

Music Therapy for the Treatment of Depression and Anxiety
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IMER Spring 2021

	Author, Source, Year	Title	Study Design	Study Results	Conclusions	Strengths/Limitations
1	Atiwannapat, P., Thaipisuttikul, P., Poopityastaporn, P., & Katekaew, W. (2016, June). Complementary therapies in medicine, 26, 141-145. https://doi- org.proxy.kcumb.edu/10 .1016/j.ctim.2016.03.015	Active versus receptive group music therapy for major depressive disorder-A pilot study.	Single-blinded RCT Outpatients 18-65 yrs Score of 7+ on MADRS Active (n=5), receptive (n=5), counseling [control] (n=4) groups Assessments at baseline, 1 mo, 3 mos, and 6 mos Secondary: TDI, QOL	Statistically non-significant (p=0.74, p=0.31, p=0.51)) reduction in MADRS scores for both MT groups vs. control Statistically non-significant (p=0.11, p=0.62, p=0.77) reduction in TDI scores for therapy groups; TDI score increased at every session in control group	Results show trend of improvement in depressive sx and QOL in both MT groups, compared to control. Active group showed dose response relationship in active MT group	Strengths: single blinded evaluator, same MT team, use of counseling for control instead of no tx Limitations: small sample size, unable to blind participants and therapists, demographic imbalance toward females, medication effects
2	de la Rubia Ortí, J.E., García-Pardo, M.P., Iranzo, C.C., Madrigal, J.J.C., Castillo, S.S., Rochina, M.J., & Gascó, V.J.P. (2018, January). Journal of alternative and complementary medicine (New York, N.Y.), 24(1), 33-36. https://doi- org.proxy.kcumb.edu/10 .1089/acm.2016.0346	Does Music Therapy Improve Anxiety and Depression in Alzheimer's Patients?	Prospective, observational 25 patients with mild Alzheimer's dz (mean age 78 years) received one 60-minute MT session. Level of salivary cortisol collected, Hospital Anxiety and Depression Scale (HADS) administered before and after MT session.	Levels of salivary cortisol decreased after MT. Statistically significant (p<0.001) decrease in depression and anxiety after MT.	Symptoms of depression and stress levels decreased after administration of one session MT in Alzheimer's patients. Patients with AD and comorbid depression may benefit from supplementary MT.	Strengths: standardized MT administered by professional neuropsychologist, quantitative measurement of cortisol. Limitations: small sample size (n=25), no observation of effect over time as only one session administered.
3	Ribeiro, M.K.A., Alcântara-Silva, T.R.M., Oliveira, J.C.M., Paula, T.C., Dutra, J.B.R., Pedrino, G.R., Simões, K., Sousa, R.B., & Rebelo, A.C.S. (2018, December 13). BMC psychology, 6(1), 57. https://doi- org.proxy.kcumb.edu/10 .1186/s40359-018-0271- y	Music therapy intervention in cardiac autonomic modulation, anxiety, and depression in mothers of preterms: Randomized controlled trial.	Prospective RCT 21 preterm mothers (ages 18- 40 years) admitted to NICU split into control group (n=11) and MT group (n=10) MT group given average of 7 receptive MT sessions lasting 30-45 minutes.	Statistically significant improvement seen in MT group for both anxiety and depression sx (for both in t-test, only for anxiety in Fisher's exact) HRV parameters suggest parasympathetic modulation following MT, most specifically an increase in SD1 after MT.	MT improved symptoms of depression and anxiety in mothers of preterm infants. Evidence of increased parasympathetic activity from relaxation and alleviation of sx due to MT → cardiac stability and decreased risk of CV disease	Strengths: utilized well- validated scale in Beck Inventory, assessed prolongation of effects by measuring HRV 12 hours after therapy. Limitations: Did not reach appropriate sample size for adequate power (discussed as 46 women), MT

			Anxiety and depression evaluations (Beck Inventory) given before and after completion of sessions; RR recorded at rest and 12 hours after administration of MT.			experiences somewhat individualized
4	Hagemann PMS, Martin LC, Neme CMB. J Bras Nefrol. 2019 Jan-Mar;41(1):74-82. doi: 10.1590/2175-8239-jbn-2018-0023. Epub 2018 Sep 13. PMID: 30222176; PMCID: PMC6534034.	The effect of music therapy on hemodialysis patients' quality of life and depression symptoms.	Observational 23 Brazilian patients on hemodialysis, 18+ years, undergoing hemodialysis for 3+ mos. BDI and KDQOL-SF given before and after MT was administered. 8 MT sessions total lasting 75 minutes each, conducted twice weekly.	Stage 1 (pre-MT): prevalence of depressive sx was 60.8% (about ½ considered mild, ¼ moderate, ¼ severe) Stage 2 (post-MT): prevalence reduced to 21.7% (17.3% mild, 4.34% moderate, 0% severe). BDI scores reduced from 15.43 to 7.43 (p<0.001) QOL scores significantly changed for functional capacity (p=0.011), pain (p=0.036), general health (p=0.01), vitality (p=0.004), mental health (p=0.012)	Music therapy is beneficial in reducing depression and improving QOL in HD pts WITHOUT risk of incident or injury. Depressive sx prevalence decreased by nearly 2/3; significant considering high prevalence in the HD population. QOL scores improved for generic dimensions and dimensions specific to CKD.	Strengths: studied specific population with great need, used well standardized measures (BDI and KDQOL), prolonged study (4 weeks) Limitations: small sample size, absence of control group, BDI is not specific to hemodialysis patients, possible issues with translation to Portuguese
5	Guétin, S., Soua, B., Voiriot, G., Picot, M.C., & Hérisson, C. (2009, February). Annals of physical and rehabilitation medicine, 52(1), 30-40. https://doi.org.proxy.kcumb.edu/10.1016/j.annrmp.2008.08.009	The effect of music therapy on mood and anxiety-depression: An observational study in institutionalised patients with traumatic brain injury.	Observational 13 institutionalized patients with TBI (ages 25-50 yrs) w/ GCS 3-4. None were treated with psychotropic, anxiolytic or antidepressant drugs. Mean time since TBI was 8 years. Pts participated in 30 minutes receptive MT and 30 minutes active MT per week for 20 weeks. Mood was assessed before and after session 1 and every 5 th session using the face scale and Hospital Anxiety and Depression Scale (HADS).	Face scale scores (mood): significant improvement (p<0.05) after each MT session and pre-session between weeks 1 and 5. Mood scores slightly increased (worsened) between each post-session and the next pre-session measurement. HADS scores for anxiety improved significantly between wks 1-20 (p=0.05), for depression improved significantly for wks 1-15 (p<0.05) and then appeared to level off. Relative improvement of 39% in anxiety levels and 25% in depression levels.	Mood was significantly improved in TBI patients before and after each MT session, with enhancement as sessions progressed, suggesting a dose-dependent response. Anxiety and depression were also significantly reduced, especially during the first 10-15 sessions. Anxiolytic effect persisted after week 20.	Strengths: standardized tool for receptive music therapy (validated U sessions), prolonged study able to assess dose dependent response Limitations: very small sample size, observational/no true control group, mood face scale is subjective

6	Tang Q, Huang Z, Zhou H, Ye P. PLoS One. 2020 Nov 18;15(11):e0240862. doi: 10.1371/journal.pone.0240862. PMID: 33206656; PMCID: PMC7673528.	Effects of music therapy on depression: A meta-analysis of randomized controlled trials.	<p>Meta-analysis of 55 RCTs 39 evaluated music therapy 17 evaluated music medicine</p> <p>Searched PubMed, Ovid-Embase, Cochrane CRCT, EMBASE, Web of Science, Clinical Evidence. Search terms “depress”, “music”.</p> <p>Subgroup analysis completed; publication bias evaluated.</p>	<p>Music therapy overall showed moderate reduction in depressive sx (SMD=-0.66, p<0.001)</p> <p>Active (SMD=-0.57, p<0.001) and receptive MT (SMD=-0.73, p<0.001) showed similarly moderate reduction effects</p> <p>Specific MT methods also studied; recreative MT and guided imagery w/ MT had strongest effects.</p> <p>Music medicine showed stronger effect on reducing depressive sx (SMD=-1.33, p<0.001)</p>	<p>MT and music medicine both showed statistically significant reduction of depressive symptoms.</p> <p>Music medicine showed a stronger effect on sx reduction than MT.</p> <p>Specific MT methods that show the strongest promise are recreative and guided imagery MT.</p> <p>MT and MM demonstrated stronger reduction effects when short/med length intervention vs. long intervention periods.</p>	<p>Strengths: meta-analysis, excluded studies with n<20, studied MT and MM distinctly as well as subtypes of MT.</p> <p>Limitations: sample sizes still smaller than desired (many n<50), most studies did not have blinding so increased potential for bias, multiple different depression scales used.</p>
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MT = Music Therapy

MM = Music Medicine