Is Music Therapy more Effective for Treating Depression in Patients than Medication?

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Abstract

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Music therapy has been studied considerably in the last decade and analysts have successfully discovered that it can be a useful treatment for patients with depression. Specifically, researchers have found that this therapy has overall increased patient outcomes for both the elderly and end- of-life care patients. Depression medications are beneficial, but bring along many side effects. Music therapy has been found to increase patients' sense of well-being, bring about excitement and motivation, and nevertheless provide greater socialization opportunities. Integrating music therapy into regular hospital treatment, nursing home, and hospice settings can overall increase patient outcomes and improve the negative emotions that can ultimately develop from their perpetual exclusion from society. Nurses, medical professionals, and hospital staff members that possess a musical background, can incorporate their familiarity with music into their interactions among patients. The hospitals and nursing home systems can also provide staffed musicians to come and perform at the patient's bedside upon request. The research was completed in a PICO format stating the patients as the population, music therapy as the intervention, medication as the comparison, and decreased depression as the outcome

Introduction

Clinical depression is a common disorder that affects an abundance of individuals. It is also frequently seen among patients receiving medical care. In an effort to help reduce the feelings of depression, patients are often encouraged to invest in pharmacological interventions. However, these medications can often lead to adverse side effects in addition to poor treatment adherence, which ultimately provides little progression towards recovery. (Zhao, Bai, Bo & Chi, 2016, para. 2). "In 2016, the Centers for Disease Control and Prevention issued recommendations to move away from opioids and instead use non pharmacological methods for the treatment of chronic pain" (Low et al., 2020, para. 1). Therefore, more research has formulated in an effort to provide the best patient outcomes for every individual. A popular approach is music therapy. Music therapy encompasses group guided sessions, listening to audio recordings, writing and analyzing song lyrics, playing instruments, etc. Music therapy has been found to improve a patient's general mood and overall response to pain, therefore easing the patient's mind regarding their condition. In the same article, researchers found, "The pain-reducing effects of music are often attributed to music's ability to distract and relax (Low et al., 2020, para. 3). With the addition of further analysis, many researchers have concluded that music therapy is predominantly a more effective treatment for depression that medication alone.

Methods

Sources were chosen based on reputable databases that were based from medical or psychological research. These sources included topics about the treatment for depression using music therapy compared to traditional methods. Each source was peer reviewed and published within the past 5 years, showing that the relevance is consistent with the posed question and accurate. Each source assessed the effectiveness of music therapy, and based their experimental results on each subject's perception of depression. After reviewing each work, information was compared to see the similarities between how each experiment was conducted and the results. Since pain is a subjective finding, the data was collected through qualitative methods such as interviews and surveys. Data was then analyzed and placed in various graphs that were examined to organize the results. The different assessment tools that were used within each journal article included the Geriatric Depression Scale (GDS), the Patient Reported Outcomes Measurement Information system (PROMIS tool), and the Elderly Information Form. Each study varied on the experimental conduction period which ranged from 8 weeks to 6 months.

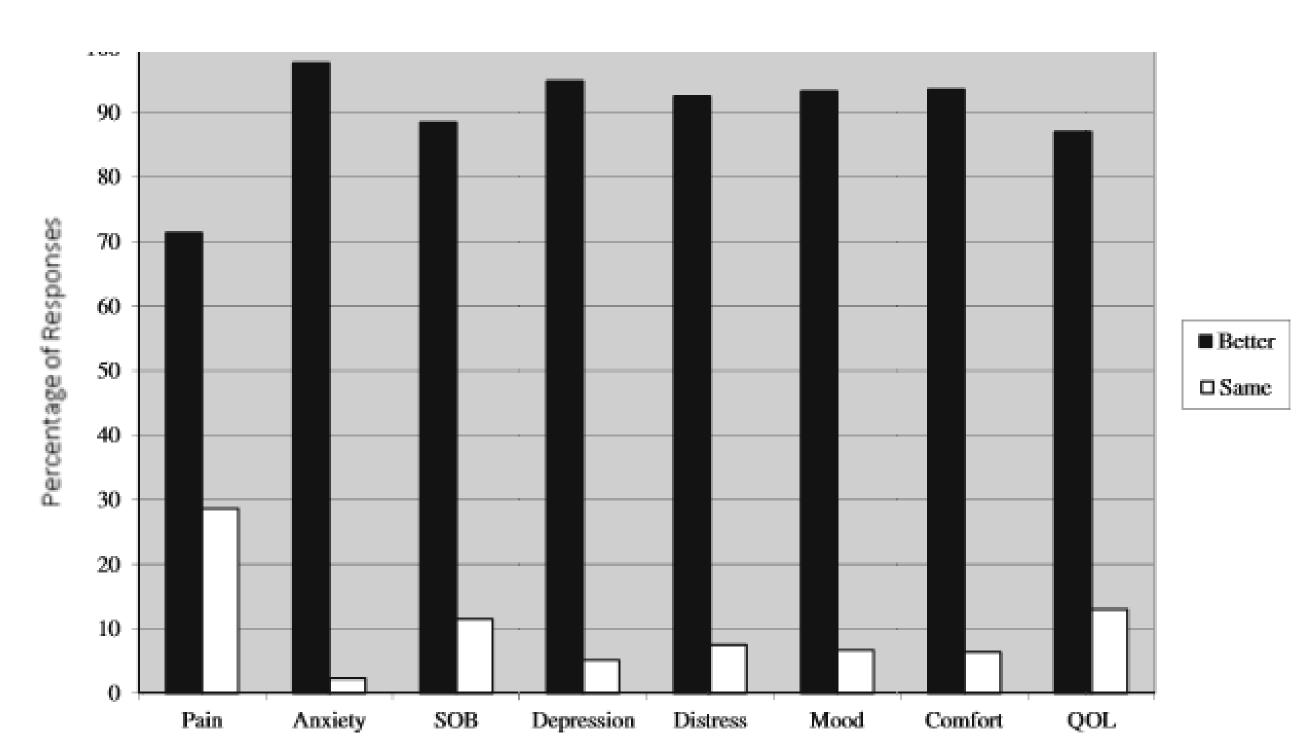


Figure 1. Shows the family's perception of music therapy. From "Perceptions of family members of palliative medicine and hospice patients who experienced music therapy," by L. Gallagher, R. Lagman, D. Bates, M. Edsall, P. Eden, J. Janaitis, L. Rybicki, and M.L. Gallagher, 2017, Supportive Care in Cancer, 25(6), 1769–1778. https://doi-org.proxy.longwood.edu/10.1007/s00520-017-3578-y

Music group (n = 32)Control group (n = 32)

Geriatric Depression So	caleMean ± SD	Mean ± SD	Test and p-value	
Pre-test	8.13 ±2.43	8.50 ± 3.08	$t^1 =541$, p = 0.591	
Post-test	7.16 ± 2.37	9.13 ± 3.09	$t^1 = -2.861$, $p = 0.006$	
Test and p-value	$t^2 = 4.888, p = 0$	$.000 t^2 = -2.918, p = 0.000 t^2$	$t^1 = -2.861$, p = 0.006	

- 5 p < 0.01, t¹ = t-test for independent samples.
- 6 p < 0.01, t^2 = t-test for paired samples.

Figure 2. Shows the decrease in depression scores after music therapy. From "Music therapy as group singing improves geriatric depression scale loneliness in institutionalized geriatric adults with mild depression: A randomized controlled study," by M. Divya, S. Sumathy, S. Easwaran, N. Parin, 2017, International Journal of Educational and Psychological Researches, 3(1), 6-10. doi:10.4103/2395-2296.198415

	Experiment group			Control group		
	Mean	SD	Median	Mean	SD	Median
GDS-SF scores						
Baseline	7.8	1.137	8	8.13	0.883	8
End of 1st week	6.92	1.095	7	7.82	1.059	8
End of 2 nd week	6.32	0.829	6	8.1	0.9	8
End of 3rd week	5.88	0.516	6	8.1	0.9	8
UCLA loneliness scale scores						
Baseline	41.35	3.556	41	38.93	2.526	39.5
End of 1st week	38.62	3.635	38.5	38.9	2.56	39
End of 2 nd week	38.08	3.269	38	38.93	2.586	39
End of 3rd week	37.45	2.66	38	38.93	2.586	39

GDS-SF: Geriatric Depression Scale-Short Form, SD: Standard deviation

Figure 3. Shows the decrease of depression scores after the 3rd week. From "The effect of music therapy on depression and physiological parameters in eldery people living in a Turkish nursing home: a randomized-controlled trial," H. Gök, Y. Yaman Aktaş, S.O.Orak, O. Saglambilen, İ. Aydin Avci, 2017, Aging & Mental Health, 21(12), 1280–1286.

Evaluation & Analysis

From the various sources, results were collected through interviews, surveys, and observations. During interviews, the subjects described how music therapy impacted their depression. "One patient remarked, 'Every time I play the instruments, it helped me with my pain [...] The drum playing changed my pain in some kinda way. 'Cuz I didn't have it [pain] once I stopped doing the drums'" (Low, et. al., 2020, para. 23). Another patient stated, "I wasn't feeling too good this morning. I turned on some music and it took my mind off of that feeling. I was able to get dressed on time and I made it here on time" (Low, et.al., 2020). A common quantitative method that was used in the sources was the Geriatric Depression Scale (GDS). After using the GDS scoring, there were significant statistical results that found improvements in not only depression but blood pressure readings. (Gök, Yaman, Orak, Saglambilen, & Aydin, 2017, para. 3). GDS scores showed continual improvement over multiple week assessments when compared to the control groups that did not use music therapy. (Divya, Sumathy, Subramaniam, & Parin, 2017, p. 8). The study done by The Cleveland Clinic showed 92% improvement on mood and 94% improvement on stress, with an overall percentage 84% of the subjects believing music therapy was helpful (Gallagher, Lagman, Bates, Edsall, Eden, Janaitis, & Rybicki, 2017, p. 1172). One experiment indicated with a total of 1,810 patients that elderly people benefited the most from music therapy, where it was observed that patients experienced increased motivation and excitement about life. (Leubner & Hinterberger, 2017, para. 56). The Cochrane Database of Systematic Reviews, showed that TAU (treatment as usual) plus music therapy was more effective than TAU alone, due to music therapy's depression reduction effects (Aalbers, Fusar-Poli, & Gold, 2017, para. 6). A study that reviewed the effects of music on patients receiving high dose chemotherapy found that music therapy can even change the perception of pain, which changed their overall mood and feelings of depression (Tuinmann, Preissler, Bohmer, Suling, Bokemeyer, 2017, para. 28).

Conclusion & Implications for Future Research

Through close analysis of patients with depression, researchers observed that when compared to antidepressants, music therapy contributed to better patient outcomes. For instance, music therapy ultimately paved the way towards recovery for a military soldier suffering from PTSD. Elderly patients were found participating in activities and engaging in interpersonal relationships. Some patients found the motivation to get out of bed simply by turning on the radio. Antidepressants are essentially short term relievers of depression. However, whether it was simply listening to the lyrics, or physically conducting music with a drum, patients regained the sense of inner peace and contentment. The process of implementing music therapy into common medical practice would need to be further researched since its effectiveness has been analyzed by many studies. In conclusion, it was found that music therapy dramatically saved the lives of a considerate amount of patients.

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