




Addiction and the Capability to Abstain

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Abstract

Addiction is a widespread problem affecting people from different regions, generations, and classes. It is often analysed as a problem consisting in compulsion or poor choice-making. Recently, however, integrated analyses of compulsion and choice have been called for. In this paper, I argue that the capability approach highlights the well-being loss at stake in cases of addiction, whether they are described as stemming from compulsion, poor choice-making, or some combination thereof. The relevant capabilities obtain when combinations of individual, socio-political, and environmental factors jointly facilitate abstention. On this complementary evaluative analysis, people's capabilities to abstain are shown to be undermined by how different kinds of factors interact with each other. The upshot is that without committing to an empirical view of the nature of addiction that must capture each case, the capabilitarian analysis helps highlight a central goal of addiction-related well-being policy-work, namely to promote people's genuine opportunities to abstain.

Keywords Well-being · Addiction · Capability approach · Choice views · Compulsion views

Introduction

When analysing addiction, there are three especially significant questions we may set out to answer. First, what is the nature of addiction? Second, and relatedly, are negative or harmful consequences part of addiction's nature? Third, how should the typical negative effects, i.e., harms of enduring addiction, be analysed? In this paper, I provide an answer to the third question by arguing that the typical harms of addic-

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tion—for the person enduring them—can be appropriately analysed in terms of that person’s capability to abstain or lack thereof.

In the addiction literature, significant attention is paid to the *nature* of addiction. To describe that nature, addiction is typically analysed as a problem stemming from lack of self-control, according to *compulsion views*, or regrettable but controlled choices, according to *choice views* (Burdman 2022, pp. 200–201). The purported dichotomy between compulsion views and choice views is, however, being met with some resistance. Burdman (2022), for instance, builds on a position which maintains that the purported dichotomy between compulsion and choice views is misguided (see also Wallace 1999; Sinnott-Armstrong 2013). In their place, integrated intermediate views are proposed that let features of both compulsion views and choice views explain what addiction’s nature is. In this paper, I will argue that these prominent descriptive views of addiction’s nature may describe central cases of addiction, but that a complementary evaluative analysis is needed to fully understand addiction’s impact on people’s well-being.

Views on the nature of addiction are orthogonal to addiction’s prudential impact, which is why a complementary analysis can teach us more about what is at stake in cases of addiction. The complementary evaluative analysis I offer explicitly highlights that a particularly important kind of well-being loss that is exhibited in salient cases of addiction goes unanalysed on compulsion and choice views. I address the evaluative question about the well-being loss of addiction while remaining agnostic as to what the nature of addiction is. In my answer to the evaluative question, I will argue that the capability approach, which provides evaluative analyses in terms of people’s genuine opportunities to achieve certain beings and doings, captures a central salient end that addiction undermines, whatever its nature is. Through a series of cases and related analyses, I show that significant well-being loss in cases of addiction can be captured by analysing people’s capabilities to abstain. The extent to which a person has such a capability, I argue, depends on how individual, socio-political, and environmental factors interact. The upshot of my complementary analysis of addiction is that what is prudentially at stake depends not only on what addiction consists in, but in the socio-political and environmental factors that, *together* with personal factors, undermine people’s capabilities.

There is much to be done policy-wise since addictions are pervasive. For instance, approximately 10% of the population over the age of 12 in the United States is estimated by Johnson et al. (2020, p. 2) to have a substance use disorder regarding ‘alcohol, marijuana, prescription opioids, heroin, cocaine (crack and powder), sedatives and anxiolytics, inhalants, and stimulants’ in the past 12 months prior to the study as per the criteria in the *Diagnostic and Statistical Manual of Mental Disorders 5* (cf. the American Psychiatric Association (2013, pp. 481–589). In absolute numbers, with regional variations, 283 million people are estimated by the World Health Organization (2018, p. xvi) to have alcohol use disorders. Furthermore, substance use disorders and related addictions cut across social classes (Herzberg 2017, p. 593) and generations (Lehmann and Fingerhood 2018). Often, life can seemingly be better than it is, which can push people towards escapism and addiction. Analysing the prudential impact of addiction informs the policy-work for alleviating addiction’s harms.

Besides being pervasive, substance addictions come in many varieties. Some substance addictions relating to felt effects and motivation can involve use of amphetamine, alcohol, or opiates (Rasmussen 2015, pp. 12–13; Weafer et al. 2018, p. 2535; Kamp et al. 2019, p. 660). But reasons for seeking out various substances proliferate, and addictions to such substances can also stem from, e.g., effects on: social interactions or sexual relations, one's cognitive performance, one's ability to cope with psychological stress or to self-medicate mental health problems, one's curiosity about novel experiences, and one's hedonic experiences or even sense of community (Pickard 2018, p. 13). Hence, the grounds for substance use can vary from person to person.

My primary focus is on substance addictions generally, that can stem from different sources such as interacting psychiatric or psychological, socio-economic, and environmental factors. However, my capability analysis can capture the well-being loss in terms of impaired capabilities to reliably refrain from things more generally, i.e., beyond substance use disorders. Hence, my analysis could, in principle, also be used to evaluate what is known as *behavioural addictions* (cf. Heather 2017, pp. 4–5), such as ones relating to gambling that are taken similarly seriously in the academic and medical literature (American Psychiatric Association 2013, p. 481). The result is that regardless of which view best describes addiction, the complementary analysis of addiction's harm I provide highlights an important prudential end that addiction undermines.

The paper's structure is as follows. In 'What is Prudentially at Stake', I argue that well-being policy-work benefits from a complementary analysis of what makes addiction bad in terms of well-being, regardless of its nature. In 'Capacities and Capabilities', I provide a capability analysis of a central end that addiction—whether based on compulsion, choice, or some combination—undermines. 'Conclusion' concludes.

What is Prudentially at Stake

Compulsion views maintain that people have an absence of control with regard to their drug-related behaviours. By contrast, choice views maintain that people retain control with regard to their drug-related choices and actions. The compulsion views and choice views offer accounts of addiction's nature and involve descriptions of people's level of, or lack of, self-control. In this section, I argue that whatever addiction's exact nature is, i.e., whether it is a problem of compulsion or choice, a complementary analysis of the well-being impact of addiction is called for to better understand what is at stake beyond the agential aspects captured by the surveyed views. To that end, I begin by analysing compulsion views and then move on to choice views.

Compulsion Views

Compulsion views maintain that addiction is constituted by uncontrolled behaviours with regard to substance use and relapse after cessation. Notably, the National Institute on Drug Abuse (NIDA) defines addiction as 'a chronic, relapsing disorder char-

acterized by compulsive drug seeking and use despite adverse consequences' (NIDA 2020, p. 4). Addictions, on *pure* compulsion views, amount to a total lack of control over a person's substance use. Such pure compulsion views are this section's main focus, as they offer a particularly clear position in the divide we find between analysing addiction in terms of either compulsion or choice-making.

To their credit, compulsion views straightforwardly cover many cases of addiction. A non-addicted individual's desire to abstain from something, because she perceives that it would be in her best interests to abstain, is typically sufficient for her to do so. By contrast, consider that some people are addicted to stimulants such as crack-cocaine and appear practically bound to use them despite judging abstinence to be better for them overall (cf. Wallace (1999, pp. 642–643) and Mele (2002, p. 154)). Even if some were initially unaware of the harms their substance use leads to, doctors sometimes tell people who are addicted to alcohol that they will suffer severe illness or die unless they stop drinking. Some who receive this medical advice understand it and earnestly wish to live well but find their commitments to abstain seriously conflicting with their addiction. Similarly, people continuing to use heroin despite it 'undermining much of what they hold valuable' warrants an explanation (Heyman 2009, p. 11), in part because it seems surprising that some actions would be both self-destructive yet also voluntary (Heyman 2009, p. 114). Though alternative explanations exist, as I will show, compulsion views offer one possible explanation of why people do not abstain in the face of such harrowing consequences.

The compulsion that addicted people seem subject to may be thought to stem from either intentional aspects or non-intentional ones. First, let us consider intentional aspects exemplified by *addictive desires*. In the context of substance addictions, a desire may be classified as addictive when it (1) would perpetuate a person's use of some substance, and (2) has a disproportionately high priority. However, addictive desires may not be impossible to resist (Wallace 1999, pp. 646–647; Henden 2018, p. 47), even if they are typically tremendously difficult to resist (Holton and Berridge 2017, p. 155). Hence, addictive desires may not always underlie compulsion in the form of a *total* lack of control but still *significantly* affect the person's control.

Second, non-intentional accounts such as brain-disease models of addiction can converge on a similar view of addiction as a kind of compulsion, i.e., lack of control. Consider that aversions to withdrawal often underly continued substance use (Wang 2019, p. 235). Continued use is, as Heyman (2009, p. 54) puts it, '[t]he best immediate cure' to withdrawal even if '[t]he best long-term cure is to wait out the symptoms'. One underlying factor may be that 'surges of dopamine "teach" the brain to seek drugs at the expense of other, healthier goals' (NIDA 2020, p. 17). A reason for this may be that '[o]nly one goal can guide behavior at a time; in fact, a dominant goal actively *suppresses* the accessibility of the most attractive alternative goals' (Dill and Holton 2014, p. 13). Hence, a person who is addicted can lack a desire to use some substance but have strong immediate aversions to feeling badly from not using it. Whatever the underlying factor is, the result ends up being the same. To illustrate, consider the case of *Henry the heroin user*.

Imagine a person, Henry, who is addicted to heroin and who uses the substance for its euphoric effects to counterbalance how badly he usually feels. However, eventually Henry's use stops overpowering his many negative emotions. Worse yet, the

entire process of using heroin now nauseates him. Looking around his unhygienic surroundings, Henry daily fears getting infections and abscesses from injecting his heroin with paraphernalia he cannot be sure are clean enough. Consequently, he eventually perceives the process of using heroin to be futile insofar as satisfying desires is concerned. Nevertheless, each day Henry wakes up feeling the thoroughly debilitating effects of withdrawal: he is *dope sick*. Dope sickness involves symptoms such as ‘yawning, sweating, lacrimation, rhinorrhoea, anxiety, restlessness, insomnia, dilated pupils, piloerection, chills, tachycardia, hypertension, nausea/vomiting, abdominal pains, diarrhoea and muscle aches and pains’ (Mateu-Gelabert et al. 2010, p. 180). In short, it is awful. Unless managed, such withdrawal often drives addicted people to use drugs again (Kosten and Baxter 2019, pp. 56–57). Yet Henry no longer acts on desires to get high. Rather, Henry is resigned to continue using heroin to stave off his debilitating, default state that has become intolerable.

To capture the case of Henry the heroin user, a proponent of a compulsion view may claim that aversions are negative counterparts to desires that can be affected by addiction-related changes to the brain. Instead of motivating agents desiring something to bring it about, they motivate agents averse to X to avoid X. Consider Schroeder’s (2004, p. 131) *Reward Theory of Desire*. On this theory, to be averse to X is to use a capacity to represent X as a punishment. *Punishment* is here not to be understood as an agent subjecting someone to negative consequences. Rather, it is expressed with the sense that the realisation of X will negatively affect the person whereby X or X’s effects become deterrents. Using this theory, or one with a similar function, a proponent of compulsion views may argue that Henry is *compelled to avoid withdrawal since the symptoms act as strong deterrents* rather than *compelled to use heroin*.

However, on this response, it is initially difficult to see what is different in terms of aversion when it comes to Henry who is addicted and those who are non-addicted. Consider that most people are similar to Henry by being (or would reasonably be) averse to experiencing the symptoms of heroin withdrawal however they might be induced. Yet, if a non-addicted person were to give us an account of how significantly averse she is to experiencing those symptoms, we should not consider that person *compelled*—and arguably the same line of reasoning applies to Henry.

In response, to explain what separates people such as Henry from non-addicts when it comes to aversions to withdrawal symptoms, a proponent of compulsion views may highlight Henry’s continued substance use and its effects of putting him at risk for future withdrawals. Furthermore, it may be argued that compulsion is not merely about not having self-control over desires or aversions, but in lacking control over external circumstances that help a person live a life she would value. For instance, Kennett (2013, pp. 150–158) argues that a person’s self-control may face external threats. We can imagine that Henry may endure withdrawal temporarily but eventually caves due to excessive calls on his self-control due to being around the substance that would alleviate the withdrawal. On this response, Henry and non-addicts alike share an aversion, but have *different means* of avoiding the drawbacks that withdrawal poses. Henry may have an *instrumental* desire to use heroin even if he does not think it is intrinsically desirable to use it (cf. Heathwood 2015, pp. 138–139). If Henry believes that using the drug will relieve the withdrawal symp-

toms, then he may well opt to use it. If the withdrawal symptoms stopped being a concern, however, the merely instrumental desire to keep using heroin would, assuming Henry knows that withdrawal is no longer a concern, disappear too. Whether it is due to intrinsic addictive desires or instrumental aversions motivating drug users to keep using, a brain disease underlying those desires or aversions, or external threats, Henry's continued use would be what identifies him as being addicted rather than not.

Continued substance use can thus account for cases of addiction such as Henry's, but all that is prudentially relevant to addiction is not evidently attributable to continued use. Consider the case of *abstaining Al*. First, imagine a person, Al, who is addicted to alcohol. Let us say that he got into drinking to mask severe emotional distress. Nevertheless, the drinking has taken its toll on his bodily health and relationships. So, he vows to stop drinking after midnight on New Year's Eve. Next, imagine that Al maintains sobriety for about two years, and comes to find the process somewhat easier in time, but always significantly difficult. After a few more years of sobriety, however, the cravings dissipate. Whilst compulsion view proponents could argue that the earlier, compulsive cravings are what addiction amounts to, that is arguably not the full extent of the relevant story, at least from a prudential perspective. Al can, it appears, endure some addiction-related well-being loss after the two years.¹ That may involve having to face the problems initially masked by the alcohol. The prudential impact of addiction is not just about struggling to not consume something, but arguably also about the hardships stemming from *not* consuming some substance one could be using to alleviate those hardships (cf. Heyman 2009, p. 84). Compulsion views are not directly concerned with external factors of this kind, but they should arguably feature in our prudential evaluations of addiction. Hence, whether we describe Al as addicted or not after the two years, there are related prudential features that should be analysed in tandem with any compulsion that Al may or may not endure.

In summary, I note two points. First, compulsion views capture much of what is at stake from an agential perspective in cases of addiction. Second, however, to fully appreciate the well-being loss that addiction instantiates, a complementary evaluative analysis would be useful to capture more of what is problematic about addiction. We have reason to be interested in such well-being losses whether or not a person is, by definitional decree, actively addicted. In the next section, I will argue that this claim about well-being also applies to choice views.

Choice Views

Choice views maintain that addictions involve people making controlled choices over their drug-related behaviours or actions (Burdman 2022, pp. 200–201; Heyman 2013a). The pure versions of these views consider people to be fully in control, albeit using that control to ill-effect. Variants of compulsion views focusing on *sub-optimal* choices include the work of Parfit (1984, pp. 318, 328), who discusses the

¹ I am grateful to an anonymous reviewer for pressing me on this point. A more detailed analysis of this prudential impact is presented in 'Capacities and Capabilities'.

imprudence of smoking and addiction as connected to clouded judgement. By way of example, consider the case of *smoking Selma*.

As Selma grew up, medical evidence of the harms of smoking became public knowledge. Selma is not a so-called *naïve addict* who does not realise smoking's harms (cf. Heather 2017, pp. 14–15). Rather, Selma is aware of the medical evidence, and ultimately aims to live a long and healthy life. Yet faced with the prospect of going through a frustrating nicotine withdrawal, Selma continues to smoke. The 'culprit' behind such an action is, according to choice view proponent Heyman (2013b, p. 2), 'the general principles that guide all choice'. Hence, addiction is analysed as actions occurring within a person's domain of controlled choice-making procedures. A core idea of choice views is that no pathology makes addictions universally permanent (Heyman 2009, pp. 17–20). A consequence of choice views is that addiction is better mitigated if we give the diagnosis according to which an addicted person's substance use is seen as stemming from controlled but suboptimal choices (Heyman 2013a, pp. 1, 3; 2013b, p. 17). Notably, those choices are usually not at the level of a lifestyle, i.e., about whether or not to be or become addicted, but of sequential choices to use some substance (Heyman 2009, p. 133).

The incongruence between what appears good for an addicted person to do and what they do is sometimes illustrated with an intrapersonal variant of the prisoner's dilemma (Gold 2013, pp. 50–53; Butlin and Papineau 2017, p. 105). By way of example, consider Selma who thinks about lighting up or quitting smoking. It would from Selma's perspective be better for her today if she gives into her strong cravings to smoke but to abstain the rest of the days so she does not suffer from, e.g., lung cancer that may follow (cf. Holton 1999, p. 246). When facing this choice again the following day, structurally speaking the same options are presented to her with the minor modification of involving that particular day and those that follow. In the end, by choosing to smoke today—each day—an outcome that is worse for her arises than would be produced by quitting smoking. Thus, Selma acts suboptimally from a global perspective, which is to say that despite individually optimal choices being made, an ultimately suboptimal outcome is produced. A purported reason for people being drawn to such globally suboptimal outcomes is that people such as Selma fail to identify and align their current interests with the interests of their future selves (Gold 2013, p. 59; Rachlin 2007, pp. S95, S97, S98).

Even though some cases of addiction may be seen as coordination problems between different selves, we should not think of addicted people in general as disconnected from their future selves. From the first day, Selma would get a benefit of some value V by quitting smoking, but she realises that she can get an additional day's worth of value from smoking *plus* V by stopping the next day. The next day, she faces the same situation, and the same choice appears best from her local choice-making perspective. At some point, V may become unavailable and Selma will get an amount of value (from however many days of smoking) that is less than V . Thus, Selma ends up in a globally suboptimal outcome. This description exhibits reasoning and a pattern similar to that of the intrapersonal prisoner's dilemma. But a reason the pattern arises can be epistemic uncertainty of when, or even if, V will be unavailable. Smoking-related illnesses, as Heyman (2009, p. 149) points out, 'take years to develop and do so with some uncertainty'. People who are addicted do not necessarily fail to

identify what is best for them long-term merely because they do not know whether, or when, risks will become inescapable realities. Hence, choice views do not universally imply that people who are addicted are *irrational*. Nevertheless, choice views emphasise that the control someone such as Selma has is largely unimpeded, and that addiction stems from voluntary choices (Burdman 2022, p. 201).

More generally, we can see that aligning one's interests (or self) with one's future interests (or selves) is not universally at stake in addiction by considering the following. First, assume that some addicted people realise that they are in a suboptimal position compared to non-addicted people, everything else being equal. Furthermore, assume that they are aware that they will keep their comparatively bad position if they perpetuate their addictions. Second, consider three consecutive states: A, B, and C. State A involves active addiction, state B is an intermediate step to stable sobriety that is worse than state A by involving drawbacks of abstinence or withdrawal, whilst state C involves stable sobriety and is better than states A and B. Third, we ask whether addicted people must be choosing poorly when perpetuating their addiction in A.

The answer is negative. A person who is addicted to something can be aware that state C is better than state A. Yet, she may justifiably consider state C to not be worth the drawbacks that state B presents. In short, upon stopping drug use things may get significantly worse before they improve (Pickard and Ahmed 2017, p. 37). For instance, a person whose homelessness is cemented by using drugs would not suddenly be housed and healthy by abstaining for a short time. Instead, the person will remain homeless without any substance that partially covers up the negative effects that the homelessness involves before any improvements have time to arise. This can be worse for the person since, as Sinnott-Armstrong (2013, p. 126) puts it, 'life on the street without drugs is so horrible'. Moreover, going through withdrawal drastically increases the risk of relapse (Bickel et al. 2014, p. 520). This means that state B is a *necessary intermediate step* to achieve state C, but it is not *sufficient* for achieving state C. It is possible to enter state B which is worse than state A and eventually end up back at state A rather than achieving the comparatively better state C. That course of events makes the situation worse overall than never entering state B would have been, which is the case even though state A is worse than never becoming addicted would have been. Someone who is addicted can come to realise this fact.

In effect, a person who has good reason to seek out a valuable state, C, is not necessarily mistaken about the relative goodness of A and C when she opts against doing so. Instead, she may consider C as unlikely enough to make the expected value of states B and C less than maintaining A would offer. A person may, e.g., believe that they could not abstain at all. But even if that step is possible and taken, she may also believe that she cannot maintain sobriety long enough for stable sobriety in state C to be realised (Jeppsson 2018, pp. 544–545; Kennett and McConnell 2013). A person who is addicted can accurately assess that realising state C is highly unlikely, and that remaining in state A is the best that they can do in those circumstances.

To illustrate, the costs of quitting smoking may be larger than never starting smoking (Grill and Voigt 2016, p. 298). But if enduring addiction is the best that one can do in some given set of circumstances, and it would still be ultimately preferable to not be addicted, some complementary evaluative analysis that goes beyond the nature of

addiction can show what is at stake. That analysis would explain what is normatively at stake even if the descriptive aspects of addiction are captured by choice views.

In summary, choice views, like compulsion views, capture serious instances of addiction but do so mainly descriptively. To better appreciate what well-being policy-work should be geared towards, it would be beneficial to analyse addiction evaluatively to show why being addicted is, everything else being equal, prudentially worse than being non-addicted is. I therefore propose a complementary, capabilitarian analysis in the next section that fulfils this function.

Capacities and Capabilities

In this section, I offer a capabilitarian analysis of the well-being loss addiction instantiates whether addiction consists in compulsion, choices, or something more integrated. First, I argue that abstention should be analysed in terms of people's genuine opportunities to reliably refrain from something. Second, I argue that we should consider external social and environmental factors that act as catalysts or dampeners on people's genuine opportunities to abstain. On this complementary analysis, addiction involves interactions between different kinds of factors that jointly undermine people's genuine opportunities to abstain. A central well-being loss stemming from addiction is thereby captured in terms of people's impaired capabilities to abstain. I argue that we should focus on such capability impairments whatever addiction's exact nature is. I will, furthermore, argue that the capability approach offers a way of cohesively formulating a valuable end for well-being-related policy-making that addiction undermines. Operationalisations can be formulated to measure people's access to the capability to abstain. As there is no shortage of sets of individual, social, and environmental factors that undermine people's capabilities to abstain, social scientists and policy-makers benefit from having a way of analysing those sets of factors. The capability approach offers tools to explore which interventions facilitate people's capabilities to abstain, which, in turn, can help decrease the well-being loss of addiction.

The End of Abstention

The capability approach is particularly useful for analysing well-being multidimensionally (Robeyns 2017, pp. 56, 118; 2016, pp. 402–403; Nussbaum 1992, p. 222; Sen 1985, pp. 195–198, 200–202). The multidimensionality serves to incorporate the different ways in which people's lives can go well or poorly in a nuanced way. To illustrate, consider someone who can eat enough to secure her bodily health, but who is only able to do so by panhandling for money, and thereby finds herself subjected to discrimination and social ostracism. In terms of bodily health, the person in question fares well, but in terms of social affiliation, she fares poorly. Typically, people who are addicted to drugs find the substances to offer some benefit, such as a propensity to induce pleasure, but also something negative, such as a lowered level of bodily health from prolonged use. The capability approach calls these different things *dimensions of well-being* and they are assessed separately.

Capabilitarian analyses employ two central concepts. The analyses in part centre on what people *are and do*, such as being in good or poor health, or performing activities such as eating or using substances. These are people's *functionings*. A functioning is a state of being or doing of a person (Byskov 2020, pp. 19–21, 26–27). Beyond asking what people are and do, capabilitarian analyses are also centrally concerned with what people *can be and do*. These are people's *capabilities*. Capabilities are genuine opportunities to realise functionings (Robeyns 2017, p. 39; Qizilbash 2006, pp. 21–22; Sen 1993, p. 38). A person has a genuine opportunity to secure her nutritional needs, say, if her conditions are jointly sufficient to facilitate healthy eating. Such conditions involve internal factors such as having a working digestive system, but also external factors such as being allowed to eat and being somewhere she has access to food. By using the concepts of functioning and capability, we may begin to analyse addiction's impact on well-being as follows.

Addictions involve recurrent failures to abstain from using or doing something. With regard to promoting well-being, capabilitarian analyses typically maintain that the relevant ends are functionings and capabilities that people have reason to value (Khader and Kosko 2019, pp. 181–183). One way of capturing one such central end that addiction undermines is as follows.

The Capability to Abstain: A person, P, has a capability to abstain from something if P's conditions are such that P reliably refrains from it if P chooses to refrain.

It is crucial to distinguish two interpretations of the specification above: a descriptive interpretation and an evaluative interpretation. The capability to abstain could be interpreted descriptively to categorise cases of addiction by stating that a person is addicted to the extent that she lacks the capability to abstain. However, establishing the adequacy of such a descriptive account is beyond the scope of my aims. Rather, I propose to evaluate what is at stake in cases of addiction captured by compulsion views, choice views, and combinations thereof. The described capability to abstain will thus be used to evaluate the extent to which someone is well off in this dimension by assessing how reliably she can refrain from using some substance.

The value of having the capability to abstain can be illustrated by the difference between someone who uses substances but lacks the capability to abstain, and someone who uses a substance recreationally but could, if she decided to, stop using the substance at any time. What matters is not only whether a person undergoes an experience that in some ways is bad for her, but also her genuine opportunity to avoid having to endure those aspects. Imagine a person, A, who lacks the capability to abstain whereas person B has that capability. Everything else being equal, we have reason to prefer being in B's position rather than A's. The way that the capability can be undermined, moreover, need not stem only from personal characteristics such as one's self-control or abilities to make good choices for oneself.

The well-being loss that lacking the capability to abstain instantiates can be illustrated by the case of *Casey in chronic pain*. Casey has chronic agonising pain, leading her to live in isolation and deep depression. Despite numerous doctor visits and specialist attention, the healthcare system fails to diagnose and treat Casey's condition.

To add insult to injury, her expressed concerns are eventually dismissed. Yet Casey's suffering is incessant and debilitating. In a fit of desperation, Casey tries several illicit substances and after a while hits it *just right*. She finds something that puts her below the threshold of suffering and is finally able to cope with day-to-day life. Without the substance, she would have continued to suffer until one day giving up on living altogether. Nevertheless, it appears worse to be Casey than to be equally well off as her without having to take any drugs. Casey extends her life by using her substance and improves her well-being, all things considered. Furthermore, she improves her well-being at each point in time. All things considered, then, Casey's state of being addicted seems better for her than her default non-addicted but painful state. Whether she is compelled, or chooses, to use, or some more integrated analysis is right, an account of her well-being loss is pressing to present.

To see what the prudential badness of Casey's addiction consists in, consider that her situation effectively blocks her from not using her drugs. What is bad for Casey is that there are no capacities that she can alone develop or nurture that would be sufficient to abstain from drug-use while living a life that is of value to her. Briefly put, she lacks the capability to abstain.

To further illustrate, consider two people who differ in terms of their self-control. First, consider *Weak Walter* who has poor self-control but whose friends and family members check up on him to help manage day-to-day life, thereby mitigating many stressors. Next, consider *Strong Sally* who is an unusually strong-willed and independent individual who relies only on herself to get by. As it happens, Weak Walter and Strong Sally end up in a car crash. Both end up recovering in an intensive care unit and are subsequently sent home with a prescription for painkillers. Weak Walter, who has friends and family to help with tasks, only takes half his prescribed amount of painkillers because he does not have a pressing need to be active to get by. By contrast, Strong Sally's self-reliance and ambitions to be doing what is best for her pushes her to move around and to do tasks that help her recover. The painkillers, no doubt, help. Yet, this self-reliance eventually leads to addiction. Strong Sally becomes addicted, while Weak Walter does not, despite being attracted to the warm feelings of the painkillers that he has readily available. What differs for Weak Walter and Strong Sally is the level of self-control needed to abstain rather than the level of self-control that they possess but fail to make use of.

Furthermore, we can imagine that Weak Walter and Strong Sally had the same goal, namely, to regain their bodily health as soon as possible to reduce their long-term suffering. They both identify the best option for them, all things considered, but end up differently impacted by addiction. We may gauge that Sally is better off if she is able to lead a valued, active, lifestyle, even if addicted, compared to if she were immobilised from the car crash but not addicted. Even though Strong Sally reaches an optimal outcome, she is addicted and badly off in terms of lacking the capability to abstain from using her prescribed painkillers. Hence, her best-case scenario includes addiction and well-being loss in terms of lacking the capability to abstain.

We arrive at a view where addiction—whatever its nature—undermines an important capability. That, however, is only part of the prudential problem. We may understand the prudential badness of addiction beyond shortfalls of the capability to abstain from a capabilitarian view as well. Consider the difference between *not being well*

and *being unwell*. Addiction and drug use may, partially, involve good aspects such as pleasure or numbness to bad conditions. Yet addictions tend to involve states of being and doing that are not merely *not worth having*, but rather *worth not having*. One way of putting this is that addiction involves not just losses of positive well-being, but the presence of ill-being (Sumner 2020; Östlund 2021). To capture the ill-being aspects, the capability to abstain can be used as an anchoring point. When the capability to abstain is missing, it is because of certain beings and doings that undermine it (poor self-control, poor choice-making, or some combination of these things). Those may be intervened on, but, as illustrated, other beings and doings can constitute ill-being factors as well, such as the emotional distress that people such as Henry and Al experience. Since those make the capability to abstain less robust, we may gauge how a person is doing in terms of well-being by looking at the conditions that facilitate, or undermine, that capability.

People's self-control and choices play important roles. But even so, they are not the only relevant things to consider with regard to the impact that addiction has on someone being able to live well. By analogy, consider the difference between pouring fuel into a car with an intact fuel tank to pouring fuel into a car with a leaking fuel tank. The rate of leakage is a factor that impacts the mileage of the cars. The car that can go the farthest is not necessarily the one with more fuel available. Similarly, the people who have a genuine opportunity to abstain from using a substance are not necessarily those with the most self-control or good choice-making procedures. Whatever addiction *is*, what is at stake, minimally, is this capability to abstain.

In summary, several factors beyond personal capacities are central to the capability to abstain. As I will show in the next subsection, expressions of addiction can emerge in many ways based on how personal capacities and external factors interact. Hence, I show that addiction, whatever its essence is, can undermine the capability to abstain in several ways.

Catalysts and Dampeners

The next step of the capabilitarian analysis of addiction's impact on well-being concerns the kinds of conditions that jointly facilitate the capability to abstain. Beyond various personal capacities of people, their capabilities to abstain also centrally involve several other so-called *conversion factors*.

A conversion factor regulates what beings and doings, e.g., abstention, people have access to. Conversion factors can be *personal*, *social*, or *environmental* (Robeyns 2005, pp. 98–100; 2016, p. 407; 2017, pp. 45–47). For instance, two people may have access to the same resource, such as a bike, but be differently capable of travelling with it. The variability, e.g., depends on whether they have a full range of motion, whether there are social norms or policies allowing or promoting travel by bike, and the quality of nearby roads (Robeyns 2017, pp. 45–46). As is noted in the addiction literature, changes in the social and physical environment offer useful points of intervention when it comes to addiction (Tekin 2018, pp. 403–404). The capability approach can unify the relevant internal and external aspects since capabilities effectively consist in combinations of conversion factors. That is to say, a capability is an

emergent phenomenon that can be realised by different sets of personal, social, and environmental factors coming together.

On the capability analysis, conversion factors interact, resulting in different levels of access to the capability to abstain. Schematically speaking, if personal conversion factors P1 and P2 are present to a specific extent, the social and environmental conversion factors S1 and E1 may jointly be sufficient for the person to have the capability to abstain, whereas S2 and E2 would not be jointly sufficient together with P1 and P2. Addiction may or may not be a shortfall only of one or several personal capacities, but whatever its nature is, it results in a specific capability loss due to how the personal, social, and environmental, factors work together. What is inescapable in addiction's impact on well-being is whether a person has the genuine opportunity to abstain, and this analysis does not require us to settle the descriptive matter first. Targets of policy-making efforts to improve the prudential outcome for people who are addicted can be described with reference to conversion factors, whatever addiction's exact nature is.

First, personal conversion factors reside in a person and include things such as her metabolism and physical condition. A person's self-control and ability to make good choices are two pertinent examples of personal conversion factors. However, they will not on their own determine whether the person is capable of abstaining. There are further personal conversion factors that are relevant to the assessment. For instance, someone's level of tolerance to a substance may impact how much she consumes, which affects how often self-control is needed to abstain. Furthermore, a person's genetics and biological features, including changes to the brain stemming from ongoing drug use, are other relevant factors to consider here. There are interaction effects between different personal conversion factors to consider. Even if a person's level of self-control matters, people's propensity to have to call upon their personal capacities can vary. Hence, we should take care to note the variety of factors that are similarly central.

Second, there are further relevant factors external to the person. Social conversion factors involve the social norms and policies that regulate the person's access to valuable functionings such as health or sobriety. Social norms that not only allow for substance use but actively promote it can lead to increased incentives to use substances for people who are addicted. Consider, for instance, social norms that promote social drinking (Tekin 2018, pp. 404–408). Someone who is expected to drink while socialising would have to use her self-control, or keep the benefits of abstinence vividly in mind, more than someone without those expectations. Similarly, policies that allow for, e.g., targeted advertisements to people who spend large amounts of money on substances such as nicotine may find themselves in a similarly vulnerable position. In short, the socio-political milieu matters a lot for well-being outcomes here.

Third, even if a person has exceedingly weak self-control, or is subjected to the most insidious of advertisement programmes that make smoking seem like a good idea, if the substance in question is not available then she may be tempted without ever becoming addicted. Environmental conversion factors include the person's geographical location, such as whether the person is in an urban city centre where, for example, liquor stores, corner stores selling cigarettes, or drug dealers, are available. Depending on where a person is, different substances are going to be more easily

accessible and opportunities for their use will consequently vary. Similarly, the natural and built environments play an important role. Consider a person who endures freezing temperatures outside due to homelessness. Such a situation can further push that person, whether she is compelled or making a choice, to find relief by, say, dulling her senses. A central harm each person who is addicted endures is this kind of capability loss, and it may be impeded by a number of conversion factors that can, consequently, be relevant targets for policy-making efforts with the aim of promoting addicted people's well-being.

The upshot is that the capabilitarian analysis can capture what is prudentially at stake in the described cases. First up is Henry the heroin user, then abstaining Al, and finally smoking Selma.

Henry felt the thoroughly debilitating effects of heroin withdrawal and kept using the drug despite it no longer overpowering his negative emotions. Using heroin is now only a means to alleviate his withdrawal. Since there is ample reason to disvalue suffering, Henry has a derivative reason to continue using heroin. On the capabilitarian analysis, it does not at its core matter whether Henry is addicted because he is compelled to use or chooses in ways that people who are non-addicted would not. What is at stake, prudentially speaking, is that Henry's changed state of being without heroin is so painful that his personal conversion factors are significantly diminished which is sufficient to undermine his capability to abstain.

Al who vowed to stop drinking on New Year's Eve manages to abstain because of his tenacity, but that did not mean that he is not poorly off. By abstaining, Al was first less reliably refraining from drinking compared to someone who is non-addicted. Afterwards, though some of his personal conversion factors were not at stake, such as having to face cravings that made abstention difficult, other negative personal factors—the negative feelings he endures—makes Al's capability to abstain significantly impeded. While Al is actively managing his addiction, the balancing of his conversion factors becomes crucial to ensure the *security* of his sobriety. Functioning security is the degree to which some being or doing is going to remain despite changes in a person's life (Wolff and de-Shalit 2007, pp. 68–72; Wolff 2009). Such security does not only depend on the person's level of self-control or good choice-making, but also on other factors that, on the capabilitarian analysis of abstention, are explicitly considered.

What are we to say about Selma who appeared to choose poorly? Giving up smoking is, to be sure, an ordeal. It can involve recurring cravings, loss of motivation, loss of focus, and malaise. Whether the correct descriptive view is that she is compelled to smoke or that she chooses to smoke is orthogonal to the question of what is bad about her not stopping. Many things may be bad for her, such as negative impacts on health and agency, but lacking the capability to abstain is why such negative effects will obtain. Hence, even if the capability to abstain is not the *only* relevant thing to consider when it comes to well-being outcomes, it offers an anchoring point for showing the corrosiveness of addiction in the sense that prudentially bad beings and doings 'cluster together' (cf. Wolff and de-Shalit (2007, p. 121, 2013, p. 161).

In sum, the capabilitarian analysis shows the end that expressions of addiction undermine in different ways. Only by targeting the combined factors that impact people's capabilities to abstain can we appropriately capture what is at stake for those

who cannot or do not stop using drugs. The capabilitarian analysis does not supplant descriptive analyses of addiction's nature. Rather, its point is to show that whatever addiction ultimately amounts to, its tendency to undermine the capability to abstain (wholly or partially) is central prudentially. There can be other factors, as well, that will vary on a case-by-case basis, such as the health impact, and the impact on those who depend on a person who is addicted (say, children of addicted parents). Nevertheless, to fully account for what goes badly *for the person* who is addicted to something, looking at the capability to abstain becomes an indispensable part of the full prudential story.

Conclusion

In their most pure forms, compulsion views and choice views respectively maintain that addiction consists in having no control, or full control, over drug-related behaviours or actions. I argued that these prominent views capture some cases of addiction and some of their harms but would be well-served by a complementary prudential analysis. The capabilitarian analysis that I proffer goes beyond personal capacities for making (good) choices by considering them in combination with external factors such as the person's social-political embeddedness and environment. On this complementary analysis, interactions between internal and external factors show that addiction undermines a person's capability to abstain. The capabilitarian analysis offers a plausible account of what the end of addiction-related well-being policy-work is—namely, to secure people's genuine opportunities to abstain. In conclusion, while addiction is always a problem *for* a person, obtaining in a person's life, it should not merely be seen as a problem *with* the person as considered apart from the many and variable conditions she is in.

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References

- American Psychiatric Association. 2013. *Diagnostic and statistical manual of mental disorders: DSM-5*. 5th edn. Washington, DC: American Psychiatric Association.
- Bickel, Warren K., Mikhail N. Koffarnus, Lara Moody, and A. George Wilson. 2014. The behavioral- and neuro-economic process of temporal discounting: A candidate behavioral marker of addiction. *Neuropharmacology* 76: 518–527. <https://doi.org/10.1016/j.neuropharm.2013.06.013>.
- Burdman, Federico. 2022. A pluralistic account of degrees of control in addiction. *Philosophical Studies* 179 (1): 197–221. <https://doi.org/10.1007/s11098-021-01656-7>.
- Butlin, Patrick, and David Papineau. 2017. Normal and addictive desires. In *Addiction and choice: Rethinking the relationship*, ed. Nick Heather and Gabriel Segal, 1st edn, 99–115. Oxford: Oxford University Press.
- Byskov, Morten Fibieger. 2020. Beyond ‘having reason to value’: Why we should adopt a procedure-independent and value-neutral definition of capabilities. *Journal of Economic Methodology* 27 (1): 18–35. <https://doi.org/10.1080/1350178X.2019.1608584>.
- Dill, Brendan, and Richard Holton. 2014. The addict in us all. *Frontiers in Psychiatry* 5: 1–20. <https://doi.org/10.3389/fpsy.2014.00139>.
- Gold, Natalie. 2013. Team reasoning, framing, and self-control: An Aristotelian account. In *Addiction and self-control: Perspectives from philosophy, psychology, and neuroscience*, ed. Neil Levy, 48–66. Oxford Series in Neuroscience, Law, and Philosophy. New York: Oxford University Press.
- Grill, Kalle, and Kristin Voigt. 2016. The case for banning cigarettes. *Journal of Medical Ethics* 42 (5): 293–301. <https://doi.org/10.1136/medethics-2015-102682>.
- Heather, Nick. 2017. On defining addiction. In *Addiction and choice: Rethinking the relationship*, ed. Nick Heather and Gabriel Segal, 1st edn, 3–25. Oxford: Oxford University Press.
- Heathwood, Chris. 2015. Desire-fulfillment theory. In *The Routledge handbook of philosophy of well-being*, ed. Guy Fletcher, 135–47. London: Routledge.
- Henden, Edmund. 2018. Addiction as a disorder of self-control. In *The Routledge handbook of philosophy and science of addiction*, ed. Hanna Pickard and Serge H. Ahmed, 1st edn, 45–53. Routledge Handbooks in Philosophy. New York: Routledge. <https://doi.org/10.4324/9781315689197>.
- Herzberg, David. 2017. Entitled to addiction? Pharmaceuticals, race, and America’s first drug war. *Bulletin of the History of Medicine* 91 (3): 586–623. <https://doi.org/10.1353/bhm.2017.0061>.
- Heyman, Gene M. 2009. *Addiction: A disorder of choice*. 1st Harvard University Press paperback edn. Cambridge, MA: Harvard University Press.
- Heyman, Gene M. 2013a. Addiction and choice: Theory and new data. *Frontiers In Psychiatry* 4. <https://doi.org/10.3389/fpsy.2013.00031>.
- Heyman, Gene M. 2013b. Addiction: An emergent consequence of elementary choice principles. *Inquiry: A Journal of Medical Care Organization, Provision and Financing* 56 (5): 428–445. <https://doi.org/10.1080/0020174X.2013.806126>.
- Holton, Richard. 1999. Intention and weakness of will. *The Journal of Philosophy* 96 (5): 241–262. <https://doi.org/10.2307/2564667>.
- Holton, Richard, and Kent Berridge. 2017. Compulsion and choice in addiction. In *Addiction and choice: Rethinking the relationship*, ed. Nick Heather and Gabriel Segal, 1st edn, 153–170. Oxford: Oxford University Press.
- Jeppsson, Sofia. 2018. Irrational option exclusion. *Ethical Theory and Moral Practice* 21 (3): 537–551. <https://doi.org/10.1007/s10677-018-9897-3>.
- Johnson, Kimberly, Khary K. Rigg, and Eyles Cary Hopkins. 2020. Receiving addiction treatment in the US: Do patient demographics, drug of choice, or substance use disorder severity matter? *International Journal of Drug Policy* 75: 1–6. <https://doi.org/10.1016/j.drugpo.2019.10.009>.
- Kamp, Felicia, Lisa Proebstl, Nora Penzel, Kristina Adorjan, Andrej Ilankovic, Oliver Pogarell, and Gabi Koller, et al. 2019. Effects of sedative drug use on the dopamine system: A systematic review and meta-analysis of in vivo neuroimaging studies. *Neuropsychopharmacology: Official Publication of the American College of Neuropsychopharmacology* 44 (4): 660–667. <https://doi.org/10.1038/s41386-018-0191-9>.
- Kennett, Jeanette. 2013. Just say no? Addiction and the elements of self-control. In *Addiction and self-control: Perspectives from philosophy, psychology, and neuroscience*, ed. Neil Levy, 144–64. Oxford Series in Neuroscience, Law, and Philosophy. New York: Oxford University Press.

- Kennett, Jeanette, and Doug McConnell. 2013. Explaining addiction: How far does the reward account of motivation take us? *Inquiry* 56 (5): 470–89. <https://doi.org/10.1080/0020174X.2013.806133>.
- Khader, Serene J., and Stacy J. Kosko. 2019. 'Reason to value': Process, opportunity, and perfectionism in the capability approach. In *Agency and democracy in development ethics*, ed. Lori Keleher and Stacy J. Kosko, 178–204. Cambridge: Cambridge University Press.
- Kosten, Thomas R., and Louis E. Baxter. 2019. Review article: Effective management of opioid withdrawal symptoms: A gateway to opioid dependence treatment. *The American Journal on Addictions* 28 (2): 55–62. <https://doi.org/10.1111/ajad.12862>.
- Lehmann, Susan W., and Michael Fingerhood. 2018. Substance-use disorders in later life. *New England Journal of Medicine* 379 (24): 2351–2360. <https://doi.org/10.1056/NEJMra1805981>.
- Mateu-Gelabert, Pedro, Milagros Sandoval, Peter Meylakh, Travis Wendel, and Samuel R. Friedman. 2010. Strategies to avoid opiate withdrawal: Implications for HCV and HIV Risks. *International Journal of Drug Policy* 21 (3): 179–185. <https://doi.org/10.1016/j.drugpo.2009.08.007>.
- Mele, Alfred R. 2002. Akratics and addicts. *American Philosophical Quarterly* 39 (2): 153–167.
- NIDA. 2020. *Drugs, brain, and behavior: The science of addiction*. US Department of Health and Human Services.
- Nussbaum, Martha C. 1992. Human functioning and social justice: In defense of Aristotelian essentialism. *Political Theory* 20 (2): 202–246.
- Östlund, Sebastian. 2021. Distinguishing disadvantage from ill-being in the capability approach. *Ethical Theory and Moral Practice* 24 (4): 933–947. <https://doi.org/10.1007/s10677-021-10232-1>.
- Parfit, Derek. 1984. *Reasons and persons*. Oxford: Clarendon Press.
- Pickard, Hanna. 2018. The puzzle of addiction. In *The Routledge handbook of philosophy and science of addiction*, ed. Hanna Pickard and Serge H. Ahmed, 1st edn, 9–22. New York: Routledge. <https://doi.org/10.4324/9781315689197>.
- Pickard, Hanna, and Serge H. Ahmed. 2017. How do you know you have a drug problem? The role of knowledge of negative consequences in explaining drug choice in humans and rats. In *Addiction and choice: Rethinking the relationship*, ed. Nick Heather and Gabriel Segal, 1st edn, 29–48. Oxford: Oxford University Press.
- Qizilbash, Mozaffar. 2006. Capability, happiness and adaptation in Sen and J. S. Mill. *Utilitas* 18 (01): 20–32. <https://doi.org/10.1017/S0953820805001809>.
- Rachlin, Howard. 2007. In what sense are addicts irrational? *Drug and Alcohol Dependence* 90 (Suppl. 1): S92–S99. <https://doi.org/10.1016/j.drugalcdep.2006.07.011>.
- Rasmussen, Nicolas. 2015. Amphetamine-type stimulants. In *The neuropsychiatric complications of stimulant abuse*, ed. Pille Taba, Andrew Lees, and Katrin Sikk, 9–25. *International Review of Neurobiology* 120. Elsevier. <https://doi.org/10.1016/bs.irm.2015.02.001>.
- Robeyns, Ingrid. 2005. The capability approach: A theoretical survey. *Journal of Human Development* 6 (1): 93–117. <https://doi.org/10.1080/146498805200034266>.
- Robeyns 2016. Capabilities. *Journal of Human Development and Capabilities* 17 (3): 397–414. <https://doi.org/10.1080/19452829.2016.1145631>.
- Robeyns 2017. *Wellbeing, freedom and social justice: The capability approach re-examined*. Cambridge: Open Book Publishers. <https://doi.org/10.11647/OBP.0130>.
- Schroeder, Timothy. 2004. *Three fables of desire*. New York: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780195172379.001.0001>.
- Sen, Amartya. 1985. Well-being, agency, and freedom: The Dewey Lectures 1984. *The Journal of Philosophy* 82 (4): 169–221.
- Sen, Amartya. 1993. Capability and well-being. In *The quality of life*, ed. Martha C. Nussbaum and Amartya Sen, 30–53. Oxford: Oxford University Press. <https://doi.org/10.1093/0198287976.001.0001>.
- Sinnott-Armstrong, Walter. 2013. Are addicts responsible? In *Addiction and self-control: Perspectives from philosophy, psychology, and neuroscience*, ed. Neil Levy, 122–43. Oxford Series in Neuroscience, Law, and Philosophy. New York: Oxford University Press.
- Sumner, Wayne. 2020. The worst things in life. *Grazer Philosophische Studien* 97 (3): 419–432. <https://doi.org/10.1163/18756735-000108>.
- Tekin, Şerife. 2018. Brain mechanisms and the disease model of addiction: Is it the whole story of the addicted self? A philosophical-skeptical perspective. In *The Routledge handbook of philosophy and science of addiction*, ed. Hanna Pickard and Serge H. Ahmed, 1st edn, 401–410. New York: Routledge. <https://doi.org/10.4324/9781315689197>.

- Wallace, R. Jay. 1999. Addiction as defect of the will: Some philosophical reflections. *Law and Philosophy* 18 (6): 621. <https://doi.org/10.2307/3505095>.
- Wang, Shaocheng. 2019. Historical review: Opiate addiction and opioid receptors. *Cell Transplantation* 28 (3): 233–238. <https://doi.org/10.1177/0963689718811060>.
- Weafer, Jessica., Ross, Thomas J., Sean O'Connor, Elliot A. & Stein, Harriet de Wit, and Emma Childs, <https://doi.org/10.1038/s41386-018-0166-x> (2018).
- Wolff, Jonathan. 2009. Disadvantage, risk and the social determinants of health. *Public Health Ethics* 2 (3): 214–223. <https://doi.org/10.1093/phe/php033>.
- Wolff, Jonathan, and Avner de-Shalit. 2007. *Disadvantage*. Oxford: Oxford University Press.
- Wolff, Jonathan, and Avner de-Shalit. 2013. On fertile functionings: A response to Martha Nussbaum. *Journal of Human Development and Capabilities* 14 (1): 161–165. <https://doi.org/10.1080/19452829.2013a.762177>.
- World Health Organization. 2018. *Global status report on alcohol and health 2018*. Geneva: World Health Organization. <https://apps.who.int/iris/handle/10665/274603>.

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