Table 1: Systematic reviews of music therapy for cancer

Source: Joke Bradt, Helen Cooke, CAM-Cancer Consortium. Music therapy [online document] May 2017.

First author (year) [ref]	Main outcomes	Number of studies Type of studies Number of patients Included	Main results/Conclusion	Comments
Bradt (2016) [3]	A Cochrane Systematic examining the effects of music therapy and music medicine interventions on psychological and physical outcomes in people with cancer	52 RCTs and quasirandomised trials (participants n = 3731) 47 adult trials, 5 paediatric trials 23 music therapy trials, 29 music medicine trials Trials took place in 9 different countries. No trials were excluded based on article language.	Results suggest that music interventions may have a moderate to large effect on anxiety (SMD = -0.71; 95% CI -0.98 to -0.43, P<0.00001), moderate effect on depression (SMD = -0.40; 95% CI -0.74 to -0.06, P=0.02), large effect on pain (SMD = -0.91; 95% CI -1.46 to -0.36, P=0.001), and small to moderate effect on fatigue (SMD = -0.38; 95% CI -0.72 to -0.04, P=0.03). Music therapy but not music medicine interventions demonstrated a moderate effect on quality of life (SMD=0.42; 95% CI 0.06 to 0.78, P=0.02). Small treatment benefits were found for heart rate, respiratory rate and blood pressure. Meta-analyses did not find support for an effect of music interventions on mood or distress.	Searches were comprehensive: 14 electronic databases were searched and 17 journals were handsearched. Most trials were at high risk of bias and therefore the quality of the evidence is low. The main reason for receiving a high risk of bias rating was the lack of blinding. Blinding is often impossible in music therapy and music medicine studies that use self-report outcomes, since participants know whether or not they listened to music and/or participated in active music making. Therefore, it is often impossible for these types of studies to receive a low or even moderate risk of bias even if they have adequately addressed all other risk factors (e.g. randomization, allocation concealment, etc.).
Nightingale (2013) [20]	A systematic review and meta-analysis of music interventions to reduce anxiety for adult cancer patients undergoing medical treatment.	13 (participants n=709) randomised controlled trials. Only trials published in English or capable of being translated were included. 5 of these trials involved a music therapist. 4 (n=201) were eligible for meta-analysis.	The meta-analytic results failed to demonstrate a positive effect on anxiety (P=0.99), compared with standard care, or headphones (without music) or rest before and after the intervention. Almost all studies reported either a significant difference in anxiety between groups post-intervention or a significant decrease in anxiety over time in the music intervention group.	The failure to demonstrate a positive effect on anxiety may in part be attributed to the small sample size There is considerable variation between trials with regards to the manner in which music interventions/therapy was carried out and it is therefore not possible to generalise the results of this analysis. A rigorous screening and inclusion criteria were adopted in this review. 5 databases were searched for trials conducted between 2001 and 2011. The PEDro scale was used for quality assessment of the studies. Only studies rated as high quality as per this scale were included in the meta-analysis.

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Zhang (2012) [21]	A systematic review and meta-analysis to examine the effect of music interventions on psychological and physical outcome measures in cancer patients	32 RCTs (participants n=3181). 10 English articles and 22 Chinese articles. Some of the trials included were paediatric studies. Of the 32 trials only 4 utilised music therapy, the rest utilised music medicine.	Results suggested that music interventions are accepted by patients and associated with improved psychological outcomes (anxiety and depression) compared with standard care, other interventions, or placebo. The effects of music on vital signs such as blood pressure are small.	There is considerable variation between trials with regards to the manner in which music interventions/therapy was carried out and age group of participants. It is therefore not possible to generalise the results of this analysis. The searches appeared comprehensive. 9 databases were searched (6 English language and 3 Chinese language). All studies were included from either the	
				The studies varied in quality. 7 were rated as high quality, 3 low quality and the rest medium quality. 20 trials had various levels of bias susceptibility. Only 4 studies concealed allocation and used adequate randomisation.	

CI - confidence interval

RCT - randomised controlled trial

SMD - standardised mean difference