Explainer: what’s the link between insomnia and mental illness?

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Poor sleep can make us feel down, worried and stressed. So it's no surprise that how well we sleep has a direct impact on our physical and mental health.

Sleep problems such as insomnia are a common symptom of many mental illnesses, including anxiety, depression, schizophrenia, bipolar disorder and attention deficit hyperactivity disorder (ADHD).

The relationship between insomnia and mental illness is bidirectional: about 50% of adults with insomnia have a mental health problem, while up to 90% of adults with depression experience sleep problems.

Sleep problems can also create a loop, slowing recovery from mental illness. People with depression who continue to experience insomnia, for instance, are less likely to respond to treatment for depression. They are also at greater risk of relapse than those without sleeping problems.

Sleep problems can also create a loop of mental illness. Alyssa L. Miller/Flickr, CC BY
Emotional processing

It is unclear how insomnia makes a person more likely to develop mental illness. Research suggests, however, that it may affect our ability to process negative emotions.

In one study, sleep-deprived people were found to show greater emotional reactivity to unpleasant images than to pleasant images or images with neutral emotional content. People who weren’t sleep-deprived showed no differences in emotional reactivity.

In another study, brain scans revealed that people with insomnia showed greater activity in the brain’s emotional processing area when they used a strategy to reduce their negative reactions to images than when they did not use this strategy.

That suggests insomnia makes it difficult to react appropriately to negative emotions. This may exacerbate their sleep difficulties and make them vulnerable to experiencing depression.

Cognitive behaviour therapy treatment of insomnia includes training in how to interpret emotional information less negatively.

There is also some evidence that mental illnesses may arise from problems within brain circuits that overlap with those that regulate our body clocks or sleepiness timing system.

Treating mental illness and insomnia

Treatment of mental illness is likely to lead to some improvement in sleep problems, especially for mild symptoms of mental illness.

But insomnia tends to persist unless it is directly targeted for treatment. In one research trial, 51% of individuals who overcame depression after psychological treatment (cognitive behaviour therapy) or medication were still experiencing insomnia.

Research is now focusing on whether treatment of insomnia will also improve mental health outcomes for people with mental illness, including depression and anxiety.

There is some evidence that both medication and psychological treatment of insomnia (via cognitive behaviour therapy) will improve the symptoms of mental health problems.

So can mental illness be prevented by treating insomnia?

A recent Australian research trial with 1,149 participants does suggest that treatment of insomnia reduces depression symptoms.

Participants who completed a cognitive behaviour therapy-based insomnia intervention showed a lower incidence of depression symptoms than those who were given health information with no insomnia treatment content.

If you have insomnia, speak to your doctor. If warranted, he or she can refer you to a
specialist sleep doctor or psychologist. They can assess how your insomnia and any associated mental health difficulties interact and tailor your treatment accordingly.