

Bondi Junction clinic using new therapies to help people with treatment-resistant depression

On her worst days Danielle can't get out of bed. But since starting a new treatment for depression called transcranial magnetic stimulation, her life has turned around.

Angela Saurine

5 min read June 19, 2024 - 9:48AM **Wentworth Courier**



Danielle Franco's life has turned around since discovering TMS. Picture: Mick Bruzzese

On her worst days, Danielle Franco can't get out of bed. She feels completely overwhelmed, helpless and can't bring herself to face the world. Occasionally, she has suicidal thoughts.

"I think, 'I just can't cope with anything anymore' and 'What's the point when life is so tough?'," the Bronte resident says. "I have had those really low lows for a long time. Sometimes medication just isn't enough. It sees you through a little portion of the day and then you start feeling down again, which is awful."

But since starting a new treatment for depression called transcranial magnetic stimulation (TMS), Franco's life has turned around.

"From one day to the next I felt like a different person," she says.

"It's almost like someone opens up the top of your head, fixes something inside and you walk out and the next day you start feeling better."

As well as suffering depression since her late 20s, when she was facing pressure at work, Franco has attention deficit hyperactivity disorder (ADHD) – a complex neurodevelopmental condition which impacts a person's ability to pay attention, sit still, exert self-control and regulate emotions – which further contributes to her feeling like she's drowning.

Undergoing TMS treatment twice a week at the AwareHub mental health clinic in Bondi Junction helps keep the interior stylist functioning.

"It basically works on the neurons in your brain," she says. "It's quite scary in the beginning because you have to wear a hat and they measure your brain and put magnets on the left-hand side of your head that send electrical pulses to your brain. The first time it feels like you're back in the 18th century when they blasted you with electricity to get rid of the devil. But it's literally changed my life. I can feel a huge difference from when I started it.

"It's the most phenomenal treatment. It works very quickly. You feel a weight lifted off your shoulders. It's something I'm very grateful for and I'm definitely going to keep it up for as long as I need it."



Dr Lisa Myers with patient Danielle Franco. Picture: Mick Bruzzese

Franco's psychiatrist, Dr Lisa Myers, says depression has traditionally been treated with therapy, medication or a combination of both. People with severe major depression or bipolar disorder that has not responded to other treatments can also undergo electroconvulsive therapy (ECT), which involves a brief electrical stimulation of the brain.

"It's a very effective treatment but I think it's always held a lot of stigma," she says. "It's always been a bit frightening for people and it can have side effects. You need to go to hospital and be under anaesthetic, so it's a lot more invasive, but it has its place."

While it's been available as a treatment for around three decades and was approved by the Therapeutic Goods Administration (TGA) for use in Australia in 2007, TMS was only listed on the Medicare Benefits Schedule for people with treatment-resistant depression (TRD) in 2021. That means it can be used outside of hospital on people who are at least 18 years old and have failed to receive satisfactory improvement despite adequately trialling at least two different classes of antidepressant medications.

"Since then, we have been doing quite a bit of TMS and it has been very successful," Myers says. "It also involves brain stimulation but it differs from ECT because you're not under anaesthetic, so you're awake and alert, and it doesn't generate a seizure in your brain."

TMS treatment involves an electromagnetic coil being placed on the scalp that generates highly concentrated magnetic fields to stimulate nerve cells in the part of the brain pertaining to mood control and depression.

"It has a range of uses that are neurological and mental health-related," Myers says. "It's great for depression, anxiety and obsessive compulsive disorder. There's also evidence for use in addiction, pain management and post-traumatic stress disorder, and it can help with things like tinnitus and migraines."

The treatment takes between three and 19 minutes, depending on the condition it's being used to treat.



Dr Myers has treated many patients successfully with TMS. Picture: Mick Bruzzese

"Initially, you have to do more frequent treatments in the acute course, which lasts four to six weeks, with patients coming in almost daily," Myers says. "If that's not possible, sometimes we do two treatments in the same day. Once the changes are established, we do more tapering of frequency, so it could move on to once a week or once a month. It's different for everyone."

The clinic also treats patients with ketamine – a dissociative anaesthetic medication that can cause rapid improvements in mood that was approved by the TGA in 2021. The substance is usually injected into the abdomen by a nurse, like insulin, once or twice a week for four to eight weeks. It takes 1.5 to two hours to administer and costs \$350 per session, but isn't covered by Medicare.

"Some clients do a course and then stop and they're OK; others will continue with a bit of maintenance," Myers says. "It's still limited who can access it based on funding, which is a shame because it's a helpful treatment and it would be great if it was at least subsidised."

Despite the limitations, Myers says she finds using the new treatments extremely satisfying.

"You see really good results for clients who have been struggling with depression and regular antidepressants haven't offered much relief," she says.

Professor Colleen Loo, who is a psychiatrist at the Ramsay Clinic Northside at St Leonards, professor of psychiatry at the University of NSW and a professional fellow at Sydney's Black Dog Institute, shares a similar view. She was involved in the first randomised trial of TMS in Australia at Prince Henry Hospital at Little Bay when she was a trainee psychiatrist in 1997.

"It's very gratifying to see it become a mainstream clinical treatment that's approved and funded," she says. "We're privileged to have seen some tremendous advancements in the treatment of depression and in treatment-resistant depression that hasn't responded to standard treatment like medication and psychological therapy."

Loo has also been involved in developing other treatments and researching their effects on brain function. They include ketamine and transcranial direct current stimulation, which involves a mild form of short, continuous and painless brain stimulation that takes around 30 minutes and is given while the person is awake.

"The latest kid on the block is psilocybin-assisted therapy, and the results that have been published so far look really good," Loo says.



Prof Colleen Loo is a psychiatrist at the Ramsay Clinic Northside at St Leonards. Picture: Supplied

Extracted from certain types of mushrooms, the psychedelic drug (commonly known as 'magic mushrooms') can produce changes in perception, mood and cognitive processes.

"I think, for people with TRD, all of these developments have been incredibly helpful," Loo says.

"It's exciting that we have had all these new options become available over the past 20 years. I think sometimes people see mental health as a terrible pit and think there's no success stories, no one ever gets better, and you never have effective treatment. It's very, very common that people who are severely depressed and who lose hope feel suicidal, but more effective treatments and better access to treatments will reduce the number of people taking their lives."