Music-assisted Therapy: Much More Than Meets the Ear

Omnicom Health Group operates at the intersection of digital health, technology advancements, and culture. We are committed to finding new opportunities to define and deliver healthcare by looking at the world through a different lens. One area that draws our focus is music. It’s all around us. We know it can calm as well as pump us up. But that’s just the surface—go deeper and discover what else music can do for us and how it’s being leveraged by digital platforms in new ways to serve patients.

1. Music-assisted Therapy
2. Our Brain: The Ultimate Sound Studio
3. Music Therapy & Modern Digital Health
4. Hey, What About My Drugs?
5. Getting It to the Masses

Let us know what you think at: technology@omnicomhealthgroup.com
Music-assisted Therapy
Much More Than Meets the Ear

Music-assisted Therapy

Music predates language, and many cultures have and continue to be steeped in musical traditions. In today’s digital world, music is ubiquitous.

Music therapy looks to complement traditional medicine. It has become a hot topic, as evidenced by SXSW 2017 panels such as “Musical Prescriptions: Compose a Healthier You” and “Music as Medicine: Therapeutic Benefits of Music.” The Washington Post dedicated its coverage of the TEDMED conference to music-related sessions. Click here to read more. The BBC recently reported on the therapeutic benefits of music for a 7-year-old girl suffering from selective mutism. Click here to watch the video.

Trained therapists are bringing the potential of music therapy to bear on a variety of health settings, including but not limited to hospitals, nursing homes, community centers, schools, rehabilitation centers, and hospices. As it grows and becomes more established, it is even being brought up in conversations between physicians and patients during routine office visits.

The fact is that music is beginning to play an ever-increasing role in improving our overall health.
Our Brain: The Ultimate Sound Studio

Thanks to technological advances in imaging such as magnetic resonance imaging (MRI), we can actually see how our ultimate sound studio, the brain, processes music. When music comes into the brain, different compartments lighting up with excitement can be seen. The right temporal lobe picks up on the pitch of the music, the basis of melody, chords, and harmony. A nearby center functions as a timbre decoder. The cerebellum is responsible for processing rhythm and the frontal lobes interpret the emotional content of what is being heard. All these compartments integrate and trigger the stimulation of dopamine, cortisol, and other body chemicals that directly affect our central nervous, immune, and cardiovascular systems, and overall metabolism.

In a recent study, the fMRI scans above show that, using the same stimuli and listeners, the caudate was more involved during the anticipation and the nucleus accumbens was more involved during the experience of peak emotional responses to music. These results indicate that a pleasurable response to music can lead to dopamine release and explain why music is of such high value across all human societies.
Music therapy is becoming a recognized dimension of modern digital health platforms. Whether delivered through music podcasts or video streaming with Spotify, or broadcast on Pandora internet radio, music therapy is becoming part of mainstream digital health application.

Take the example of GE Healthcare connecting people to music and social media. “Juke Box”, a GE Healthcare initiative powered by Spotify, shares inspiring music with caregivers and people who are ill. The recent breast cancer initiative “give a little beat for breast cancer” was an easy way to allow someone who has cancer, or knows of someone who has cancer, to share inspiring music. Through the website, www.givealittlebeat.com, or Facebook app, anyone can submit a song or listen to any of the songs in the Hope, Love, Party, and Shout playlists.

Memorial Sloan Kettering Cancer Center teamed up with Pandora chief musicologist Nolan Gasser to create the right “prescription of music” for cancer patients. Pandora’s Music Genome Project focuses on helps ease the suffering of cancer patients through the breakdown of hundreds of musical characteristics to stream songs containing the “genes” that people like to hear. The prescribed music can ease some of the more unpleasant symptoms cancer patients experience. Gasser created “The Wellness Suite,” which uses musical techniques that research has shown helped to relieve fatigue, pain, anxiety, and nausea in cancer patients. Gasser created “The Wellness Suite” that uses musical techniques that research has shown helped to relieve fatigue, pain, anxiety, and nausea in cancer patients. For example, the use of slow heartbeat-paced tempos with occasional bursts of rhythmic energy showed positive therapeutic effects.
Hey, What About My Drugs?

It is important to remember that music-assisted therapy is intended to augment, not replace drug (or any other) therapy. What we all care about is improving outcomes, and any proven and safe assistance should be taken seriously. Although more work still needs to be done, the prospect of taking either the same amount of drug or possibly even less—and having a better result because of music—is intriguing and exciting.

To illustrate this further, let’s look at another area of active research: the application of music therapy to reduce pain.

- A study in two large medical centers showed that the addition of music provided greater relief of pain in cancer patients than medications alone.
- In a different study, people having a colonoscopy who listened to music required less sedative and reported less discomfort.
- In patients with fibromyalgia, a condition of the nervous system, a study showed patients on a music regimen had a significant reduction in pain symptoms.

There is no arguing that drugs are essential and still needed, but that the addition of music appears to be improving results and, in some cases, reducing the amount needed. These are very encouraging findings, especially given the epidemic of drug abuse that is triggered by pain management.
Music-assisted Therapy: Much More Than Meets the Ear

5 Getting It to the Masses

Music therapy delivered through digital means is predicted to be an economical, generic, and interoperable form of digital therapy that has the promise of being connected to a patient’s electronic health record.

Music-assisted therapy needs to be personalized. It isn’t a single repeatable therapy such as a statin or stress-reducing breathing exercise. The same music can affect individuals differently. What one person may find soothing, another may find irritating.

This is where the music therapist comes into play. Based on the principles of how music affects us physiologically, a music therapist will work with the patient and physician to design the best protocol for the desired effect.

An interesting initiative is underway in one of our Omnicom sister companies, GMR Marketing, that specializes in virtual and augmented reality. Through a proprietary cloud-based system, GMR is looking to pilot algorithmically customized playlists for Alzheimer’s patients. Initiatives such as this, and the advent of wearable devices, may help bring the benefit of music therapy more into the mainstream.
Conclusion

Two ideas that are very much a part of ever-increasing medical jargon are “multidisciplinary” and “personalized” (or “customizable”). They have primarily described the different types of physicians involved in the care of a particular patient, and the specific type of therapy or therapies that a particular patient will receive.

A third idea that is also very much a part of our advancing medical argot is “outcomes.”

Music-assisted therapy allows us to broaden the discussion of what constitutes multidisciplinary and personalized therapy, and more importantly, stay focused on the larger goal of improving outcomes.

Our pharmaceutical clients face incredible challenges discovering new drugs, getting them approved (hopefully), and bringing them to market. The costs and risks are high. As music-assisted therapy emerges as a potential adjunct to drug therapy that improves outcomes, our clients might become more and more interested in hearing how it could be utilized in clinical studies, phase 4 initiatives, and patient support programs to help reduce risk and help patients.

A special thank you to the TBWA\WorldHealth team for their research and creative thought leadership to produce this paper.

To learn more about any of these trends contact: technology@omnicomhealthgroup.com
Music-assisted Therapy: Much More Than Meets the Ear

Sources


