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Title

Becoming posthuman: Hepatitis C, the race to elimination and the politics of remaking the subject

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Abstract

Hepatitis C has long been a public health problem in Australia. 'Revolutionary' new drugs with the potential to cure hepatitis C have now emerged. The Australian government has invested heavily in them, and has an ambitious goal to eliminate hepatitis C by 2030. Numerous shifts in policy and practice are required if the elimination agenda is to be realised. This paper explores the significance of these shifts. We ask: what is the race to elimination *doing with the subject*? We argue that the race to elimination can be understood, simultaneously, as: a *product* of posthuman forces, capable of being analysed using the theoretical tools made available via the posthuman turn; producing an *intervention* in what it means to be human; and generating a *dilemma* for people who use (or used) drugs, people with hepatitis C, and posthuman scholarship. In drawing out these issues, we aim to: trace the significant developments underway in hepatitis C medicine and raise awareness of them; encourage reflection on the consequences of these developments; and invite reflections on what might be lost when the human is remade by hepatitis C medicine.

Keywords

Hepatitis C, elimination, Australia, posthuman, informed consent, drugs

Introduction

Hepatitis C is a blood-borne virus (BBV). Transmission largely occurs in the context of injecting drug use, through the sharing of needles and syringes or ancillary injecting equipment (Fraser and Seear 2011). For many years, the most widely available form of treatment for hepatitis C was known as ‘combination therapy’. Under this regime, only about 3000 people annually commenced treatment in Australia (Hellard 2014). Drugs were taken for 24–48 weeks, with the length of treatment dependent on a range of factors including viral genotype (Hopwood and Treloar 2007). Combination therapy was notoriously onerous because of the wide range of reported side effects (Fraser and Seear 2011), and many people discontinued treatment before completion of the regime (Hopwood and Treloar 2007). A new generation of hepatitis C treatment known as direct-acting antivirals, or DAAs, then emerged. The reported benefits of DAAs are numerous and include: a treatment period reduced from 24–28 weeks to 8–12 weeks, and dramatic improvements in cure rates – from 40% for combination therapy to over 95% (European Association for the Study of the Liver 2020). Fewer serious side effects are reported (Asselah et al. 2016), and treatment is more tolerable. DAAs were almost immediately lauded as ‘revolutionary’ (e.g. Gane 2014; Martinello et al. 2018). They bring the possibility of large numbers of those affected being cured, or the possibility of viral elimination altogether.

The World Health Organization has announced an ambitious goal to eliminate hepatitis C by 2030, and Australia is one of the only countries to have adopted it (Commonwealth Department of Health 2018; World Health Organization 2016). In 2015, Australia offered universal access to DAAs, listing them on the Pharmaceutical Benefits Scheme, making it a world leader in treatment (Dore 2017). There is considerable global interest in whether Australia can eliminate hepatitis C. Accessing, screening, diagnosing and treating people is key to this ambitious project, and numerous shifts in policy and practice are required to realise the elimination agenda. The ‘race to elimination’ has indeed driven dramatic changes in the national policy landscape, including new models of care and micro-elimination strategies (Lazarus et al. 2018). There are also shifts in models of testing and treatment, and in the way that individual rights are viewed, including the fundamental right not to undergo any medical procedure without one’s full and fully informed consent (Berg et al. 2001). This paper explores the significance of these shifts. We ask: what is the race to elimination *doing with the subjects of hepatitis C medicine*, many of whom are people who inject (or have previously injected) drugs? And how might we assess these developments?

In this paper, we argue that multiple, entangled, mutually reinforcing shifts in testing, treatment and approaches to patient rights are underway, and that these processes raise urgent ethical and political questions for healthcare in Australia. We argue that the race to elimination can be understood, simultaneously, as: a *product* of posthuman forces, capable of being analysed using the theoretical tools made available via the posthuman turn; producing an *intervention* in what it means to be human, and generating a *dilemma* for people who use (or used) drugs, people with hepatitis C, and for posthuman scholarship. This dilemma has some parallels with one identified by David Moore and Suzanne Fraser (2006) in their previous work on subject positions in harm reduction, but differs in important ways, as we will explain. Overall, we argue that the remaking of the subject that is taking place in Australian healthcare introduces costs (such as invasions of

bodily integrity, autonomy, and privacy), which can be hugely troubling for people who use drugs and people with hepatitis C. In drawing out these processes and dilemmas, we aim to do three things. First, to trace the significant developments underway in hepatitis C medicine, so as to raise awareness of them. Second, to encourage policymakers, practitioners, researchers and others to think carefully about the consequences that might follow these developments, especially (but not only) for people who use/have used drugs. Third, we invite reflections on what might be lost when the human is remade by hepatitis C medicine, and consider possible broader implications of this.

Background

Most countries around the world have legal regimes that criminalise the use, possession and supply of certain substances. A key logic underpinning prohibition is the notion that drugs produce various predictable effects and harms (Fraser and Moore 2011b). These harms include hepatitis C, with the virus sometimes described as an inevitable and predictable effect of drug use (Rhodes and Treloar 2008), even though its association is complex and far from certain (Fraser and Seear 2011). This idea – of drug effects as consistent and predictable – is frequently mobilised in defence of drug prohibition. It is also contested and controversial, and has been the subject of much critical alcohol and other drug (AOD) scholarship. Critical AOD scholarship mobilises poststructuralist, feminist, queer, new-materialist and more-than-human or posthuman philosophies. Collectively, such work challenges the claim that drug effects are singular, predictable, stable and fixed (i.e. that drug use is always already harmful), emphasising instead the multiplicity, unpredictability, instability and inconsistency of drug effects (Fraser and Moore 2011b). This work argues that drug effects, harms and other realities are not *inherent* to substances. It seeks to shift the ‘unit of analysis’ (Duff 2017) from drugs ‘themselves’ to ‘drug events’ (e.g. Dennis 2019; Farrugia 2017; Malins 2017; Dilkes-Frayne and Duff 2017; Fitzgerald 2015) and ‘assemblages’ (Deleuze and Parnet 1987) of material, human and non-human forces in their ‘intra-actions’ (Barad 2007; Fraser 2006). Such work invites us to think about harms associated with drugs as posthuman: always already the product of multiple mutually constitutive forces operating in intra-action, and to think about subjects, objects and agency differently; not as vested only or purely in humans, but in a ‘range of different kinds of actors’ (Cohn and Lynch 2017: 286).

These approaches allow us to conceptualise harm ‘as a property of the assemblage and not of any one discrete body therein [e.g. the drug or the person who uses drugs]’ (Duff, 2014: 634). Such ‘assemblage thinking’ (Deleuze and Parnet 1987) disrupts dominant ideas about drugs and those who use them, and challenges prevailing approaches to agency, responsibility and causality. It also decentres the human. In this sense, posthuman approaches open up an important political space, pushing back against the foundational logics of drug law, policy and related fields of practice. Posthuman theories can also be mobilised when analysing hepatitis C acquired through other means, such as blood transfusions, although relevant political issues will differ. In this paper, we want to reflect on what becomes of the subject, once we start to think through phenomena using posthuman theory. Does the challenge to humanism that we have described above sometimes have costs? We want to hold open this possibility in the analysis that follows, through a detailed exploration of the rapidly evolving contours of hepatitis C medicine. Before we come to this

analysis, however, we want to introduce one further set of ideas that are relevant to the analysis we will undertake in this paper.

Theory and Method

The question of the subject is always pertinent but it is especially so in AOD scholarship and scholarship that pertains to harm reduction. One of the most comprehensive analyses of the 'drug-using subject' is David Moore and Suzanne Fraser's (2006) work on the subject of harm reduction. Although harm reduction policy and practice has done much to improve the lives of people who use drugs, by, for instance, preventing transmission of blood-borne viruses such as hepatitis C, and helping to prevent drug overdose deaths, harm reduction may still be flawed in some ways. Taking this as their starting point, Moore and Fraser (2006) argue that harm reduction inscribes a neoliberal subject, positioning people who use drugs as autonomous, rational, independent and calculating. One problem with this inscription is that it fails to account for the many ways that agency is constrained. As they explain,

this failure risks diverting policy and practice away from structural issues and the resulting unequal distribution of resources, limiting our conception of effective strategies for harm reduction. (2006: 3036)

Inscriptions of the subject as autonomous, rational, independent and calculating can responsabilise people for harms associated with drugs, such as the transmission of hepatitis C through the sharing of needles, while structural failings, such as the lack of sterile needles and syringes for people who need them, can be overlooked. The subject is put at the centre of drug harms in this way, and risks being positioned as a 'failure' (Fraser and Seear 2011). The neoliberal subject also had benefits, however. Constituting subjects as autonomous, rational, independent and calculating might be empowering for some people who use drugs, given that this subject position carries benefits such as trust and legitimation. This, they argue, constitutes 'a dilemma' for harm reduction policy and practice. How should we react when faced with this simultaneously beneficial and harmful move?

To answer to this question, Moore and Fraser turn to Judith Butler's (2004: 227) work on how feminists might respond to the (white, male, heteronormative) subject of liberalism. As Butler explains, to

question the foundationalism of that category [of the subject] is not the same thing as doing away with it all together. Moreover, it is not to deny its usefulness, or even its necessity. To question the subject is to put at risk what we know, and to do it not for the thrill of the risk, but because we have already been put into question as subjects. We have already, as women, been severely doubted: do our words carry meaning? Are we capable of consent? Is our reasoning functioning like that of men? Are we part of the universal community of human kind?

Moore and Fraser (2006) argue that this approach – of putting at risk what we know – has value for harm reduction. It is possible, as Butler suggests, to be both skeptical towards the liberal subject and to acknowledge its strategic value. This leads Moore and Fraser to conclude that:

we must reject any dream of discovering a ‘pure’ location from which to construct the ‘ideal’ subject of harm reduction. There is no such place. Our intention in this paper has not been to identify and recommend such a location but to spell out the processes of subjectification at work in harm reduction, and the implications of the forms of subject produced. In doing so, we hope to prompt insights into future directions for the subject of harm reduction. (Moore and Fraser, 2006: 3045)

Moore and Fraser’s focus was on the specific question of what harm reduction was doing to the subject, and what costs and benefits flowed from the predominantly neoliberal subject of harm reduction. Their work took place before the emergence of the race to elimination, where new subject positions and political questions are emerging. It is vital that we trace these and consider their implications. Indeed, we know from previous work on hepatitis C (Fraser and Seear 2011) that any shifts in hepatitis C medicine, including treatment policy and practice, shape shifts in subject formulations, given the co-constitutive relationship between medicine and subjects (see also Lancaster and Rhodes 2020). This paper takes up these issues and asks: what is the race to elimination *doing with the subject*? And how might we assess these developments? In what follows, we trace a series of important shifts happening in the landscape of hepatitis C policy and practice. In order to undertake this analysis, we collected and analysed the national policy and strategy documents on hepatitis C since the first national strategy was introduced 20 years ago. Paying careful attention to key phrases and words used throughout these texts, we assessed how the virus and treatment was described over time, how strategies and policy priorities evolved, and how people with hepatitis C were described alongside these shifts. We then searched for recent research on novel strategies and practices designed to further the elimination agenda, exploring how the subject and their rights were described. Our familiarity with work of this kind was also informed by our many years working within the field of hepatitis C. We argue that the race to elimination can be understood as: a *product* of posthuman forces, capable of being analysed using the theoretical tools made available via the posthuman turn; producing an *intervention* in what it means to be human; and generating a *dilemma* for subjects similar to the one surfaced by Moore and Fraser in their critique of harm reduction. This dilemma is important to the posthuman turn in drug scholarship, and to posthuman health scholarship more broadly.

The shifting landscape of hepatitis C

Shifting treatments: As noted earlier, the treatment landscape has shifted dramatically in Australia over the last few years, with the advent of DAAs. Initial take-up of DAA treatments was strong, but has declined over time (MacLachlan et al. 2020). This plateauing in treatment uptake has meant that Australia’s commitment to eliminating hepatitis C by 2030 looks increasingly less easy to honour. There are numerous possible reasons for this, including that hepatitis C can be asymptomatic, and that there can be challenges in connecting with affected and undiagnosed populations (Martinello and Matthews 2015). People who inject drugs are a highly stigmatised and

often marginalised population (e.g. Lancaster, Seear and Ritter 2018; Fraser et al. 2017; Lloyd 2010), and do not always trust health care systems, including digital systems (Treloar et al. 2013; Newman et al. 2020). Thus, the availability of DAAs will not, in itself, be enough to cure everyone, and more ‘innovative’ methods are needed (Wright et al. 2019). These innovations have manifested in numerous ways. For example, hepatitis C testing used to have an ‘exceptional’ status in which detailed pre-test counselling was required. This requirement has now been removed, as testing has sought to be normalised (Johnson and Lenton 2017). These forces have added pressure to other areas of policy and practice, provoking other shifts designed to support Australia’s elimination agenda, including changes in strategy.

Shifting strategies: Australia’s approach to hepatitis C has been governed, since 1999, by a series of national strategies, complemented by policies including the *National Drug Strategy 2017-2026* (Commonwealth Department of Health 2017) and state and territory strategies. The first *National Hepatitis C Strategy 1999-2000 to 2003-2004* had two primary aims, which were ‘to reduce the transmission of hepatitis C in Australia’ and ‘to minimise the personal and social impacts of hepatitis C infection’ (Commonwealth Department of Health and Aged Care 2000: 1). An important conceptual move occurred in the second *National Hepatitis C Strategy 2005-2008*. Although the strategy retained a focus on individuals and individual responsibility, it also emphasised the possibility that treatment of individuals could have benefits for the population as a whole. To this end, the strategy noted that cure ‘not only improves quality of life for those who successfully undergo treatment, but also reduces the risk of passing the virus on to others’ (Commonwealth of Australia 2005: 17). Later, calls emerged for treatment rates to be trebled (Treloar and Rhodes 2009). These moves were consolidated in later strategies, through calls for a stronger public health response to the virus (WHO 2016) and via the adoption of a ‘treatment as prevention’ approach (known as TasP). First used within the context of HIV, treatment as prevention sees ‘treatment as a tool for limiting spread of an infection in generalised epidemics in a particular setting’ (Hajarizadeh et al. 2016: 317). The idea is that testing and treatment has benefits for individuals, who will be diagnosed, treated and cured, and populations, as cure helps prevent ‘onward transmission’ (Hellard et al. 2014). TasP now figures explicitly in the national strategy (Commonwealth Department of Health 2018), with new treatments described as having ‘the potential to reduce overall hepatitis C incidence as the population of people living with hepatitis C diminishes’ (Commonwealth Department of Health 2018: 23). The World Health Organization (2017) has also acknowledged the value of TasP. The current national strategy also embraces elimination of hepatitis C as a key goal (Commonwealth Department of Health 2018). Testing and treatment are priority areas, and the WHO (2016) established time bound targets for testing, adding further systemic pressures.

These shifts instantiate the primacy of the individual subject, by prioritising locating, testing and treating *individuals*, and the possibility of *individual transformation through cure*. This apparent valorisation of the individual appears elsewhere in the national strategy, as where a commitment to the human rights of people with hepatitis C, ‘including the right to the confidential and sensitive handling of personal and medical information’ is now included (Commonwealth Department of Health 2018). We argue that the picture is more complicated, however. A decade ago, Fraser and Moore (2011a: 377) wrote critically of the rush to increase treatment rates, describing a ‘growing sense that treatment comprises an important part of the response to the scale of the epidemic’. They argued that although treatment was onerous and harmful for many people, potentially not

suited to their individual needs and circumstances, it was nevertheless thought to be ‘warranted as part of a strategy for helping to reduce overall transmission, and therefore prevalence, rates’ (2011a: 377). They described this move as homogenising, arguing that such responses:

risk treating affected people as epidemiological units bereft of individual differences and circumstances, and their personal interests as indistinguishable from those of society as a whole, despite their evident exclusion from many of the rewards offered by society. (2011a: 377)

Of course, Fraser and Moore’s critique pre-dated the emergence of DAAs. This renders some aspects of their analysis less relevant for DAAs, given that they are more successful and tolerable. The notion, however, that the medicalisation of hepatitis C was conflating individual interests with public health outcomes was an important concern, becoming only more important with the passage of time and the race to elimination. Acknowledging that cure can be profoundly beneficial for many people, others note that public health outcomes and priorities do not necessarily matter to publics (Harris, Albers and Swan 2015). Moreover, both the TasP approach and some public health rhetoric can be stigmatising, alienating and unintentionally dehumanising, especially where individuals are constituted as ‘transmitters’. Through all of this, the ‘individual – their needs, fears and desires – slips from focus’ (Harris, Albers and Swan 2015: 965).

This trend has arguably gathered pace in the years since, with significant investment in elimination, and shifting strategies and practices. Somewhat paradoxically, the advent of DAAs and the elimination agenda is generating a shift *away from* the individual. Starting at least with the second *National Strategy’s* aforementioned homogenising move as identified by Fraser and Moore (2011a), the subject of hepatitis C medicine is being remade. This remaking is a product of the elimination ‘assemblage’, which includes drugs, epidemiological measures and methods, policy documents, government resources, pharmaceutical companies, refrigerators to store drugs, public health targets, models and strategies, trucks, scientists, nurses and doctors, laboratories, devices, needles, outreach vans, hospitals and doctors’ waiting rooms, as well as the effects produced by the imagined elimination ‘boundary’ of the nation state (Seear et al. 2021) entangled in intra-action (Barad 2007). Through these intra-actions, individuals are conflated with publics, personal interests become national ones, and individuals are made relationally (i.e. where cure is important for subjects via connections to others, and the potential to reduce onward transmission). These changes bear some similarities to those underway in HIV medicine, including important changes in the ‘nature’ and ‘criterion’ of citizenship accompanying the pharmaceuticalisation of public health, and its potential to demarginalise and marginalise people living with HIV (Persson et al. 2016). Against all of this, certain obstacles – in the form of individual legal rights and medico-legal obligations – appear to stand in the way of the subject ‘slipping’ away (Harris, Albers and Swan 2015) altogether. As we will see in the next section, even these vestiges of liberal humanism are giving way, raising urgent questions about the politics and ethics of the posthuman turn being wrought by hepatitis C medicine.

Shifting approaches to consent and rights: Testing and diagnosis is central to an imagined post-hepatitis C future. This requires people to first provide informed consent: typically defined as

being met when a person develops a full appreciation of the benefits and risks of a proposed course of action, such as medical tests or treatment, and agrees to proceed (Berg et al. 2001). Informed consent is a legal requirement in Australia, enshrined in both the common law and statute (e.g. *Rogers v Whitaker* (1992) 175 CLR 479). It is therefore an important precursor to diagnosis, treatment and cure, and a potential barrier to broader elimination efforts. As a transaction between putatively 'free and equal' persons, it is closely tied to individualism and humanism. The requirement that people provide informed consent prior to testing is acknowledged in the current national hepatitis C strategy, where it is stated that:

The principles of quality testing in Australia include that *informed consent is required at all times*, including in custodial settings; and that testing is voluntary, accessible, non discriminatory, confidential and of clear benefit to the individual being tested. (Commonwealth Department of Health 2018: 24; emphasis added)

Relevantly, the current national testing policy states that testing should be voluntary (Commonwealth of Australia 2020). Later the policy says that: 'Informed consent for testing means that the person being tested agrees to be tested on the basis of understanding the testing procedures and the reasons for testing, and is able to assess the personal implications' (Commonwealth of Australia 2020: 16). The WHO's best practice guidelines also note that 'informed consent should be tailored to an individual's gender, culture, health literacy and intellectual level' (2017: 7). This appears to instantiate the primacy of the individual subject, emphasising individual rights, bodily integrity and autonomy, the need to tailor explanations to individuals based on unique personal characteristics, and so on. The requirement for informed consent thus appears at odds with the more-than-human, homogenising and relational forces we described previously. However, both the rhetoric and operationalisation of consent are changing.

In Spain, for example, Andaluz et al. (2020) have argued that:

In order to achieve [the elimination] objective, we must go beyond the routine treatment provided at our clinics and design new strategies for identifying infected patients, many of whom are unaware of their illness.

They position barriers to testing and treatment (including legal rights protections) as potentially unethical, arguing that 'not acting in the knowledge that an effective treatment is available could be considered as a failure to provide assistance' (Andaluz et al. 2020). Similar rhetoric can be found in Australia. For instance, some have noted that 'Australia is unlikely to meet the WHO targets unless the identification and testing of people exposed to hepatitis C is increased by 50%' (Scott et al. 2020). They go on to list a range of other methods for improving testing rates, including, for instance, 'introducing mandatory reporting of hepatitis C testing as key performance indicators for opioid substitution therapy clinics and prisons' (Scott et al. 2020: 369). These shifts in rhetoric, which are about how systems can be reformed and efforts to test scaled up, are complemented by important shifts in practice. These include novel strategies to locate people who have been lost to follow-up, including by waiving the requirement that they consent to being contacted after several years (Kracht et al. 2019) and other attempts to explore 'limited patient

consent procedures' that make gaining consent for testing less onerous, potentially at the expense of patient autonomy (e.g. Crane et al. 2017). We are also seeing a shift from 'opt in' approaches, which require clear and affirmative action (e.g. verbally) to indicate consent, to 'opt out' approaches, which assume that a person consents unless they affirmatively indicate otherwise. Actively finding people by following up notification data, contact tracing and searching health records are some of the more recent strategies implemented to reach elimination targets (Stoové et al. 2020). This is happening in England, Ireland (Francis-Graham and Rosenberg 2019; O'Kelly et al. 2016), and Australia, including through the recent SEARCH study (Prince et al. 2020) in New South Wales. That study involved a novel method for locating, testing and treating Aboriginal and Torres Strait Islanders and overseas-born residents who might have hepatitis C. A team of researchers tested the previously stored blood samples of patients who had attended an emergency department for another medical reason (i.e. non-hepatitis C). They used an opt out method, through which posters and brochures in some 'common languages' (Prince et al. 2020) were placed around the emergency department, advising that people's stored blood might be retrospectively tested for hepatitis C. Around 5000 samples were tested in this way. This method was described as having 'removed barriers to testing' (Prince et al. 2020: 127).

Together, these practices have at least four important features. First, they involve less, and less direct, engagement with patients than in the past, manifesting a dilution in the substance of informed consent and its symbolic and literal value. There is a move away from detailed pre- and post-test counselling, changing the way the individual facing a test and/or diagnosis is treated, and reducing opportunities for care. Second, they utilise language and concepts that enact individuals and their rights as an impediment to testing and treatment. Although such moves are often said to be about advancing patient health and human rights (e.g. Prince et al. 2020), these moves are also tied to the elimination agenda. Although we acknowledge that comprehensive pre- and post-test conversations take time, is this reason in itself to take blood from someone, when/if they are unable to assess the possible benefits or risks of a positive diagnosis? Is the subject being made as less valuable, or differently, through such processes? Thirdly, individuals and their rights come to be constituted as problems for testing, cure and elimination. This has the potential to obscure other forces that might have influenced a decline in rates of testing and treatment, and to why people are 'lost to follow up'. These include: persistent stigma and discrimination of people who use drugs in healthcare settings (Lancaster, Seear and Ritter 2018), a lack of trust in health care systems (Newman et al. 2020; Treloar et al. 2013), and a failure of treatment to live up to expectations (Madden et al. 2018, Whiteley et al. 2018). To date, debates about these developments tend to focus largely on narrowly bioethical questions, such as whether the benefits of testing and treatment outweigh the disadvantages and risks (e.g. van Dijk et al. 2020), including the risk of shock that one's blood has been tested without express permission, or the sense that one's privacy has been breached. We see these moves differently, however. They represent an erasure of humanist ideals and values, such as individual freedom, autonomy and integrity, and an intensification of the process by which the subject of hepatitis C medicine disappears from view, or becomes posthuman. To the extent that being conferred with such rights is understood to signal one's status as a valid, valued subject (i.e. as 'human'), the remaking of this right, and its apparent diminution, remakes the human.

Discussion: Becoming posthuman

Across several iterations of national hepatitis C strategies, testing policies, other human and non-human forces including curative drugs, and processes pertaining to consent and rights, we are witnessing a set of vital shifts for people who live with hepatitis C/people who use drugs. These shifts are not simply about the availability of medicine, but shifts in how subjects are constituted, in relation to each other, drugs, medicine, medical policy, and the State. All of this is possible because medicine and subjects are co-constituting (Fraser and Seear 2011). Many of the shifts taking place in hepatitis C medicine appear subtle, as with shifts happening in relation to the specific way that 'opt in' approaches to consent have given way to 'opt out' approaches, or with the specifics of how opt out consent is being implemented (e.g. a conversation about testing, versus a flyer handed to a person, versus a poster hung on a wall). When these moves are analysed together, we see *a shift in how the subject of hepatitis C medicine is both perceived and enacted via the race to elimination*. As Fraser and Moore (2011a: 377) observed nearly a decade ago, regarding the push to treat people who use drugs in order to prevent onward transmission, subjects appear as 'bereft of individual differences and circumstances' with 'their personal interests [...] indistinguishable from those of society as a whole'. We see something similar going on here. However, these developments have intensified significantly in the decade since Fraser and Moore (2011a) offered their critique, as elimination became entrenched through practice and policy. These logics have benefits and costs. Our point in this article is not to deny the benefits that flow from testing, treatment and cure, but to instead invite critical reflection on the rapidly changing version of subjecthood being made possible by DAAs and to encourage reflection regarding the various forces that are limiting ways of being and becoming with hepatitis C. A remaking that is simultaneously homogenising, humanising and dehumanising is underway, and we must attend to what this means for those affected.

Here, we want to reflect on what such tensions and movements *do with the human*. Can the subject who uses or who has ever used drugs be (or remain) 'human' in the face of a set of forces that position them and their interests as mere obstacles to other goals? What is the place of the subject in the midst of this web of forces? How does one live in a world dominated by a powerful national/global agenda? The specific changes we have traced in this paper can be seen as simultaneously: a *product* of more-than-human forces, an *intervention* in what it means to be human, and generative of a *dilemma* for people who use drugs, as well as for critical drug scholarship and posthuman scholarship more broadly. This dilemma has some parallels with that identified by Moore and Fraser (2006) in their previous work on the neoliberal subject of harm reduction, insofar as the subject positions inscribed in (or made available through) the elimination agenda have costs and benefits for people who use drugs. Here, the dilemma we identify is of a slightly different kind. The choice is not between the possibilities and limitations of neoliberal subjecthood but between humanism, which can create significant problems for people who fail to live up to its normalising ideals, and posthumanism, which can erase the subject and much-needed protections. This generates new dilemmas for posthumanism in critical AOD and health scholarship. As we explained earlier, moves away from humanism are seen to have great analytic, symbolic and material power in AOD scholarship, positioning drug effects and forms of harm not as the product of individual subjects but of assemblages. But posthuman phenomena may not

generate consistently valuable outcomes across different areas of policy and practice. The remaking of subjects in legal spheres can generate benefits that differ markedly from their remaking within medical ones. In the present setting, the remaking of the subject has a set of political effects that differ markedly from the effects that might flow in, say, research into the assemblage of the drug overdose event. On the one hand, the subject is remade in its relations to others, constituted as part of a national (or possibly global) collective, where bodies, affects and interests are entangled. The recognition that all people who use drugs are connected through the elimination effort together might be empowering, inspiring and galvanising, offering a sense of optimism and purpose via a relational, monistic worldview. This new way of understanding oneself and one's place in the world through medicine has the potential to confer new benefits, especially if it allows people who use drugs to move beyond the narrow confines of 'addicted' subjecthood. Under this approach, dependence gives way to interdependence, rather than independence, which was the subject position made available under neoliberalism (Moore and Fraser 2006). But there are also problems with a version of subjecthood in which subjects are principally constituted via their relations to others and to broader public health goals. Whereas the value of posthumanism in AOD scholarship is its remaking of the subject as less responsible for forms of harm traditionally assigned to them as individuals, in the present context we see an erasure of rights and forms of care which are unquestionably precious to marginalised members of society, including people who use drugs and people with hepatitis C.

Conclusion

The remaking of the subject under elimination introduces costs (such as invasions of bodily integrity, autonomy, and privacy), which can be hugely troubling for people who use drugs and people with hepatitis C. These moves may also erode trust in medicine and undermine the elimination agenda, even as they advance it. The various risks and costs of such moves include: deterring people from treatment, if they feel their trust has been breached, or if they feel dehumanised in some way; the risk of re-infection, greater marginalisation and stigma, if people disengage with service providers; and the myriad of social, community and economic costs that may follow. As with the neoliberal subjects of Moore and Fraser's (2006) earlier work, we can find no simple answer to this dilemma. There is no 'pure location' from which to construct the ideal subject after the posthuman turn. There is a need, instead, to be attentive to what is happening under elimination, to ask whether all of these moves are essential, and to reflect on what they do. This problem is likely to intensify as Australia moves closer to its 2030 elimination deadline, encounters stepped targets for testing and treatment, and is subject to the watchful gaze of other nation States. All of this raises important and urgent questions about the place of individual interests, rights and ways of being in the face of cure, and a powerful national apparatus that is determined to eliminate the virus. It also has other implications for people with hepatitis C, affording 'revised notions of citizenship and social inclusion among people who inject drugs and others affected' by the virus (Rance et al. 2021). We need to think with care about the gains and losses generated through the elimination agenda.

To conclude, we offer some speculative pathways for addressing some of the questions and challenges we have identified in this paper. First, we argue that meaningful engagement of

affected communities is essential at all points of the policy development and implementation process. In policymaking and strategic planning, including in the push to upscale testing and treatment, more careful attention must be paid to the needs and rights of people with hepatitis C. It is important to think beyond the 2030 elimination goal, and to consider the risks that are introduced by subtle shifts in language, models of testing and treatment and changes to consent. These effects may be severe and long lasting for an already marginalised group. Ethics committees who are tasked with approving ‘novel’ or ‘innovative’ strategies for upscaling testing and treatment should be encouraged to consider the effects of remaking consent, beyond narrowly bioethical considerations of the kind we noted earlier. There is also value in considering a charter for better safeguarding patient rights in this context, including for the use and re-use of health records (Dencik 2020), and to explore other measures that would protect the rights and interests of individuals concerning testing, diagnosis and treatment. Finally, researchers might seek to deliberately intervene in these dynamics (following Fraser 2020) and instigate change (Seear et al. 2021) by conducting research expressly focussed on the needs, perspectives, experiences and rights of those affected by the elimination agenda. Such work allows us to attend more carefully to what is happening, and to shape movements between subjects and medicine to ‘enact better outcomes’ (Fraser 2020) for some of the most marginalised members of our community.

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