

Myths and mental illness

Rebutting the serotonin theory of depression exposed an important gap in our knowledge. But is it the whole story, asks **David Robson**



Book
Chemically Imbalanced
Joanna Moncrieff
Flint Books

JOANNA MONCRIEFF was a “precocious 14-year-old” when she experienced “a period of what might have been called depression”. She didn’t seek treatment, however. “I didn’t want to take anything that would stop me reading my philosophy books.” Luckily, she changed schools, met “a lovely boyfriend” and was happy again. “I expect my resistance was coloured by my parents’ general stoicism,” she writes in her new book, *Chemically Imbalanced: The making and unmaking of the serotonin myth*.

Moncrieff cautions that “none of us can speak for anyone else about the nature of our feelings”, yet, for me, her wording does imply that others simply lack the necessary stoicism to

We urgently need new ways to understand and treat depression

weather feelings of hopelessness and despair. We have been misled, she says, by the idea depression is a “direct result of a biological process” rather than “the expression of one’s character”.

Moncrieff, a professor of critical and social psychiatry at University College London, attracted widespread attention in 2022 as co-author of a paper reviewing evidence for the “serotonin theory” of depression. This posits that depression is caused by low levels of serotonin, a key neurotransmitter that helps transmit signals between brain cells and may help regulate mood. In the paper, she concluded there was “no convincing evidence” for the idea. In her book, she is blunter, writing that “this narrative is a myth”.

There is no denying the research’s importance. Doubts about the serotonin theory had been growing, but Moncrieff’s analysis provided the most comprehensive rebuttal to date – and rightly received considerable coverage for exposing this gap in understanding mental illness.

The big question, for many,

concerned the implications for the largest class of antidepressants, selective serotonin reuptake inhibitors, or SSRIs, which had been thought to work by raising levels of the neurotransmitter within the brain’s synapses.

Here, however, things get messy. Moncrieff’s review didn’t assess the effectiveness of these

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drugs, but other researchers have found that they do significantly reduce symptoms. So, even though we don’t know why they work, many psychiatrists believe that SSRIs remain a valid treatment.

It may be that SSRIs decrease inflammation, which has been linked to depression. They may also encourage neurogenesis (the growth of new brain cells) and neuroplasticity, thought to be impaired in some mental illness.

One person’s depression might have different causes to another’s.

This raises possibilities of new, personalised treatments that target the specific pathways – as neuroscientist Camilla Nord compellingly described in her book, *The Balanced Brain*. But Moncrieff dismisses such research with far less rigour than in her analysis of the serotonin theory.

Many doctors and scientists believe that biological factors may predispose some to depression, and influence the progression of the disease. But Moncrieff writes that it “sounds nice to have a half-way house, where personal and biological factors mingle equally, but when biological processes are genuinely causal, they override human inclinations”. Yet mingling is where much expert opinion lies.

Moncrieff concludes that we should see depression as a “meaningful human reaction” to life problems. This may be true in some cases. But even if we dismiss any neurological explanation of depression, much psychological research shows that depression is often accompanied by serious cognitive distortions – such as catastrophising – that warp our view of reality and exacerbate and prolong our symptoms.

I worry some readers will see Moncrieff’s message as saying their depressive symptoms are an accurate reflection of themselves and the world rather than a condition that can be treated.

But she is right to say that “When you are offered a solution to a complex problem in life that sounds too good to be true, it probably is.” Depression is undoubtedly complex, and we desperately need new ways to understand and treat it. ■

David Robson is an award-winning science writer and author of *The Laws of Connection: 13 social strategies that will transform your life*



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