Mental Health for the Masses

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What makes a catchy song, a catchy song? Is it that one might have a certain memorable moment attached to the song, or do you get goose bumps when your tune comes on? Whatever it may be, you can't deny that music has a great role in our lives. From babies in the womb to old men and women in nursing homes, music has a profound effect on the human body, much more than thought before.

Music therapy is the use of music, in a clinical matter, to accomplish an individual's goal in a therapeutic environment. It may seem controversial that music could be used to heal oneself, but people have been using music for therapeutic purposes since the 1700’s. Today, people have the ability to go to school to be musical therapists. Musical therapy is now widely considered a true clinical profession, so there must be reason for this; it must work. The reason this topic is controversial is because of the very phrase, “It must work”. How could something so simple, primitive and normal in our society, treat or suppress a mental illness like Alzheimer's? To fully understand this question, one must know how music therapy became so widely accepted.

Music therapy has been in use since the late 1700’s, but didn't catch on until the 1900’s. The earliest known record of music therapy appeared in an article titled, “Music Physically Considered”, written in 1789. The next reference appeared in the 1800’s with the first recording of a music therapy session in an institutional setting in Blackwell’s Islands, New York. The 1900’s saw the creation of the first organizations dedicated to musical therapeutics. In 1903, a woman by the name of Eva Augusta Vescelius founded the National Society of Musical Therapeutics. The society was short-lived, but was the first of its kind. In 1926, Isa Maud Lisen founded the National Association for Music in Hospitals. This organization was dedicated to bringing live music to sick and injured individuals; the live music had a great benefit to the health of the sick, with improvements in mental well being. And in 1941, Harriet Ayer-Seymour founded the National Foundation of Music Therapy. Though these organizations didn't live long, they provided the first journals, books, and educational courses on musical therapy. In 1944, the first musical therapy academic program came out of Michigan State University. Other universities such as, the University of Kansas, Chicago Musical College, College of the Pacific, and Alverno College followed soon after. A few years later, the National Association for Music Therapy (NAMT) was founded in New York City, June 2, 1950. NAMT succeeded where other organizations failed. They created university-level teaching standards, as well as clinical training requirements. Research and clinical training became a priority, and they published many research and clinical journals. They were in operation from 1950-1997, but their impact was huge in terms of the growth of musical therapeutics. A year from that in 1998, The American Music Therapy Association (AMTA) was formed. This was due to a merger between (NAMT) and another organization, the American Association for Music Therapy (AAMT). AMTA is now the single largest music therapy association in the world, representing musical therapeutics and musical therapists in the United States and in over 30 countries worldwide.

Music therapy has quite the history and since the 1700’s it has finally been recognized for its uses. So how does music have such a big effect on the human mind and body? Well, let's see how infants react to music. In a study published out of Penn State Hershey, it showed that infants in the intensive care unit put through a music therapy session had reduced heart and respiratory rates after each session(1). The mother’s singing worked even more effectively than music alone. They researched this by playing a 30-40 minute music therapy session to infants, over a period of five weeks.

The results were:

The music therapy sessions had positive effects on the infant’s physiologic response systems. (1). Mother’s singing was more beneficial compared to music alone. The infants showed lower heart rates and respiratory rates, as well as more alertness, and less need for attention when listening to their mother’s singing. (1). Not only did the infants benefit from music therapy, but the mothers did as well. They had positive perceptions regarding the music therapy session, and their children's overall response to the session. (1).

This study is important because, not only does it show the positive effects of musical therapeutics, but it also gives parents an alternative to calming their children without having to result to sedatives.

So we know the effect of music therapy on infants, but what about an adult patient? In a study of effects of listening to music on preoperative anxiety in men undergoing prostate surgery, they found that patients who participated in a music intervention had significantly reduced anxiety and blood pressure(2). Listening to music pre-surgery could also prove to suppress the need for sedatives. Patients who were about to undergo surgery with spinal anesthesia who listened to music required less sedative to reach a certain level of relaxation compared to a control group(2). Music also proves beneficial post operation as well, in a study of music therapy post coronary bypass surgery, patients showed a significant improvement in mood compared to a control group (2). Music has also proved to have pain-relieving qualities in a hospital environment, and has been proven to reduce pain associated with a variety of surgical procedures such as burns, laceration repair, immunizations, lumbar punctures, insertion of intravenous lines, and dental procedures. But music doesn't always have to be used in a hospital setting to treat pain. A study of older adults with chronic osteoarthritis pain showed that, those who listened to music 20 minutes daily for two weeks reported much less pain compared to a control group that did not listen to music(2).

All of these results provide us with insight to music’s healing properties towards adults particularly in a hospitalized state. So how does music affect those in the late chapters of their lives? As people get older and older things such as speech and language skills slowly fade over time. With diseases such as dementia or Alzheimer's, an individual loses his or her ability to speak. With that said, people with dementia or Alzheimer's are still able to sing or hum their favorite tunes(3). In fact music helps the elderly maintain speech intelligibility as well as speech skills. Music could also be used to maintain the memory organization and thought processing of the mind. If an elderly person were to listen to a song from their high school prom night, it would bring back memories and spark conversation in the individual. This is what's known as Reality Orientation, a technique that uses music-based experiences to help confused or disoriented individuals. This provides them with information about their surroundings, such as important names and places(3). Music therapy could also be used to improve the social and emotional health of the elderly. The elderly who participate in group music therapy show signs of reduced? feelings of loneliness and isolation and it could be a great way for the elderly to bond with their families.

Music has proven its medical benefits, but it has also proven to be a great alternative to sedatives and pain relievers. It has also been proven to relieve emotional pain as well as stress. So, it's no doubt listening to music has many benefits, but does learning and creating music provide the same benefits? In a study published in the Journal of Neuroscience, researchers found that kids who took music lessons over a period of two years not only got better at their instruments but they found that it assists in learning and processing language. In the brain language and music are similarly processed. It stems from pitch, timing, and timbre. Consonants and vowels become clearer and the brain can make sense of them more quickly. It could be compared to being bi lingual, one would know similarities between the two languages and in turn would be able to communicate themselves more effectively. (7). When a human learns a musical instrument, especially as a child below the age of seven, our brains develop in a different way than without. Our brain develops enhanced cognitive functions as well as neuroplastic changes in the brain’s structure and function. Better performance was shown in areas of: fine motor skill, rhythm perception and auditory discrimination, in studies of children undergoing consistent music training (8). Another study of children undergoing music lessons show that both listening to music as well as playing music stimulate your brain and can increase your memory. This study was done with 22 children from age 3 to 4 and half years were given either singing lessons or keyboard lessons. Where as a control group of 15 children received no lessons what so ever. Both groups participated in the same preschool activities. The results showed that preschoolers who had weekly music lessons improved their spatial- temporal skills 34 percent more than the control group of children. Not only that, but researchers also found these effects to be long term (9). Playing music on an instrument requires a great deal of hand-eye coordination. When a musician plays music live more times than not, they are using musical notation to know where they are in the song. Your brain subconsciously converts ¼, 1/8, 1/16, 1/32 notes from a piece of paper to fast and slow precise movements to create music. One aspect of a musician’s life, which is considered less glamorous, and could hurt this process, is performance anxiety or stage fright. A way a musician can overcome this is by constantly playing in stressful situations. This constant exposure to stress while playing will, in other words, build your brain’s confidence. Every time a musician plays, they get better and more confident. But everything is in moderation, if a musician plays in a far too stressful of a situation, this could actually impede on the musicians learning of their instrument. Their brain will be focused on the audience, not the music or instrument. Learning to play music is another way for one to foster self-expression as well as relieve stress, because music has no rules, one can play whatever they choose. The more advance one becomes on their instrument they more they'll be able to express themselves. Just like a progressing painter, at first they may not know how to put their emotions on a canvas, but as the years go on the painter learns how to more effectively put themselves and their emotions on the canvas. It may seem obvious that learning a musical instrument has many benefits: it improves one’s listening skills. The trained musician has very good ear, they can correct themselves mid-song as well as tell the difference between various notes and rhythms’ all mentally within seconds. Playing music, as well as listening intently to music, builds this skill. This takes years to do, so it is important to not get discouraged while developing this skill.

So where does music, in a professional and clinical matter, go from here? Well, if history repeats itself, I believe music, in a therapeutic sense, will continue to expand to wider audiences and more and more people will realize its practical and beneficial uses. Because music is such a simple form of meditation and is accessible to most humans, we all can currently take a step onto the path of health and wellness. I also believe that more and more science will continue to back music for its healing abilities, even though there are already plenty of clinical studies to support music therapy. Music has proved useful to infants, adults, and the elderly as well as patients in a hospital setting. It has proved useful for physical pain as well as mental issues such as depression and anxiety. The fact that our schools are continuing to take away their music programs and replace them with more academic classes is deterring from the importance of music and its benefits in education. In most schools music is never allowed in the student’s school time. In other words, students can’t listen to music in class. What teachers don’t realize is that music promotes attentiveness, creativity, and listening skills; playing music proves to be even more beneficial to the teenage mind. I feel if we take music from the kids, the future this generation grows into will not take music seriously. I propose that music should be treated with the same respect that math and science and other academics receive. I also propose that we hold music and music therapy as a profession in a higher standard in the clinical world. I believe this because music as medicine has more beneficial use than the public perceives. Another benefit music holds is how absolutely cost effective it is as well as how accessible it is by the American population. You don't need much money to listen to or play music, in fact all you need is a voice and a way of tapping or a way of creating a beat. And in terms of just listening to music, you can just flip on a radio. Music, is in fact, ingrained in our culture,but it's not recognized for its mental healing abilities. Not in a literal sense at least. When was the last time ever heard of a music therapy festival? How about a music therapy intervention and or class in high school? Point being, if music continues to be considered just a pastime activity, it won't be seen or taken seriously from a clinical, professional, and justifiable point of view.

We are still working towards the actual measurable effects of music on the human body and psyche. And whether or not its therapeutic effects could be definitively explained, there's no doubt that music has a great impact on humans worldwide. Music is a primitive, social and personal experience that we can't quite explain with words. Despite its history, music in a therapeutic sense, is just now starting to catch on with the general public, with massive music festivals, countless music being created and vast amounts of instrumentalists worldwide. Music therapy will continue to grow in popularity and more and more people will realize and feel its effects.

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