**JEANETTE**

A My name’s Jeanette, so I’m a music therapist. I actually work here at the Royal Talbot one day a week. But I’m also employed as a Research Fellow at Melbourne Uni and I have worked in neuro-rehab as a music therapist for twenty years now. So the last fourteen years, I’ve been here at Royal Talbot. I’ve also worked at Epworth in a consultancy role for a long time and before that. I used to work at Ivanhoe Private when it was Ivanhoe Private, and now it’s North-eastern Rehab, so I’ve been around for a little while.

So I just wanted to start with telling you a little bit about the evidence base for music therapy in neuro-rehab.

I published a book with a colleague back in 2006 about methods that we use in music therapy. And I also want to touch briefly on neurologic music therapy, which is a specialised training that you can do. And last year, we published a Cochrane Review on music interventions in acquired brain injury too, and we found, really briefly because I don’t want to go in to it too much, twenty nine studies that met the inclusion criteria and twenty one of those were included in the quantitive meta analysis.

We had 775 participants in those combined studies, 90% of them had stroke. And just in summary, we found really strong evidence for rhythmic auditory stimulation on gait rehab. And some evidence for singing-based interventions for communication outcomes for people with aphasia, and not really much evidence for music interventions in cognitive function, mood or behaviour. Which is interesting because we get a lot of referrals for mood and behaviour, but anyway.

The other interesting thing that came out of the Cochrane Review was that we found that music, rhythmic auditory stimulation, which we had the strongest effect for, was more effective when conducted by music therapists than by another clinician. Or with a metronome or something like that, which is another interesting finding.

So I’m just going to really briefly cover quite a few areas today in my talk. Traumatic brain injury, stroke, spinal injury and some neuro-degenerative conditions, but I thought we might start with something interactive, given that it’s a music therapy talk. I might get you to actually experience what it’s like, so put your coffees down for a sec and just stretch your brain.

So we’ll start with a little body-crushing thing, so I need you to stand up for this because you’re going to have to move, so follow me.

The first bit is:

Clap. Tap, tap.

Okay, and then we go, clap. Tap, tap. Clap. Slap, slap, so that’s the whole thing.

(Demonstrate):

And then the last bit is:

Stamp. Clap, clap, so clap. Tap, tap, clap. Clap, clap, stamp. Clap, clap, and then we do a little boom back in to the beginning.

(Demonstrate):

All right, so clap. Tap, tap. Clap. Slap, slap, stamp, clap. Clap, clap, and back in.

(Demonstration):

The last bit’s where we’re struggling, isn’t it? Stamp. Clap, clap, and then clap, clap, a short clap back in to the one, and one, yep.

So the stamp. Clap, clap, and back to the start.

Okay, clap. Tap, tap. Clap. Slap, slap. Stamp. Clap, clap, and one.

That’s it, now you got it.

(Demonstration):

And one, and one, tap, tap. Clap. Slap, slap. Stamp, clap, clap.

Keep going, just keep going. All right, now if you’re feeling really brave, you can try and sing with me.

Music can heal your body,

Music can soothe your soul,

Music can change your brain,

All you got to do is sing.

Music can heal your body,

Music can soothe your soul,

Music can change your brain,

All you got to do is sing.

I want some brave souls to join me.

Music can heal your body,

Music can soothe your soul,

Music can change your brain,

All you got to do is sing.

One more time, loud voices.

Music can heal your body,

Music can soothe your soul,

Music can change your brain,

All you got to do is sing.

Give yourselves a clap, very good, all right, who feels like their brain has been stretched in ways they didn’t think was going to happen this morning?

That was a bit unfair, I was meant to click on to that for you, sorry. I’m clicking on two, so it’s hard to see.

So this is pretty much all I’m going to talk to you about today, so if you got that take home message, you’ve got the whole thing. But what I really want to illustrate through doing that really is an experience of how much music is a whole brain activity. So you’re using your… so many networks in your brain at the same time. This little moving clip shows you the parts of your brain that highlight when you’re participating in music.

So you’re using your attention and concentration, your auditory, your sound processing networks, your language networks, your sensory and motor coordination as you say doing that, your emotional networks, your feelings, your higher executive functions, your planning and all of that’s all happening at the same time.

So when we bring all of this together in one integrated neurological act of singing or participating in music, or actually really using a whole brain and it makes it a really fantastic modality to work in the neuro-rehabilitation context.

We know that when we’re using music, we use a more distributed network of pathways in the brain and we also know that when we’re using music and language together, we access a more preserved neural pathways than just language when people have got language processing difficulties.

We also know that rhythmic auditory cueing really stimulates the motor system and helps us to move more efficiently. The medial prefrontal cortex has been identified as an area that connects memory, emotion and music, so that kind of explains the power of music and memory and the way it makes us feel. So there are lots of things that we know, and starting to understand more about the way the brain processes music in the way we respond to music through brain scanning.

There are five main areas that we work in neuro-rehabilitation and it sort of speaks a little bit to the way that we collaborate with all of the other Allied Health professions. So music therapy can work in physical rehabilitation, speech and language, cognitive rehabilitation, emotional wellbeing and adjustment and also assessment and regulation of arousal.

Neurologic music therapy, which I mentioned at the start, is an evidence-based model of music therapy that draws on a neuroscience model of music processing. It talks, it sort of really works with using music to effect functional change on non musical behaviour. We’re kind of using music as the mode through which to work, but we’re actually not getting people to be more musical or better musicians, or anything like that. That’s something that we often have to explain to patients because they go, “music therapy, I’m not musical”, or “I haven’t got a music, I can’t sing” and things like that. But it’s more just a modality, a really engaging modality to work within and it really uses the whole brain.

So this is a little indication of what happens with the brain at rest and then the brain responding to music, similar to that other spinning model I showed you before.

Rhythm is a fundamental part of movement coordination that we really need. We also know that rhythm primes the motor neurons to get us ready to move and we know that internal rhythms synchronise automatically with external rhythms, so there’s this principle of rhythmic trainment where it’s actually physics principle that rhythms lock in together, so if you’re put in a room of grandfather clocks and all the pendulums are swinging out of time, over time, they just gradually synchronise together.

Magic, I don’t know why. And the same thing happens when we’re moving with music.

It’s actually really hard to, you have to fight against walking in time or moving in time when you hear music with a strong rhythmic beat. You’re tapping your foot without even thinking about it, so there’s this principle in trainment that we use a lot in rehabilitation. And as I said in our Cochrane Review, we found ten modelised control trials looking at rhythmic auditory stimulation and significant improvements in all these gait parameters.

So I’ll show you a little clip now of this patient with a left hemiplegia. And we’re just showing you, first of all stepping without music, and then with music.

She’s stepping without music, how much time’s on each foot, balance, the speed, so you can see that already just a few seconds later, she’s changed the way that she’s stepping. The amount of times, a bit more even on each foot, so she’s almost doubled her walking speed and she’s much more symmetrical in the way that she’s walking. That’s an example of the immediate effect of rhythm on gait and then we use that in a training process and we kind of gradually increase the speed of the music at the time, and then we withdraw the music.

Obviously, you don’t want to be reliant on someone walking around with you with a guitar for the rest of your life. The idea is that you remove that stimulus, but that you train with it.

How am I going for time?

I’m going to skip this video just because I don’t have time for it.

This is another technique that we use, therapeutic instrumental music performance, a fancy name for playing instruments.

We love to call it TIM in music therapy, but we can use musical instruments for that and for gait rehab as pre-gait training, for strengthening endurance coordination, range of movement, balance, things like this. In our Cochrane Review, we found some significant improvements in timing of upper extremity function and elbow extension angle for using music-based interventions in upper limb training.

A couple of really quick clinical examples.

I just want to really demonstrate the way that we need, we set up people in different positions to work on particular movement goals, so this young man’s really working on his right upper limb, a couple of different goals.

This is also collaborative work with OTs, just getting people set up in the right angles. Then just some quick shots, so the way that we can sort of set up instruments to work on particular movement patterns, pro nation, super nation, using gravity within a gait gravity, adapting instruments.

Sometimes we add weights to them or we pad them, depending on what we need and then we can modify them over time, different types of grip using different instruments.

This is a PhD student of mine who’s working on upper limb rehab for people with quite severe impairments in their upper limb after a stroke. And using functional electrical stimulation to get some movement and then working towards more functional movement. She’s using an iPad because it requires not very much strength and range of movement, so I’ll just show you a little clip of. This is actually a retired music professor, so you can kind of see that she’s got the technique as she’s improving over time, she’s got the time off.

So there are quite a few areas that we can work on in terms of communication rehab too. Language, speech and respiratory, and also voice quality.

Melodic intonation therapy is quite a well known method of treating aphasia that’s based on music. We’re basically trying to use the language-capable areas in the unaffected parts of the brain to help with getting back to speech through singing.

We use singing, chanting and rhythmic tapping with the left hand to engage the motor areas in the brain for articulation. The idea is really that we put functional phrases to music in a way that replicates the natural inflection of a phrase. Then we teach that to the patient, then we remove the melody so, it's kind of, you’re chanting it. Then you take away the rhythm and try and get back to more natural sounding speech.

I’ll just show you, this is a guy with aphasia post stroke. At the start, I think she’s asking him, how do you like your coffee. And then he can’t answer, he gets stuck on thank you, thank you, thank you, and then we go through the melodic intonation phrase and then at the end of it, you’ll hear him say...

(showing):

So you can see, even just after that little practising, it’s more about giving them the cues to be able to access their speech or their language again.

Music also is good in motor speech rehab as well as language. Because we share all of the neural mechanisms for speech and language in the brain, and all of the speech articulators and breathing, rhythm and melody, and all these common elements that makes it a really useful thing to work on speech.

Through singing, we can coordinate the timing using rhythmic and melodic cues and to organise speech and improve naturalness and intelligibility.

Q I just have a question.

A Yeah, yeah, jump in with questions.

Q With their guidance, I’m a neuropsych, so I don’t know about this, but that’s awesome how you’ve learnt that so quickly. Is the aim… would you think that will translate to other questions? For me, from a cognitive point of view, I can imagine his response to that question, but will that have any other question or do you have to teach the response to…?

A Yeah, that’s a good question, actually, and I don’t know the answer. I think in my experience, it’s been the phrases that we’ve learnt, so it hasn’t, I’ve never seen any magical return to spontaneous speech from this, it’s more about giving them some functional sentences that they can cue themselves to be able to say.

Yeah, just basic things to get through. But I think over time, working with someone, there is a little bit more functional speech. But I haven’t ever seen, from someone with quite severe aphasia, come back to just speaking normally. But it’s more about just giving them access to be able to communicate basic needs and things.

Q Yeah, and you probably get a different picking up each technique, each time you taught.

A Yeah, even just getting them to internally cue or tap their foot to kind of get them started, or think of something, like try and think of it in a melodic way. It all depends on the amount of cognitive capacity as well. But these are some of the other goals that we would have for speech as well as language. Increasing vocalisation, using music to stimulate speech, working on articulations, particularly sounds in songs. We can highlight rate of speech, voice inflection, breath control and also loudness, voice projection.

I’m going to skip through that, these are some of the techniques that we use so we can work on breathing and vocal exercises to help with articulatory control and respiratory strength, vocal intonation therapy where we look more at intonation of the voice. And how we support that using breathing and improving pitch and loudness and all of these other things. I might just show you some examples now of musical speech stimulation, so this is a young man who had a very severe frontal brain injury, and this is about one year post.

He hadn’t spoken or made any sounds up until this point.

He started vocalising, he got referred to speech therapy to try and help with his speech rehab. But because of his severe frontal injury he had no insight and no planning. He just found speech completely puzzling and boring, and didn’t want to be there and was very resistant and non compliant, so he was referred to music therapy and he was very dysarthric.

He had quite good intonation, so I was really working on trying to get his articulation of speech sounds better, so this is him trying to say Guns ‘n Roses just to hear how his speech sounds.

(View):

So you can hear he’s got the timing, but not any of the consonants.

Now this is, I’ve chosen this song to work on the sound m because in the chorus, there are lots of MM’s.

(Play):

Something funny’s happening with the video.

I might just keep moving him, but I had to cue him, so we’re starting with really simple sounds like bilabial sounds to begin with.

Let’s hope this one works a bit better, this is L, working on the sound L.

(view):

Okay, I don’t know what’s going on with my video, but it’s not really demonstrating what I want it to.

Let’s try this one.

(View):

You can see then he doesn’t want to go outside of the music.

I started getting him to say the sound P. Not interested. Put it in the context of the song, a little bit interested, but he says, hurry up and get going with the song.

(view):

Okay, so when it’s back in the context of the song, he’s much more compliant and then over time, we can get to the point where we’re actually doing musical exercises, articulation exercises.

(view):

Okay, so we’ve kind of transitioned from… we’re doing something musical, but he’s engaged, is the point of that.

We can also use the timing of songs to increase or decrease rate of speech or coordinate breathing and intonation.

This is just an example of how you can, we choose songs that have short phrases.

“Come As you Are”

So just being able to choose the right songs for the right person with respiratory control can be helpful.

Therapeutic singing is kind of an overall method that we use that covers lots of different things and I want to take you through really briefly some of the research that we’ve done.

I did this case study research back in 2008 where we looked at people with dysarthria. We did measures of their intelligible speech, recorded them speaking, reading and describing a picture before and after an eight week music therapy intervention where we did a lot of those techniques that I’ve just taken you through. This is an example of… we’re using a musical intervention, but we’re actually looking for translation of that outcome outside of music. So we tested them speaking before and after, not singing.

This is a wave form which is like a visual representation of a sentence, saying the sentence here, and this top line is left and right channels and it’s before and this is after.

So you can see already that the amount of time they’re taking is less and they’ve got these big gaps here in the beginning.

(View):

So even just inflection, very monotone, almost robotic sounding, the way that she’s saying that sentence.

(View):

And also increasing phrase lengths, so grouping more words together. So in this one, you can sort of see that really separated out one word at a time whereas you’ve got breath, a couple of words together, and then a breath, and then a couple of words together which makes it more, sound more natural.

Different patient now.

(View):

We’ve also been using singing as an alternate form of respiratory muscle training, so I did some research with people with spinal cord injury for my PhD back in 2011/12 and then more recently, I’ve been working with people with Parkinson’s who also have difficulty.

Both of those populations have difficulty with voice projection due to respiratory issues.

When we’re singing, we’re taking in deeper breaths more quickly and we’re using our out breath longer and slower, using more of our lung volume and higher pressures. And we also know that because singing’s usually enjoyable for most people, it’s more likely to be something they can continue in the long term and be compliant with.

Both of the studies I’m talking about here, the one with quadriplegia and the Parkinson’s ones have found significant increases in vocal loudness and respiratory strength after three months of therapeutic singing interventions in comparison to the control groups.

This shows you, with the Parkinson’s study, I haven’t got time to tell you too much about it, but we had two dosage levels.

We had weekly singing versus monthly singing and we had two controls, but the weekly singing group increased by significantly more than monthly, who stayed about the same and then the two control groups decreased over time as you would imagine with a degenerative condition like Parkinson’s, and also with the spinal study. We found it difficult to recruit people because everyone in Victoria is quite spread out, so I think the spinal population is disproportionately rurally and regionally isolated. We had to think of a way that we could try and get people together to sing together in a group setting that was more accessible.

So I’ve been working with a group at Melbourne Uni, the network society institute to develop a virtual reality online version of this protocol.

“Knocking On Heaven’s Door”

So even though they’re sort of sitting at home in their lounge room, they kind of feel like they’re sitting around a camp fire with other people in a group, so we’re replicating that group setting and it’s much more immersive than just trying to do it via Skype. The other thing I should mention is that if you try and sing via Skype normally anyway, you can’t do it in time because of the latency. That was one of the major hurdles which I came to these guys in the beginning with. How can we sing together online? Because it’s really built for ‘you talk, then I talk’, so trying to do it together, it’s difficult, but yeah, this has been a really immersive experience. The interesting thing that we found after interviewing some of our test people is that they feel less embarrassed about singing because none of these guys probably would be confident singers or would say they would sing, especially not in public. Having the mask on and stuff, that’s a little bit more… feels a bit safer.

Okay, let’s keep moving. Cognitive rehabilitation, music therapy, we can work on concentration and attention, orientation, memory, planning and sequencing and even visual neglect. Some of those things, if you cast your mind back to doing all that body percussion and trying to multitask and sing, you can kind of see how it’s really great for working on concentration and attention, different types of attention.

We also can write songs with people to trigger recall of important information and to aid their memory. An example of this is the way that we use music in early development, so kids learn their ABC and lots of stuff through songs. It just helps us to have that pneumonic aid to connect to the rhythm and the melody helps us to remember the information and same things using advertising jingles.

That’s why people get paid big dollars. Because they know how to make something that’s catchy, that sticks in your brain like an earworm, and then you remember the phone number or the information about the ad. We use the same principle in music therapy with people with memory issues and also listening to songs, getting people to remember information about songs, using percussion activities with different types of tasks.

This is an example of a song that I wrote obviously with someone in 2013 here, but helping them to remember autobiographical information, so this was a young man who had quite a severe stroke, bleed, I think, not quite a stroke, but yeah, and he really had difficulty, he had two young children, he had difficulty remembering their names, he didn’t remember why he was here, so just this information was really helpful and he was very musical as well, so it was a great motivation for him.

I’ll play you a little bit of it.

(Song):

So this an example of how to work collaboratively without the discipline, so we, I think this might have been working with speech to kind of get the content down with the patient and then writing the song together with him and his wife.

We also had other verses about the two kids, one verse for each kid and cueing things about what was significant about those for him, but that was a really useful thing. We also write songs with people for functional tasks like sequential tasks like showering routine or getting dressed, and then we often collaborate with OTs.

We had a student a couple of years back who, a music therapy student, and we would work with a showering routine and she actually had to go in to the bathroom with the guitar and work out. Because you need to work out the timing of the steps because if you just record it “and I’m running up to washing my tummy and you’ve got me washing my feet”, so we had to work out the timing and it was interesting. She never thought she’d be in the shower with someone playing guitar… things that you do. Probably one of the other areas that we work on a lot is emotional adjustment and grief and loss, and things like that. Which you can imagine, music really connects with our emotions, and also music is quite a culturally appropriate way for people to process that stuff.

Often when we have people who find it difficult to articulate in words or to get in touch with their feelings in a talking-based therapy with psychology or something like that. Sometimes we can get to them through music, and we do often get referred the “too hard basket” cases in music therapy, where people are struggling to make progress in a particular way and just coming at it from a different angle through music and building that rapport, and then all of these effects that I’ve shown you that we can have is quite helpful.

We do a lot of song writing with people in, still spinning, people in rehab and we’ve also just finished a big ARC funded study that was looking at changes in self concept over time following a traumatic neurological injury, spinal injury, stroke and acquired brain injury. We recruit a lot of the participants through Royal Talbot, Epworth, Monash Health as well, I think.

And basically, this was a process, a six week protocol where we wrote three songs with people using quite a targeted song writing protocol, so usually, when we’re writing songs with people, it’s very patient-directed and what’s coming up for them and just using what’s an issue for them at the time. Whereas this study, we were looking at targeting self-concepts specifically, so we broke it down in to the six sub-domains of self-concept like physical self-concept, how do I feel about my body and self image and things like that, personal self-concept, social, family, work or education, moral or spiritual.

I think those were the six subdomains and we kind of really prompted people to examine how they saw themselves in relation to all those six sub-domains and they wrote a song, three songs over that six weeks. One was about who was I before the accident in relation to all those things? Who do I feel like I am now, and who do I think I’m going to be. So it was past, present and future. And we took lots of measures on self-concepts and wellbeing measures over time and we found nothing.

I might play something out of my computer because I’ve got an example of a song that someone wrote and we did some … as part of a study, went through and did a lyric analysis of all the songs.

(Song):

I think that was a song about the present self, but just to give you an example of what it sounds like when someone writes a song like that.

So we did a lot of study and then an RCT and these are the results of the pilot study. We basically found that there was an effect for the meaningfulness of the song writing experience and we did, in the lyric analysis that I mentioned, we found that people really focused a lot on the physical self in the middle song. So the red is the pre and, sorry, the first song, second song and third song, so that kind of makes sense, I think if you think you’re in rehab and you really focus on your physical goals.

At the beginning of the first song, people were focusing more on family and personal self.

In fact, personal self was kind of big throughout them all and then family self became less while they were in rehab and then as they started thinking about going home more again.

So we concluded that therapeutic song writing’s a really powerful way for people to tell their story.

It also brought painful awareness. The other thing that we found was their wellbeing measures like depression and things, actually got worse at the midpoint. Which was halfway through writing that song about now, which kind of makes sense.

Sometimes when you bring all of that stuff in to your conscious attention and focusing on how that affects them as a person, it actually made them feel worse, but then they got better again at the end, so we had some interesting sort of interpretations of what that means.

I just want to really briefly tell you about some of the other research studies that we’ve done, so I’ve talked to you about the dysarthria one from a while back, ten years ago now.

We’ve been also looking at intonation following traumatic brain injury. My colleague did her PhD research in that area. We’ve done research with, have you heard of the Stroke Accord Choir?

They’re a choir who were set up in about 2010 for people with aphasia post stroke and I helped them to set that group up. We did some research with them about communication outcomes and feelings of connection and things, we had some good results of that study.

The Parkinson’s study I mentioned, we just finished at the end of last year, but it was a twelve month study looking specifically at high intensity vocal effort and singing and vocal exercises. Looking at improving loudness, so speech intensity as our primary outcome and also wellbeing and things like that, so we found some really great significant results in that.

We’ve only looked at three-month data so far, but we’ve got the six and twelve-month time points to analyse.

Other studies looking at reducing agitation and increasing orientation for people in post-traumatic amnesia (PTA) are showing a good effect for music in that area, which is interesting because sometimes we’re a bit worried about overstimulating people in PTA. So we don’t play music to them, but I think in a controlled and informed way, we can use music that actually helps people’s orientation and can decrease their agitation. Obviously not just sticking the radio on in their room and letting it go, but we used specific familiar songs in short time bursts, and things like that, and it was helpful.

We’ve also done study in people with motor neuron disease, so in their transition to non-invasive ventilation and giving them a music relaxation intervention to help manage their anxiety about ventilation, with good results as well.

I briefly mentioned the study with quadriplegia. Again, looking at respiratory function and voice projection and the next step of that now is we’ve developed this virtual reality platform and we’re going to be going in to testing that in clinical trials as well.

Now that really is it.

Any questions or reflections?

Q About funding, so I mostly work with TAC clients and I’ve never paid for a music therapist.

A TAC’s a funny one. They don’t like to fund music therapy for outside of hospital.

They say if you’ve got TAC patients in a hospital bed, then you choose how you spend your money, but for our patients, they used to, when I used to work at Ivanhoe, they used to have outpatient funding for TAC, and we just put in our plans and they’d approve them. Then something happened at some point and they said no and we’ve had a go at trying to get them to reconsider, I think we’re in quite a different place.

I think the last time we went back to ask them about it, it was probably ten years ago and I think our evidence base has changed a lot in that time. I know that from my university role, there’s a TAC research panel and I’m on that as a music therapist, so it just seems weird. I feel like we need to be agitating to get music therapy funded back through TAC. We’re on NDIS.

Q That would be good, so I’m sort of getting mixed responses with NDIS and music therapy.

A I know, because they’re confused, they don’t know within themselves what’s going on.

Q Yeah, so you are.

A We are, yes, we definitely are. Some providers or some case, what are they called? Not case managers, support whatever the word is, possibly don’t know that if you go in and I know it is, make it happen, the planners.

Q So if you say that ‘I know that it is’?

A Yes, make it happen. It definitely is, you can check the website and I also am on the board of the Australian Music Therapy Association, so I know from that perspective, we’ve been working really hard to increase our profile and educate NDIS planners. From the top, they know and I think it filters down sometimes. Some people have no trouble, plans get approved all the time, so people go, no, music therapy’s not approved and they have to push, but it should be.

Q I’ve got quite a few clients who’ve had music therapy with STR funding, it just keeps and then transitioning, I’m just getting mixed thoughts.

A Yeah, it’s annoying and confusing, but it’s definitely… the answer is yes. You just have to push harder, its especially important for people who’ve had slow to recover funding, and they want to be able to continue on.

Q Which, for Parkinson’s, which hospitals would be included? I’m just thinking of a current Parkinson’s client who we’re just doing a plan for now that this would be great for, so the people who they’ve chosen to do the plan does not include music therapists, so it would be recommended in the plan, which hospitals would be appropriate for a client with Parkinson’s?

A I know Monash Health do, so out at Kingston, they have music therapists there, I don’t know if they do outpatient, yeah, and I don’t know if they do music therapy, outpatient music movement disorders clinic, but it never hurts to ask. I always say, always ask because for people, even if you get knocked back, if these requests keep happening, then maybe they’ll start providing it. Same thing with TAC, I always say, I know it’s not approved, but if you keep hammering them, they’ll go, what is this annoying people keep asking about music therapy and hopefully, they’ll do something when we go back to them.

Q But you’re only talking to your little support coordinator who’s got no power or any thoughts up the chain in there.

A Yeah, I suppose, but yeah, I hope they will. When you go to the point of asking, go to the top of the chain and ask for them to approve it, then if they get in that message filtered through from there as well, it might add to the case, I don’t know, maybe it doesn’t, maybe not.

Q So how does someone find, if I was going to recommend someone have music therapy, how would they find the person’s appropriate for their specific, if you Google music therapists.

A Yeah, well, on the music therapy association web page, there’s a little, find an RMT button, so you can do it that way and I think it even has NDIS providers listed under there. In terms of specific public hospitals, I didn’t finish answering that question, there are music therapists scattered around Austin Health, Monash Health has seven or eight, I think there are probably six or seven here at Austin, where else? Eastern has some, but I’m not quite sure in what areas, so in terms of rehab, I’m not sure how many there are specifically, but yeah, Royal Melbourne, Melbourne Health have quite a few.

Q So do music therapists tend to, are they working as in most or all in private practice or a mix of private or…?

A All over the shop, som-e in public hospitals, some in private, some in private practice, some in clinics, so there are a lot of people setting up in clinics with other Allied Health professionals doing NDIS stuff.

Q I’m just interested in what you said about the showering and dressing for the client who has such a trigger for her behavioural issues, we have already talked about to get music therapy.

A Yeah, it’s so great on so many levels, it’s like you’ve got the cueing, but it’s also a distraction.

Q He’s responsive to it and singing is great, so I know we sort of have the music and singing songs in the shower and music in the shower, but didn’t actually have someone to, so I haven’t thought about the pace of it and having that not actually being able to put music on to the pace to have someone who’s a specialist to actually guide through the process.

A The same kind of thing though as you don’t always want a music therapist in the shower with you, so we would do that initially and then we’d probably set you up with something.

Q Yeah, then you’d record it and play it as a prompt.

A It’s also really good for just distraction, from a pain perspective or a behavioural perspective, getting out of that loop of negative responses. Something else to focus on that’s engaging, something that actually focuses in on something that is better than what you were focusing on.

Q Just to summarise, at the beginning, the Cochrane Review said that there was no significant difference with cognition, mood or behaviour even though it’s obviously saying it’s good, but what did…?

A Yeah, not so much that there wasn’t any effect, just that there weren’t any studies and there was hardly any research in that area and what is there is really kind of low quality, not much. Which we kind of found interesting because when you look at referral patterns, you get a lot of referrals for that, but I think it’s hard to show maybe people aren’t choosing to research it because it’s hard to pin it down, how to show change. Whereas some of those more functional outcomes like walking speed, you can just measure it and...

Q That can show change with an agitated client, with ETAs, it would be really easy to show.

A Yeah, that’s true, maybe we just need to do more research in that area because definitely in dementia, there’s heaps of research showing reduced agitation with music therapy.

Q Are the people who you generally get referred, are they people who have an interest in, I know people, everyone listens to music, but is it people who are specifically saying, yes, I really like music, or is it just…?

A We try and tell people not to do that, but it’s unavoidable because often people who are referring, music therapy doesn’t pop in to your mind and then you’ll go “so and so was a guitarist” and they say “that’s right, he’s a guitarist, music therapy, let’s refer him to music therapy”.

It happens all the time and it actually sometimes works negatively because people who have been a musician and have a severe… and they can’t play any more, it actually brings up lots of stuff, so it doesn’t actually, so I think if someone is very resistant or doesn’t want to, but there aren’t many people who hate music and refuse to do anything, they’re always a bit embarrassed or scared maybe to start with because they don’t know what’s going to happen. But once they get there, it’s really good, but yeah, we do get a lot of referrals and I think sometimes people have had a musical background or interest self refer, when they hear about music therapy more than just your general anyone, yeah, that’s something that we’re constantly saying, you don’t have to have any musical background.

Q Yeah, it could be just for any person for referrals.

A Yeah. Great, well, it was lovely to share with you all. Thanks for having me.

**END OF TRANSCRIPT**