm and HIV epidemic outbreaks, *International Journal of Drug Policy*, 20: 283-291.
- Gomart, E. (2000) Methadone: Six Effects in Search of a Substance, *Social Studies of Science*, 32: 93-135.
- Gomart E. (2002) Towards generous constraint: freedom and coercion in a French addiction treatment, *Sociology of Health and Illness*, 24 :517–549.
- Grebely, J., Cerdá, M. and Rhodes, T. (2020) COVID-19 and the health of people who use drugs: What is and what could be? *International Journal of Drug Policy*, 83: 102958.
- Han, C. (2018) Precarity, precariousness, and vulnerability, *Annual Review of Anthropology*, 47: 331-343.
- Hansen, H. (2013) Pharmaceutical evangelism and spiritual capital: An American tale of two communities of addicted selves, in Raikhel, E and Garriott, W. (Eds) *Addiction Trajectories*, London: Duke (pp 108-125).
- Harris, M. and Rhodes, T. (2013) Methadone diversion as a protective strategy: The harm reduction potential of 'generous constraints', *International Journal of Drug Policy*, 24: e43-e50.
- Harris, M. (2020) Normalised pain and severe health care delay among people who inject drugs in London: Adapting cultural safety principles to promote care, *Social Science and Medicine*, 260: 113183.
- Harris, S. (2015) To Be Free and Normal: Addiction, Governance, and the Therapeutics of Buprenorphine, *Medical Anthropology Quarterly*, 29: 512-30.
- Hedström, J. (2017) The political economy of the Kachin revolutionary household, *Pacific Review*, 30: 581-595.
- Htun, K. M. (2018) *Living with Opium: Livelihood Strategies among Rural Highlanders in Southern Shan State, Myanmar*, Chiang Mai: Chiang Mai University Press.
- Jones, L. (2014) The political economy of Myanmar's transition, *Journal of Contemporary Asia*, 44: 144-170.
- Kiik, L. (2016) Conspiracy, God's plan, and national emergency: Kachin popular analyses of the ceasefire era and resource grabs, in Sadan, M. (Ed) *War and Peace in the Borderlands of Myanmar*, Copenhagen: Nias Press (pp. 205-235).
- Ko Ko, N. and Braithwaite, J. (2020) Baptist policing in Burma: Swarming vigitalism or community self-help? *Policing and Society*, 30: 688-703.
- Kramer, T. (2021) 'Neither war nor peace': Failed ceasefires and dispossession in Myanmar's ethnic borderlands, *Journal of Peasant Studies*, 48: 476-496.

- Lasco, G. (2014) Pampagilas: Methamphetamine in the everyday economic lives of underclass male youths in a Philippine Port, *International Journal of Drug Policy*, 25: 783–788.
- Lasco, G. (2020) Drugs and drug wars as populist tropes in Asia, *International Journal of Drug Policy*, 77: 102668.
- Lin, M. (2019) *Artisanal Jade Mining in Myanmar*, Yangon: International Growth Center.
- Lone, S. and Cachia, R. (2021) The political economy of opium reduction in Myanmar: The case for a new ‘alternative development’ paradigm led by and for opium poppy farmers, *Journal of Peasant Studies*, 48: 586-606.
- Lum, N., Wai, T., Thar, A. M. C., Show, K. L., Harries, A. D., Wann, N. M. A., Hone, S. and Oo, H. N. (2020) HIV testing and ART initiation in people who inject drugs and are placed on methadone in Kachin State, Myanmar, *Public Health Action*, 10: 27-32.
- Lunze, K., Lermet, O., Andreeva, V. and Hariga, F. (2018) Compulsory treatment of drug use in Southeast Asian countries, *International Journal of Drug Policy*, 59: 10-15.
- Magura, S. and Marshall, T. (2020) The effectiveness of interventions intended to improve employment outcomes for persons with substance use disorder: An updated systematic review, *Substance Use and Misuse*, 55: 2230-2236.
- National AIDS Program (2019) *Myanmar Integrated Biological and Behavioural Survey and Population Size Estimates among People Who Inject Drugs, 2017-2018*, Yangon Ministry of Health and Sports: National AIDS Program.
- McArthur, G., Minozzi, S., Martin, N et al. (2012) Opioid substitution treatment and HIV transmission in people who inject drugs: Systematic review and meta-analysis, *British Medical Journal*, 345: e5945.
- Meehan, P. (2021) Precarity, poverty and poppy: Encountering development in the uplands of Shan State, Myanmar, *International Journal of Drug Policy*, 89: 103064.
- Meehan, P., Sadan, M., Hla, S. A., Phu, S. K. and Oo, M. M. (2022) Young people’s everyday pathways into drug harms in Shan State, Myanmar, *Third World Quarterly*, DOI: 10.1080/01436597.2022.2090923.
- Ministry of Health of Myanmar (2021) *Drug Dependency Treatment and Research Unit Annual Report*, Yangon: Department of Medical Services, Ministry of Health.
- Nettleton, S., Neale, J. and Pickering, L. (2013) ‘I just want to be normal’: An analysis of discourses of normality among recovering heroin users, *Health*, 17: 174-190.
- Nyunt., H., Aung Wan, N. M., Soan, P., Tawil, O., Lwin, M. K., Aung Hsam, M. T., Win, K. M. and Mesquita, F. (2021) How Myanmar is working to maintain essential services for people living with HIV and key populations during the covid-19 pandemic, *Journal of the International Providers of AIDS Care*, 20: 1-6.

- Raikhel, E. and Garriott, W. (2013) Tracing new paths in the anthropology of addiction, in Raikhel, E and Garriott, W. (Eds) *Addiction Trajectories*, London: Duke (pp 1-35).
- Rhodes, T., Stimson, G. V., Fitch, C., Ball, A. and Renton, A. (1999). Rapid assessment, injecting drug use, and public health, *Lancet*, 354: 65-68.
- Rhodes, T., Watts, L., Davies, S., Martin, A. et al (2007) Risk, shame and the public injector: A qualitative study of injecting drug use in South Wales, *Social Science and Medicine*, 65: 572-585.
- Rhodes, T. (2018) The becoming of methadone in Kenya: How an intervention's implementation constitutes recovery potential, *Social Science and Medicine*, 201: 71-79.
- Rhodes, T. and Lancaster, K. (2019) Evidence-making interventions in health: A conceptual framing, *Social Science and Medicine*, 238: 112488.
- Rigg, J. (2006) Land, farming and livelihoods: Rethinking the links in the rural south, *World Development*, 34: 180-202.
- Ritter, A. and Di Natale, R. (2009) The relationship between take-away methadone policies and methadone diversion, *Drug and Alcohol Review*, 24: 347-352.
- Rocha, I. C., Cedeno, T. D., Pelayo, M. G., Ramos, K. And Victora, H. O. H. (2021) Myanmar's coup d'état and its impact on COVID-19 response: A collapsing healthcare system in a state of turmoil, *BMJ Military Health*, 0: 1-2.
- Sadan, M. (2016) *War and Peace in the Borderlands of Myanmar*, NIAS Studies in Asian Topics, 56, Copenhagen: NIAS Press.
- Sadan, M. and Dan, S. L. (2021) The role of artisanal mining in the sustainable development of Myanmar's jadeite mining industry, *Environmental Science and Policy*, 126: 189-196.
- Sadan, M., Maran, J. H. P. and Dan, S. L. (2021) The Pat Jasan drug eradication social movement in northern Myanmar: Deep culture and cultural psychology, *International Journal of Drug Policy*, 89: 103179.
- Sordo, L., Barrio, G., Bravo, M. J., Indave, B. J., Degenhardt, L., Wiessing, L., Ferri, M., Pastor-Barriuso, R. (2017) Mortality risk during and after opioid substitution treatment: Systematic review and meta-analysis of cohort studies, *British Medical Journal*, 357: 1550.
- Smith, M. (2010) Ethnic politics in Myanmar: A year of tension and anticipation, *Southeast Asian Affairs*, 37: 214-234.
- Transnational Institute (2012) *Financing Dispossession: China's Opium Substitution Programme in Northern Myanmar*, Amsterdam: Transnational Institute.
- Transnational Institute (2021) *No One Left Behind? Covid-19 and the Struggle for Peace and Justice in Myanmar*, Myanmar Policy Briefing 25, Amsterdam: Transnational Institute.

Tun, S., Vicknasingham, B. and Singh, D. (2021) Higher methadone dose reduces risky drug injecting behaviours among methadone clients in Myanmar, *Emerging Trends in Drugs, Addictions and Health*, 100025.

Tun, S., Vicknasingam, B., Singh, D. and Wai, N. (2022) Client satisfaction to methadone maintenance treatment program in Myanmar, *Substance Abuse, Treatment, Prevention and Policy*, 17: 2.

United Nations Development Program (UNDP) (2021) *Covid-19, Coup D'Etat and Poverty: Compounding Negative Shocks and Their Impact on Human Development in Myanmar*, Geneva: UNDP.

United Nations Office of Drugs and Crime (UNODC) (2021) *Synthetic Drugs in East and South-East Asia: Latest Developments and Challenges*, UNODC: Global Smart Programme.

United Nations Office of Drugs and Crime (UNODC) (2020) *Myanmar Opium survey: Cultivation, Production and Implications*, Geneva: United Nations Office of Drugs and Crime.

valentine k. (2007) Methadone maintenance treatment and making up people, *Sociology*, 41: 497-514.

Valverde, M. (1998) *Diseases of the Will: Alcohol and the Dilemmas of Freedom*, Cambridge: Cambridge University Press.

Vindrola-Padros, C. and Johnson, G. A. (2020). Rapid techniques in qualitative research: A critical review of the literature, *Qualitative Health Research*, 30: 1596–1604.

Werb, D., Kamarulzaman, A., Meacham, M. C., Rafful, C., Fisher, B, Strathdee, S. A. and Wood, E. (2016) The effectiveness of compulsory drug treatment: A systematic review, *International Journal of Drug Policy*, 28: 109.

Whittle, H.J., et al. (2020) Precarity and health: Theorizing the intersection of multiple material-need insecurities, stigma, and illness among women in the United States, *Social Science and Medicine*, 245: 112683.

Woods, K. (2011) Ceasefire capitalism: Military-private partnerships, resource concessions and military-state building in the Burma-China borderlands, *Journal of Peasant Studies*, 38: 747-770.

World Bank (2019) *Myanmar: Economic Transition amid Conflict*, Washington, D.C.: World Bank Group.

World Bank (2021) *Myanmar Economic Monitor: Progress Threatened, Resilience Tested*, Washington, D. C.: World Bank Group.

Zolopa, C., Hoj, S., Bruneau, J., Meeson, J-S., Minoyan, N., Raynault, M-F., Makarenko, L. and Larney, S. (2021) A rapid review of the impacts of Big Events on risks, harms, and service delivery among people who use drugs: Implications for responding to COVID-19, *International Journal of Drug Policy*, 88: 103127.

Zourabichvili, F. (1994) *Deleuze: A Philosophy of the Event*, Paris: PUF.