

* The world is making huge inroads when it comes to understanding mental health. As the global conversation about the importance of good mental health gains volume and reach, stigmas, stereotypes and misinformation are slowly being dismantled. People are beginning to understand and accept that maintaining good mental health is as important as physical health. Despite the number of people experiencing mental health issues globally, treatment options aren't as advanced or reliable as they should be. Medigrowth believes medicinal cannabis can play a leading role.

MEDICINAL CANNABIS AND MENTAL HEALTH*

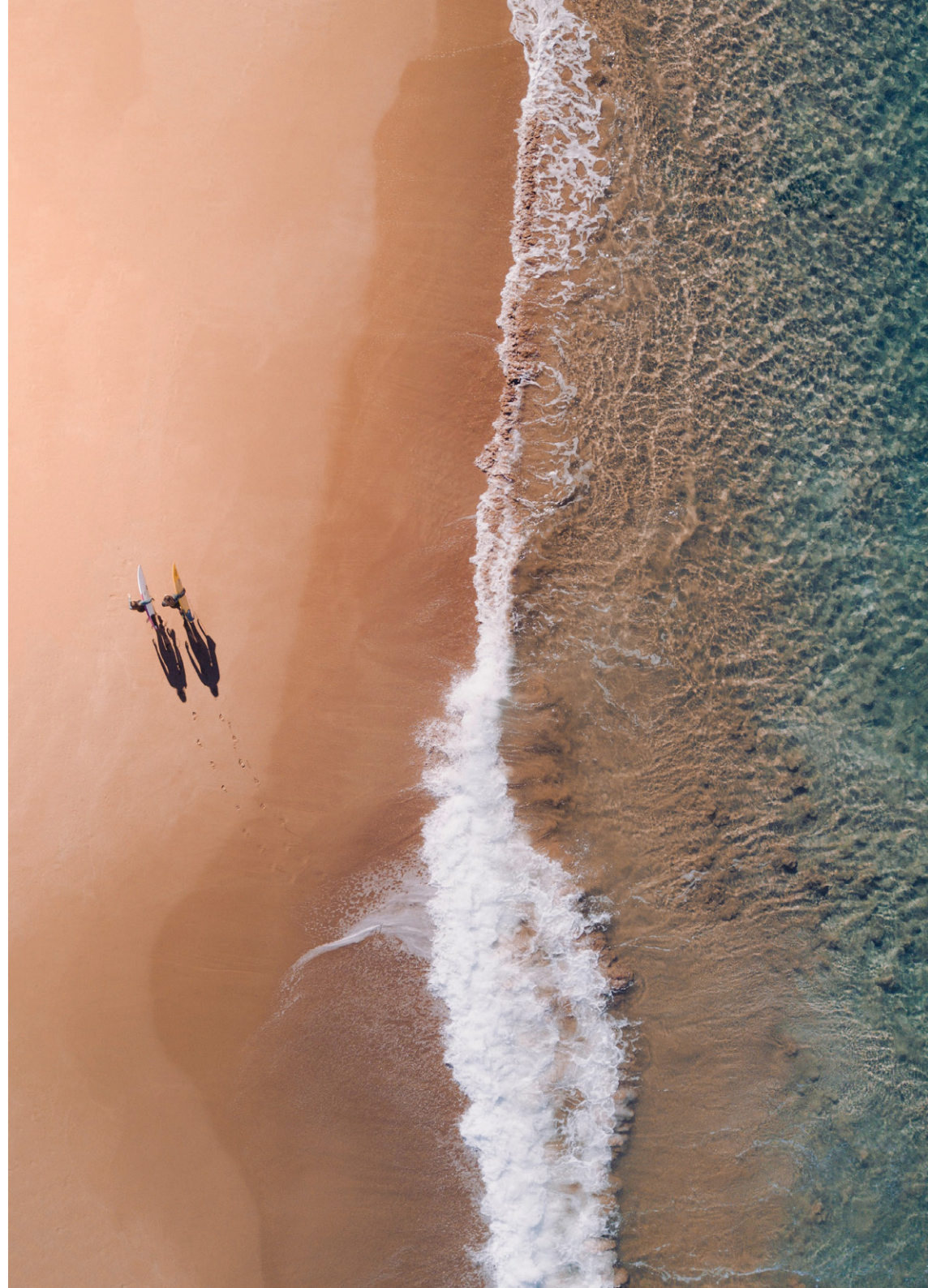


MENTAL HEALTH IN AUSTRALIA

Australia's mental health statistics tell a troubling story. The National Health Survey 2017–18 estimated that 1 in 5 (4.8 million) Australians reported that they experienced a mental or behavioural condition during the collection period (July 2017 to June 2018).

The country's suicide statistics are similarly concerning. Rates of suicide have remained relatively constant over the last decade, with an average suicide rate of 12.1 per 100,000 people in 2018.

Prescriptions related to mental health have increased at an alarming rate; a 2014 study reported that the number of antidepressant and antipsychotic medications prescribed to Australian children aged 10–14 increased by 35.5–49.1% over four years.



CURRENT TREATMENT OPTIONS



Anxiety

Anxiety disorders can cover a wide range of symptoms and include panic disorders, post-traumatic stress disorder (PTSD), and social anxiety disorder—all of which are debilitating and damaging to one's overall quality of life. Anxiety sufferers can experience emotional symptoms, physical symptoms, and often at higher risk of substance misuse. Depression and bipolar disorder are also linked to anxiety. A combination of these disorders puts patients at a higher risk for suicide.

It's clear that there is a mental health issue in Australia. Current mental health treatment options revolve largely around synthetic medications such as selective serotonin reuptake inhibitors (SSRIs) like Fluoxetine, Citalopram, and Sertraline for anxiety and depression. While these medications have shown success, their side effects can put patients at risk for non-compliance.

Greater consideration should be given to treatments that could help ameliorate symptoms of mental illness safely, and drastically improve the overall mental health of many Australians.

Antidepressants and side effects

One study found that 38% of SSRI users experienced side effects, the most common of which were reduced sexual function, increased sleepiness, and weight gain. At first glance, these side effects might not seem too serious; however, they can contribute significantly to a patient not wanting to take their medication, resulting in decreased mental health.

Antidepressant use could also be risky for young adults and children. One study of women aged 15–24, conducted over 14 years, showed that suicide death often followed increased use of prescription antidepressants.

It follows that any medication that could safely treat mood disorders without affecting adherence levels is preferable.

CANNABIS AND MOOD DISORDERS

Cannabis has long been touted for its anti-anxiety and mood-stabilising abilities. Thanks to the legalisation of medicinal cannabis in late 2016, cannabis treatment is now an option for more Australians.

Cannabidiol, or CBD, is one of the primary medicinal compounds found in cannabis, and it's gaining traction as an antidepressant, anxiolytic and stress reliever. CBD is not responsible for the high associated with cannabis and as such, CBD extract is much more readily available for patients. A range of CBD products can be prescribed in Australia; they are legal via either [Authorised Prescriber](#) or [Special Access Scheme category B](#) and they are treated as a prescription medication.

Does CBD work?

CBD's antidepressant-like actions are impressive. One study found that when mice were given either CBD or antidepressants, the CBD treatment resulted in antidepressant effects that were comparable to the antidepressant itself.

Anxiety disorders can also benefit from CBD's therapeutic effects. A 2011 [study](#) investigated CBD's effects on anxiety and cognitive function. To test the effectiveness of CBD for participants with a social anxiety disorder, CBD was administered to participants prior to partaking in a public speaking test. The researchers found that participants treated with CBD demonstrated an overall reduction in anxiety, cognitive impairment and public speaking discomfort.

How does CBD work?

[Serotonin](#) is a neurotransmitter chemical commonly associated with feelings of happiness. CBD is thought to exert its antidepressant and anxiolytic effects through modulating serotonin production.

A mouse model [study](#) supported this serotonin theory; it found CBD administration in mice resulted in an immediate increase in neurotransmitter levels, including serotonin.

Another possible mechanism of CBD's medicinal value for mental health is cortisol. Cortisol is a steroid hormone known for its role in the body's stress response. CBD has demonstrated the ability to reduce [cortisol](#) levels at certain doses. Cannabinoid receptors have also been shown to play a key role in reducing cortisol levels, with receptor activation resulting in a cascade response that ultimately limits cortisol production.

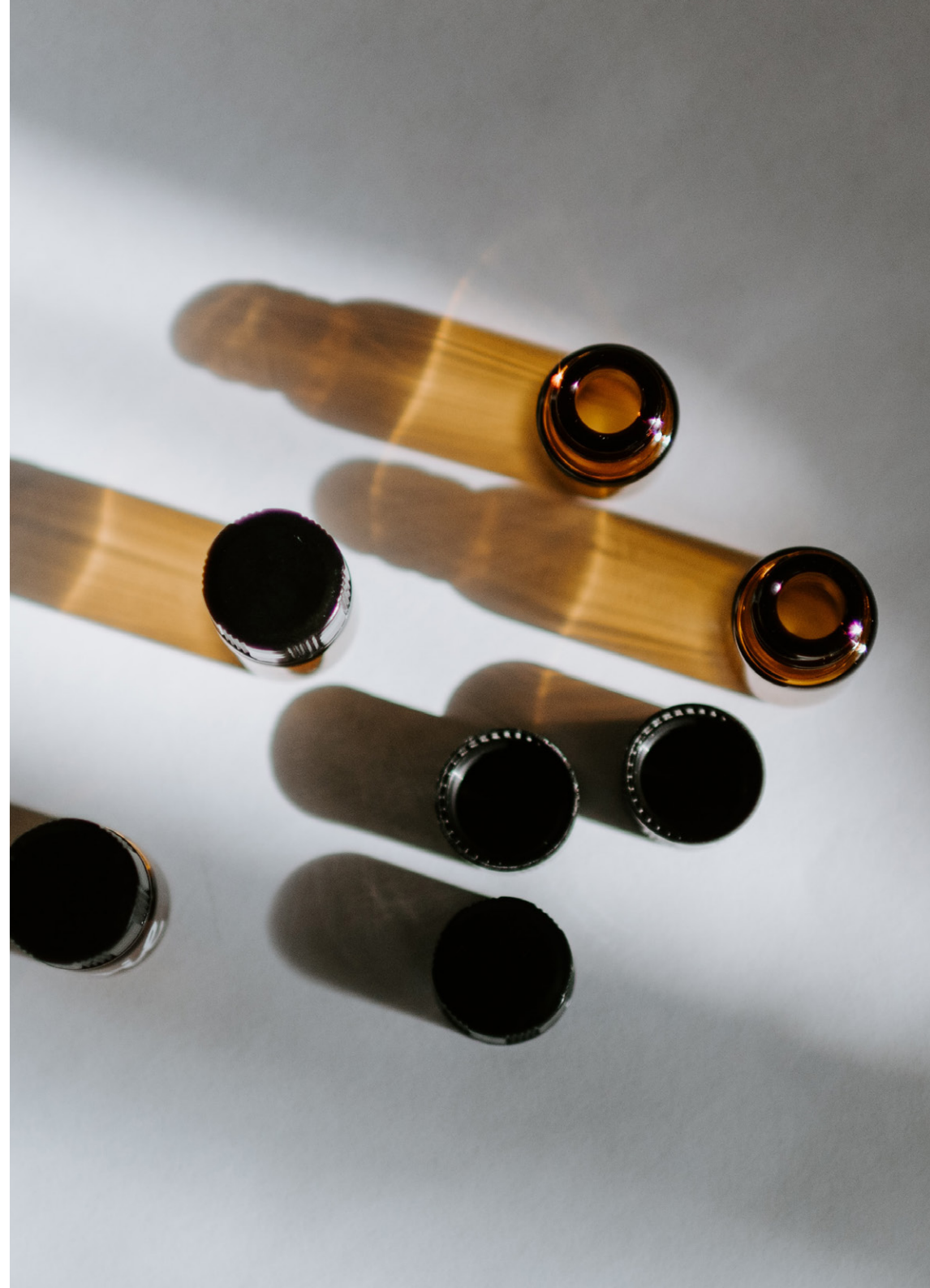
Much like prescribed antidepressants, CBD has also demonstrated an ability to improve [neuroplasticity](#). Neuroplasticity is how the brain adapts and changes in response to stressors or events. By improving neuroplasticity, CBD may be able to create a healthier neural environment and a brain better equipped to cope with symptoms of mood disorders.

* As with all potential medications, safety is of paramount concern. However, a range of studies involving CBD treatment for mood and psychotic disorders found that CBD demonstrated a favourable safety profile, with minimal uncommon side effects such as tiredness and diarrhoea. In fact, CBD showed a safer profile than other mood disorder treatments. This led to the findings of one study, which concluded that CBD could improve patient compliance and treatment adherence when used alongside pharmaceutical treatments.

Another case study found that CBD helped to treat a 10-year-old girl's PTSD symptoms with minimal side effects, showing that CBD could be offered as a safe treatment option for children with PTSD suffering from anxiety and dysfunctional sleep patterns.

SUMMARY

CBD is a safe and non-intoxicating compound that has demonstrated the ability to improve symptoms of anxiety and depression. Further research into the medicinal benefits of CBD will help us understand how it can be best used to improve people's mental health.



MEDIGROWTH

Medigrowth is driven by passion and the pursuit of excellence in cannabinoid medicine. As a fully licenced Australian medicinal cannabis biotech, our success is measured in real world change: improving lives for Australian patients and delivering results as a trusted B2B, research and medical partner. Our commitment to pure, safe and trusted Australian made medicinal cannabis drives our company culture to continually inspire, innovate and exceed.

Patients and doctors can find further information on Medigrowth Australia and how to legally access medicinal cannabis products at medigrowth.com.au

