

ADDING RHYTHM TO REHABILITATION

Project collecting data to measure benefits of music therapy for rehab patients recovering from stroke and brain injury

WHEN MUSIC THERAPIST SAMANTHA HARBER

begins her session on Unit 58, a few of the patients are leery. They've been referred to the trial program as part of their rehabilitation from stroke or traumatic injury—and they're invited to sit in a circle and choose an instrument.

One patient refuses the pick from the basket of triangles, maracas or other hand percussion instruments. Another chooses but doesn't want to participate.

Then Harber grabs her guitar and starts singing. The mood immediately lightens and by the end of session everyone is participating.

Their involvement, however, is not mere entertainment or distraction—it is designed to help their individual recoveries.

It's a therapy that physiatrist Dr. Stephanie Plamondon has seen presented at many conferences, including at a World Congress for Neurorehabilitation—where there was an entire symposium on music therapy.

One of the studies presented, she says, demonstrated improved fine motor outcomes.

"People who'd never played the piano before, if they tried to learn to play piano, there was a demonstrated improvement in their fine motor skills in recovery from stroke."

The connection between music and rehabilitation



Dr. Stephanie Plamondon

"Music has far fewer potential adverse effects than some medications..."

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can take many forms, but initially Dr. Plamondon is interested in improving patients' mood and allowing them to have greater success with other physical therapies.

"In stroke and brain injuries, there is a correlation between poor outcomes and depression," she says. "So any way we can improve mood should have an impact on their outcomes."

The 20-week program at Foothills Hospital, in collaboration with JB Music Therapy, started in July 2016 and was made possible by a grant from the Canadian Music Therapy Trust Fund and a private donor via the Calgary Health Trust.

"It has been inspiring to observe the measurable changes in well-being during each session," says therapist Harber.

"The connections felt in music translate deeply through the mind and body, allowing patients to work physically and emotionally with the therapist."

As more and more research into the therapy demonstrates its value, Dr. Plamondon hopes funding will allow the program at Unit 58 to continue next year.

"In children it's used all the time, but in adults you



▲ Music therapist Samantha Harber gets patients involved in a group session at Foothills Hospital.

hardly ever see it being used in therapies," says the DCNS physiatrist.

"There's been lots of other research looking at how music therapy can be beneficial in mood, pain and addictions. It has a broad range of potential applications."

It's also been adopted in the evidence-based guidelines for stroke rehabilitation to improve expressive aphasia.

Initial results from the quality improvement project at Foothills are encouraging she says.

"Anecdotal feedback from patients and recreation therapists who have been organizing it has been very positive."

And unlike other therapies, the risks from a patient refusing to shake a maraca are easily mitigated.

"Music has far fewer potential adverse effects than some medications would, so I think it's another tool that we could be using."



▲ Music therapy intern Kaylyn Légaré, right, helps Samantha Harber engage the group.