

Disease, Normality and Current Pharmacological Moral Modification

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We are grateful to Crockett and Craigie for their interesting remarks on our paper. We accept Crockett's claim that there is a need for caution in drawing inferences about patient groups from work on healthy volunteers in the laboratory. However, we think the evidence we cited established a strong presumption that many of the patients who are routinely taking a medication, including many people properly prescribed the medication for a medical condition, have morally significant aspects of their cognition and behavior modified in a way that is unintended and may sometimes be unwelcome. Crockett notes that in some cases the effects of long-term drug use may differ, sometimes markedly, from the effects of short-term use. However, if acute use of a drug affects a neural system involved in mediating moral cognition or behavior, this nevertheless provides some evidence that chronic use of the drug may affect that same system and thus have morally significant effects. It is also plausible, in some cases, that an acute moral effect would give rise to a chronic moral effect via cognitive mechanisms. For example, a drug that acutely diminished anxiety in encounters with members of a different racial group might result in one or two such encounters being experienced more positively. This might in turn lead to longer term

changes in racial attitudes, and/or in self-fulfilling prophecies based on expectations about what future interactions with members of that group would be like, even if the initial anxiety-reducing effect of the drug did not persist. Notice that the ethical issues we raise do not require that the morally significant effects of chronic use be exactly the same as those of acute use—it is enough that there are such effects.

Crockett also points out that a pharmaceutical may compensate for a deficit in patients: whereas normal controls may have their level of, say, serotonin raised above baseline by a drug, a depressed patient may instead have normal levels restored. Any effects on their behavior would therefore also consist in altering it from abnormal to normal. However, some of the drugs that we discussed are frequently used in normal, healthy individuals—for example, to control reproduction or normal anxiety. In addition, though we agree that where these drugs are used to treat disorders they could simply alter behavior from abnormal to normal, this cannot simply be assumed. Firstly, many people who currently use antidepressants may have depressive symptoms unrelated to serotonin abnormalities; SSRIs might act on them in a similar way to other normal people. Secondly, a great deal depends both on the method of action of the drug - which may bind to receptors in areas of the brain that are not pathological - and on the aetiology of the disorder. It remains controversial how selective serotonin reuptake inhibitors work; for that reason alone, we cannot assume that they merely restore patients to normal functioning across the board. Indeed, it would be surprising if they affected only those dimensions of neural functioning that are disordered in depression.

Moreover, as Crockett implicitly acknowledges, even if the effect of SSRIs on depressed individuals would merely be to align their moral dispositions with those of healthy people, this would still be a significant effect. Notice that while virtually everyone agrees that severe depression is undesirable, there is far less agreement about many questions in the moral domain—it is not

clear, for example, when it is appropriate to accept or reject unfair offers. So it cannot be simply assumed that the moral dispositions of more healthy individuals are necessarily ideal or optimal.

However, as Crockett says, the effects on patients may be different from those on healthy controls, and the effects of chronic ingestion different from those of acute ingestion. We concur wholeheartedly and believe that such potential differences make further investigations of possible effects in patient groups urgent. Fortunately, the effect of psychiatric treatment on moral decision-making in patients is a growing research area (Pearce and Pickard, 2009).

Craigie emphasizes the ways in which many of the issues we raise in the original paper are not novel. There are other substances that alter cognition and behavior in ways that might be unintended and sometimes unwelcome. As she says, alcohol is signal case, but as she also emphasizes, the effects of alcohol are generally well understood by the public. The cases of caffeine and the contraceptive pill (which we discussed as a possible influence on oxytocin levels) are perhaps more closely parallel, in that their effects are harder to detect in oneself and in others, but may nevertheless be significant, especially when aggregated across many individuals. The effects of alcohol are not only easier to detect, but also involve a rather uncontroversial disruption of moral agency. While few see loss of self-control or reflective capacity caused by alcohol as morally harmless, the desirability of (or danger in) more subtle changes in moral judgment and sentiment is far harder to assess. It is also worth noting that the comparison between the drugs that we discussed and drugs like caffeine and alcohol cuts both ways. In some ways, it might reassure us about newer drugs, but in other ways, it may cast a shadow on our acceptance of these drugs. As David Nutt and collaborators (2010) have shown, widely available and familiar substances may have effects on behavior that are as far reaching as those of newer drugs. Our complacency with regard to them may be a product merely of their familiarity.

We second Craigie's suggestion that the best response to many drugs may be education of the public with regard to their effects, so that competent adults (and guardians) may make informed choices and perhaps also put in place mechanisms to guard against possible ill effects. However, for some drugs, as in the case of alcohol, some kind of regulation of the circumstances in they are used may be desirable.

Craigie ends by noting that the effects of pharmaceuticals on behavior are very likely to be a small part of a bigger picture. Social and environmental factors shape cognition and behavior in ways that are probably more significant than the effects of drugs. We heartily agree. But again, the comparison cuts both ways. It might lead us to think that psychopharmaceuticals are less worrisome than we would otherwise have thought, given that a more significant role is played by social and environmental factors in shaping behavior or (as one of us has argued it should; Levy 2012) it might instead lead us to think that ethicists and policy makers ought to attend much more to these social and environmental determinants of behavior. At any rate, we shall be able to make better decisions, as individuals deciding what drugs we should take, as physicians seeking the best interests of our patients, and as policy makers aiming to promote welfare, only if we are properly informed about the acute and chronic effects of the drugs we ingest and how they interact with social circumstances. We should, as Craigie warns, be careful not to exaggerate the influence of pharmaceuticals on our moral psychology behavior. However, we are very far from doing so at present; with the notable exception of alcohol and illicit drugs, the possible moral effects of pharmaceuticals have barely been noted. Never more so than here is the cliché that more research is needed emphatically true.

References

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