

relatively unaltered. Rational, logical choices in response to internal or external cues associated with reinforcement become exceedingly difficult. To this end, addicts may well realize that what they are doing is against societal rules or even their own personal desires and goals, but they cannot inhibit their behavior because of the skewed perception of short-term rewards and the augmented negative affect associated with cessation of drug taking. Voluntary control is significantly impaired and therefore moral responsibility becomes weakened.

As everyone recognizes about addiction, biological processes and normative judgments are interdependent. We make no attempt to define exactly where lines should be drawn. Rather, our goal is to re-emphasize in support of Hyman's (2007) initial article the view that current biological information from the neurosciences reveals a powerful mechanism for explaining perseverative drug-seeking behavior that calls into question the voluntary control over some actions of people with powerful addictions. While we applaud efforts to clarify the foundations and preserve the appropriateness of some normative judgments associated with addiction, we also support a medical model of addiction that acknowledges limitations in the ability to voluntary control behavior by drug-addicted individuals.

#### REFERENCES

- Borse, C. 1999. On the distinction between disease and illness. In *Meaning and medicine: A reader in the philosophy of health care*, ed. J. Lindeman Nelson and H. Lindeman Nelson, 16–27. New York, NY: Routledge Press.
- Charland, L. C. 2007. Affective neuroscience and addiction. *American Journal of Bioethics (AJOB–Neuroscience)* 7(1): 20–21.
- Cochrane, T. I. 2007. Brain disease or moral condition? Wrong question. *American Journal of Bioethics (AJOB–Neuroscience)* 7(1): 24–25.
- Conrad, P. 2004. The discovery of hyperkinesia: Notes on the medicalization of deviant behavior. In *Health, disease and illness: Concepts in medicine*, ed. A. Caplan, J. McCartney, and D. Sisti, 153–162. Washington, DC: Georgetown University Press.
- Foddy, B., and J. Savulescu. 2007. Addiction is not an affliction: Addictive desires are merely pleasure-oriented desires. *American Journal of Bioethics (AJOB–Neuroscience)* 7(1): 29–32.
- Hyman, S. E. 2007. The neurobiology of addiction: Implications for voluntary control of behavior. *American Journal of Bioethics (AJOB–Neuroscience)* 7(1): 8–11.
- Koob, G. F., and M. LeMoal. 2004. Drug addiction and allostasis. In *Allostasis, homeostasis, and the costs of physiological adaptation*, ed. J. Schulkin, 150–163. New York, NY: Cambridge University Press.
- Morse, S. J. 2007. Voluntary control of behavior and responsibility. *American Journal of Bioethics (AJOB–Neuroscience)* 7(1): 12–13.
- Volkow, N. D. and Fowler, J. S. 2000. Addiction, a disease of compulsion and drive: Involvement of the orbitofrontal cortex. *Cerebral Cortex* 10: 318–325.

# Addiction Is Not an Affliction: Addictive Desires Are Merely Pleasure-Oriented Desires

**Bennett Foddy, University of Melbourne and Monash University  
Julian Savulescu, University of Oxford**

Our commentary offers a reductive account of addiction as pleasure-seeking. Hyman (2007) sees two extremes in the addiction debate: views that conceptualize addiction as a brain disease and views that conceptualize addiction as a moral condition. We have characterized addiction not as a brain disease or a moral condition, but as a particularly strong preference, similar to appetitive preferences (Foddy and Savulescu 2006). Sometimes the results of this prefer-

ence are not to the addict's liking, but they choose to take their drug, just the same. "Addiction" is merely a form of pleasure-seeking.

On our account, addictive desires are merely desires for a source of pleasure, or as we now prefer to call them, *pleasure-oriented desires*. Addictive desires are different from other desires for pleasure in the following ways:

Address correspondence to Bennett Foddy, Centre for Applied Philosophy and Public Ethics, University of Melbourne, 3/53 Evans Street, Brunswick, VIC 3056, Australia. E-mail: bennett@foddy.net

1. They are especially strong;
2. They occur in a particular context and set of social relationships that triggers the anticipation of pleasure and a strong drive to satisfy the desire; and
3. They are socially unacceptable, usually because they threaten the welfare of the individual or challenge some set of social norms.

### KINDS OF ADDICTION

Hyman (2007) focuses on drug addiction, defined here as the provision of drugs that produce some pleasurable mental state by direct intervention in the pleasure pathways in the brain. It is important to recognize that drugs do not act mysteriously, as Hyman well describes. They engage preexisting pathways invoked by behavioral and or psychological activity. Drugs act directly on these pathways, unlike some sources of pleasure. Nonetheless, the result is the same—the pleasurable activation of brain pathways resulting from a particular behavior.

As Hyman (2007) notes, people engage in some activity that, for various reasons, generates pleasure. There are four potential sources of pleasure:

1. “Natural activity:” engagement with the natural world;
2. Social activity: engagement with other people;
3. Psychological activity: engagement with one’s own psychology; and
4. Biological: direct engagement of the biological pathways that generate pleasure.

Hyman (2007) argues that these pleasure pathways developed as humans evolved to enhance the achievement of survival-related goals. Such an evolutionary explanation should of course encompass reproductive goals as well. Today, however, we do not only have the old evolutionary goals of survival and reproduction, we also want to have a good life, to achieve worthwhile goals, control reproduction and raise a family, develop our talents, and gain knowledge. In addition, of course we all want pleasure in our lives. These pleasure pathways can be manipulated directly to provide pleasure and also to reinforce the achievement of our other important life goals.

### DRUGS CONSTITUTE A BIOLOGICAL SOURCE OF PLEASURE

Drugs are not the only sources of addiction. Physical dependency syndromes have been observed for sugar (Colantuoni et al. 2002), water (Edelstein 1973), and carrots (Kaplan 1996). Water, like drugs, acts directly on the pleasure pathways by diluting the electrolytes in the brain. People can become addicted to any source of pleasure: eating, drinking, sex, pornography, gambling, exercise, or work. These are different kinds of pleasure activities—some are a mixture. For example, sex is both a social and biological source of pleasure. What all these different kinds of addiction and different sources of pleasure have in common is that the activity engages the same basic

and primal pleasure pathways of the brain and generates pleasure. Whatever the source of the pleasure, there are common areas of the brain that are activated.

### Normative Implications of a Reductive Account

The problem of addiction is the problem of the place of and kinds of pleasure in a good life. Which kinds of pleasure should we seek? How much and when should we seek pleasure? When should we resist pleasure? Addiction is nothing but the drive to experience pleasure.

There are reasons why we should or should not pursue an activity. If an activity threatens a person’s life or health, or the life and health of others, then this gives us a reason not to pursue that activity. Pleasurable activities are no different, except that pleasure constitutes *some* reason to perform them. Whether a person has most reason to engage in some pleasurable activity depends on the weight of all these considerations. The search for pleasure, or achievement, or security for one’s family or job are all worthwhile activities that at times can be outweighed by other considerations. When we say that someone is addicted to some pleasure, we are making a normative claim that they have given the pleasure too much weight. We are not making a claim about their brain chemistry or their ability to act autonomously.

The term *addiction* itself carries a heavy normative loading—when we use this term we agree tacitly to the presumption that we should not desire drugs. Similarly, in 1851 an American doctor described the “disease” of drapetomania, a disorder that caused slaves to run away (Cartwright 1851). The presumption in that case was that slaves should desire continued captivity. Addiction, like drapetomania, is an example of the medicalization of socially unacceptable behavior. Now that we have enough disposable income to enjoy ourselves in many ways and many biological sources of pleasure at our disposal, we face real normative issues this century regarding the role pleasure should play in our lives; however, defining certain pleasure-seeking behaviors as addictions does not solve these issues.

Addicts are characterized as suffering from a disease, like a person as afflicted by a virus or cancer. This fiction of affliction allows us to treat them, often against their will, when their behavior challenges the values by which we live and order society.

### RELATIONSHIP TO HYMAN’S ACCOUNT

As previously noted, Hyman (2007) sees two extremes in the addiction debate: views that conceptualize addiction as a brain disease and views that conceptualize addiction as a moral condition. We agree with Hyman that addiction involves the pleasure pathways of the brain. Addiction is not a disease, however, any more than drapetomania was a disease. It is a simple biological fact that we seek pleasure. Pleasure itself is an intrinsic good. Perhaps it is not always good, on balance, to pursue pleasure. This would make excessive pleasure-seeking a poor choice, not a disease.

Addiction is not a “moral condition” either, though there is a lot of moralizing about so-called addictions. Drug-oriented desires are no less authentic than desires for sex or food. Drug addicts are as in need of help as are sex addicts or food addicts. There is no reason to view drug-derived pleasures any differently from non-drug-derived pleasures.

We agree with Hyman (2007) that dependence and withdrawal are not good defining characteristics of addiction. Sometimes it is claimed that drug addiction is typified by tolerance to the drug, such that higher and higher doses are necessary to achieve the same level of pleasure. But this tolerance, and the related characteristic of dependence, is typical of all repetitive pleasurable activities. The hedonic treadmill is characteristic of all pleasurable activities: the same level of some pleasurable activity performed repetitively generates less pleasure such that we require newer and higher levels of activity.

Hyman (2007) favors the currently fashionable definition of addiction as *compulsion*. The compulsion of addiction lies in its pleasure. We want the object of our addiction because to get it is pleasurable and it makes us feel good. These sources of pleasure can, especially under conditions of social prohibition, have severe side effects, as can other sources of pleasure such as mountain climbing. There is no further property in the compulsion of addiction other than pleasure-seeking. Our nature is to seek pleasure and avoid pain. Does an addict have control over their drug use? The answer is yes—but only in the limited sense for which a healthy person has control over their strongest pleasure-oriented desires.

### SURVIVAL AND THE GOOD LIFE

A conception of autonomy that claims that our preferences have no biological underpinning and that we are normally free to control our preferences would be hopelessly romantic. Hyman (2007) sees that this kind of conception is at least at odds with our survival-relevant choices, which have an obvious biological underpinning and he puts these in a kind of exclusive normative category. But survival is just one of our values—it is not always the most important value and survival-oriented choices are not always the most rational. The joy of flying a kite in the strong wind, lying in the first summer sun, and laughing at a joke are at best only indirectly survival-related pleasures.

Hyman argues that “...addictive drugs tap into and, in vulnerable individuals, *usurp* powerful mechanisms by which survival-relevant goals shape behavior” (2007, 8). But survival-relevant goals (such as obtaining food) shape our behavior in much the same way as drug-oriented goals do—put simply, we want very much to satisfy these goals. If an addictive drug “usurps” the process of obtaining food, it just means that we more strongly want to obtain the drug than the food. Mountain climbers usurp powerful survival-related mechanisms that reduce unnecessary voluntary exposure to risk in order to achieve goals, demonstrate skill and determination, and test human endurance. In addition, of course they gain great pleasure from gazing across the vista of the peaks they have surpassed.

It is true that seeking a drug such as heroin is rarely “survival-relevant”, and Hyman’s (2007) point may be that it is only when we are addicted that a non-survival-relevant goal can “usurp” a survival-relevant goal; however, this point is false. First, if this were Hyman’s view, then a person who refused to give information when tortured would be “addicted” to protecting their secrets—a goal that has no intrinsic survival value. Second, a starving person who sacrificed her food for her friend would be “addicted” to saving her friend. “Survival-relevance” is not a fundamental or exclusive property of rational action. Rational action can aim at satisfaction and of course pleasure.

One of the problems in addiction research seems to be that we know more about the pharmacology and neuroscience of addiction than we do about the pharmacology of mountaineering, of saving friends, or of eating strawberries. This is a result of the sociopolitical context in which addiction research has taken place for the last half-century, where certain sources of pleasure were deemed socially unacceptable. It would be a mistake to think that just because we know the mechanisms of drug conditioning, that there are no analogous conditioning mechanisms involved in the processing of “natural rewards”.

Hyman says that these conditioning mechanisms cause “drugs [to] become overvalued” (2007, 8), but again the term *overvalued* is a highly subjective descriptor. Drugs are only overvalued if survival-relevant goods have more objective value. As the previous examples show, there are valuable goods that are not survival-relevant and not all goods have the same value to all rational actors. It is an open question how much pleasure we should experience in a good life.

A fuller conception of autonomy would allow for the possibility that a rational person might simply value the pleasure of heroin use above the value of their health or their job. If we are to be truly autonomous, we must be free to devalue those goods that are very popular—even those goods that we might have a natural tendency to protect. This devaluation may or may not lead to a *good* life, but good outcomes have never been a necessary characteristic of autonomous actions.

It is also worth noting that even heroin addicts, so infamous for their inability to abstain from the drug, do not seem to value heroin above every other goal. Hyman supposes, rather cautiously:

Perhaps in a drug-free context, perhaps with a good measure of initial coercion, perhaps with family, friends, and caregivers acting as external “prostheses” to shore up damaged frontal mechanisms of cognitive control, and often despite multiple relapses, addicts can cease drug use and regain a good measure of control over their drug taking (2007, 8).

It is a shame that this picture of drug use has become so prevalent. In fact, drug users frequently just stop using drugs, without caregivers, friends, family, without relapsing, and without any kind of coercion. One of the most well

known examples is that of opiate-addicted soldiers returning from Vietnam who ceased using when they returned to the United States (Robins and Slobodyan 2003). Many drug addicts stop using in order to better care for a dependent child (Watson 1999). And a great many just 'mature out' of a drug addiction (Winick 1962). The drug users who continue to relapse for their whole life are the statistical exception. With that in mind, perhaps it is easier to conceive of drug users as having a "good measure of control" even when their drug is more important to them than food.

## CONCLUSION

The problem of addiction is the problem of the management of pleasure, not treatment of a disease. This differentiation becomes more and more important as the opportunities and sources of pleasure increase. What place should pleasure have in our lives and how can we achieve that? The moral opprobrium that attaches to addiction should be that which is appropriate for any activity that harms others and should not be the result of disapproval of different ways of living or different orderings of value. Much of the disrepute attached to addiction has been illiberal and the result of one group, often the dominant political or religious group, applying their norms for personal living to others, who share a different ideal of the good life.

One critical question we face now about addiction is: are biological sources of pleasure different to social, natural, or psychological sources? We typically have a bias against the biological in favor of the social and psychological. Bioconservatives typified by Leon Kass, Francis Fukuyama and Jürgen Habermas resist biological modification in favor of social or psychological enhancement. Many are similarly biased against biological sources of pleasure in favor of social and psychological sources; however, there is no reason to

prefer the psychosocial to the biological route to attaining a good. What matters is that one's life is good, and this opens the door to a place for drug-induced pleasure as a part of the good life. Most people implicitly accept this when they use the drugs ethanol and caffeine.

## REFERENCES

- Cartwright, S. A. 1851. Report on the diseases and physical peculiarities of the Negro race. *The New Orleans Medical and Surgical Journal* 7: 691–715.
- Colantuoni, C., P. V. Rada, J. McCarthy, C. Patten, N. M. Avena, A. Chadeayne, and B. G. Hoebel. 2002. Evidence that intermittent, excessive sugar intake causes endogenous opioid dependence. *Obesity Research* 10(6): 478–488.
- Edelstein, E. L. 1973. A case of water dependence. *British Journal of Addiction to Alcohol and Other Drugs* 68(4): 365–367.
- Foddy, B., and J. Savulescu. 2006. Addiction and autonomy: Can addicted people consent to the prescription of their drug of addiction? *Bioethics* 20(1): 1–15.
- Hyman, S. E. 2007. The neurobiology of addiction: Implications for voluntary control of behavior. *American Journal of Bioethics (AJOB–Neuroscience)* 7(1): 8–11.
- Kaplan, R. 1996. Carrot addiction. *Australian & New Zealand Journal of Psychiatry* 30(5): 698–700.
- Robins, L. N., and S. Slobodyan. 2003. Post-Vietnam heroin use and injection by returning US veterans: Clues to preventing injection today. *Addiction* 98(8): 1053–1056.
- Watson, G. 1999. Disordered appetites: Addiction, compulsion and dependence. In *Addiction: Entries and exits*, ed. J. Elster, 3–28. New York, NY: Russell Sage Foundation.
- Winick, C. 1962. Maturing out of narcotic addiction. *Bulletin on Narcotics* 14: 1–7.

# Ameliorating and Exacerbating: Surgical “Prosthesis” in Addiction

Paul J. Ford and Cynthia S. Kubu, The Cleveland Clinic Foundation

Hyman (2007) lucidly explores several important aspects of neurobiological processes related to addiction before proposing that external “prosthesis” (e.g., family, friends) fundamentally act as important ways for an addict to regain control over addictive behaviors. This proposition cre-

ates an interesting dialogue about the moral obligations of those suffering from addiction, as well as the moral obligations of people surrounding those with addictions. Professional healthcare workers inherently have obligations toward patients suffering from addictions. In this respect, the

Address correspondence to Paul J. Ford, Department of Bioethics, The Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44195. E-mail: ford@ccf.org

Copyright of American Journal of Bioethics is the property of Routledge and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.