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Just like other substances that affect brain chemistry (such as illicit drugs), psychiatric drugs produce altered mental states. They do not 'cure' diseases, and in many cases their mechanism of action is not properly understood.

> *These drugs, when they do have effects, work more like substances that temporarily alter our state of mind, such as caffeine or cannabis. These pills, in other words, don't cure us – they simply change us. They can throw us temporarily into a foreign state of mind, into an altered version of who we are.*[1]

People have used psychoactive drugs to change their state of mind for centuries, but during the 20th century, a new range of psychoactive drugs were introduced, including drugs that we now call 'antidepressants' and 'antipsychotics,' along with benzodiazepines like Valium and Librium. At first, these new drugs were largely thought of as at best soothing tonics that changed a person temporarily rather than cured a disease. As the psychiatrist and researcher Dr. Joanna Moncrieff put it: 'They weren't understood to act upon underlying diseases like they are today. They were seen as drugs that would pep you up or calm you down. They were accepted as sticking plasters or up-lifters that might at best be able to suppress symptoms for a period, but never were they seen as reversing a disease state.'[2]

However, this view started to alter in the 1960s and 1970s as the idea was postulated that such drugs may well reverse a disease state. By the 1980s this view had become widely accepted. These drugs, it was now believed, worked by correcting, or helping to correct, underlying biological abnormalities assumed to produce particular psychiatric symptoms. This dominant model of how psychiatric drugs work can be called the 'disease-centred model'; a model reflected in the names of the major drug classes. For example, antidepressants are believed to reverse biochemical pathways that give rise to symptoms of depression, and antipsychotics are thought to act on the mechanisms that produce psychotic symptoms.

Despite the lack of evidence supporting the disease-centred, it has been widely embraced by psychiatry. The reasons for this are complex, but two are of note. Firstly, the disease-centred model is consistent with psychiatry's vision of itself as a medical specialism just like any other, with drugs that target and cure underlying illnesses. Promoting this view has been crucial for psychiatry given its historical struggle for full medical status. Secondly, the disease-centred model has legitimised the wide-scale manufacturing and dissemination of psychiatric medications by the pharmaceutical industry (i.e. if mental illness is caused by a physical malfunction, and these pills correct that malfunction, then their consumption is both necessary and justified).

Despite the enormous financial and professional investment in the disease-centred model, there does exist an alternative model. This alternative is the 'drug-centred model' which stresses that psychiatric drugs are, first and foremost, psychoactive drugs; drugs that induce varied and unpredictable physical and mental states that do not constitute a 'cure'. This alternative model is now widely embraced in psychology, psychotherapy and other mental health specialisms. There are also numerous psychiatrists whose research is also consistent with this view.[3, 4]

The view that psychiatric drugs cure an underlying pathology is greatly weakened when we acknowledge that the introduction of new specific drugs has not improved the prognosis of major psychiatric disorders, which is the opposite of what you would expect if the drugs were truly combatting disease. As Dr. Moncrieff points out: 'The failings of the medico-biological approach to madness and mental distress are obvious and frustrating to many psychiatrists as well as other mental health professionals and service users. Medical doctors, including psychiatrists, are beginning to become more aware of the compromising influence of the pharmaceutical industry over medical and psychiatric practice and many are enthusiastic about non-drug-based interventions. Some are concerned about the possible damage

that may be done by long-term psychiatric drug use, both physical and psychological, the latter by inducing dependence and chronicity, and aggravating certain psychological symptoms.'[5]

The view that psychiatric drugs cure an underlying pathology is also greatly weakened by observing the effects such drugs have upon healthy individuals. According to the disease-centred model drugs should only exert their effects on disordered states of mind. But extensive research shows that all psychiatric drugs have psychoactive effects on healthy volunteers[6, 7]. Benzodiazepines, for example, have calming effects on people whether or not they are complaining of anxiety, and the emotionally numbing effects of antidepressant can also be observed in 'healthy' people who take them.

Adopting a drug-centred model has various advantages. Firstly, acknowledging that psychiatric drugs create altered mental states allows the doctor and patient to have an honest, open discussion about the advantages and disadvantages of the various drug effects. Some effects may be useful in the short term, for example the calming effect of an antipsychotic during acute psychosis. However, this same effect may have undesirable consequences on other aspects of a patient's life, for example while driving a car.

A drug-centred model is also more likely to lead to discussion of long-term adverse affects. This approach acknowledges that the drug is providing symptom relief through its psychoactive action rather than curing a physiological problem – and that, over time, the psychoactive action can cause undesirable changes to brain chemistry (see Long-lasting negative effects on cepuk.org) leading to a range of negative effects. The drug-centred model therefore provides a rationale for selective rather than continuous drug use.

A drug-centred model also imposes a duty on the psychiatric research community to produce relevant, unbiased information about the range of effects that psychiatric drugs can have on all bodily systems, both during short-term and long-term use. At present, the influence of the disease-centred model keeps the full range of effects of many drugs hidden, and therefore neither doctors nor patients can make fully informed decisions about the risks and benefits of using them.

While assumptions have been made about the disease-targeting properties of psychiatric medications, the reality is that the mechanism of action of many of these drugs is poorly understood. For example, while SSRIs medications are believed to block the re-uptake of serotonin, thereby increasing the levels of serotonin in the synapse, contemporary neuroscience has failed provide any link between serotonin deficiency and any mental disorder.[8]

Likewise, antipsychotics are known to block dopamine pathways in the brain. This realisation led to the development of the dopamine hypothesis, which posits that psychosis (or schizophrenia) is caused by over-activity of dopamine. However overall, research fails[9] to prove that there is any specific link between dopamine and psychosis; an alternative explanation is that antipsychotics cause neurological suppression which in turn reduces the intensity of psychosis symptoms.

Ritalin and other stimulants are prescribed to millions of adults and children diagnosed with ADHD. Stimulants affect dopamine along with other neurotransmitters, and as a consequence of this it has been suggested that ADHD is related to dysfunction in the dopamine system. However, there is no convincing evidence that ADHD is caused by dopamine abnormalities [10]. Moreover, the characteristic effects of stimulants, which include improved attention at low doses, occur in everyone regardless of whether or not they have an ADHD diagnosis.

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There is no evidence linking the pharmacological action of any class of psychiatric drug with the targeting of a disease process. CEP believes that the disease-centred model of psychiatric drug action is misleading, harmful and unsupported by the facts. A drug-centred model is an essential starting point for considering the cautious and safe use of drugs in mental health services.

To contact us or for more information please visit cepuk.org.

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[1] Quoted in Davies J., *Cracked: why psychiatry is doing more harm than good* (London: Icon (2012))

[2] Quoted in Davies J., *Cracked: why psychiatry is doing more harm than good* (London: Icon (2012))

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