

EFFECTIVENESS OF ART INTERVENTIONS ON IMPROVING PSYCHOLOGICAL OUTCOMES AND QUALITY OF LIFE AMONGST BREAST CANCER SURVIVORS: A SYSTEMATIC REVIEW

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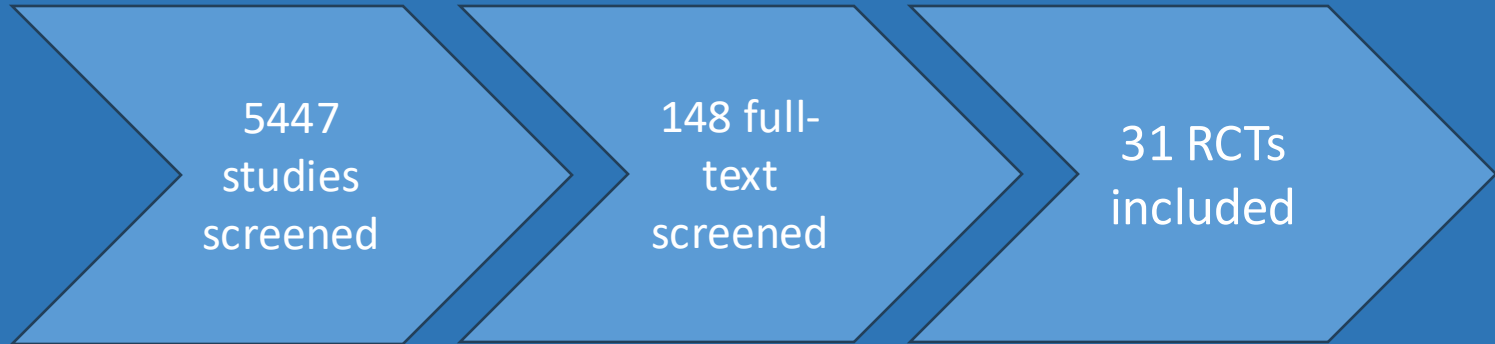
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INTRODUCTION

- Breast cancer is the most commonly diagnosed cancer in Canadian women¹
- Many breast cancer survivors experience significant long-term psychological effects post-treatment, such as body image dissatisfaction, anxiety, and depression²
- Art-based interventions offer unique opportunities to alleviate such outcomes and enhance quality of life³

METHODS

- Comprehensive literature search was performed to identify relevant randomized control trials
 - Studies were only included if interventions were completed following breast cancer treatment
- 7 databases searched from inception to April 2024: Medline ALL, Cochrane Central, Embase, Emcare, CINAHL, PsycINFO, Scopus, and Web of Science
- Risk of bias was assessed with ROBINS-II; evidence certainty was evaluated using GRADE^{4,5}



RESULTS

Type of Intervention	Description	Studies	Prevalence of Outcomes Addressed in Studies	Statistically Significant Outcomes Reported by p-values per Domain
Dance-Based Interventions	Involves using movement and dance to support emotional well-being.	Rubio et al. (2023); Ho (2016); Denig et al. (2022); DaSilviera et al. (2023); Sandel et al. (2005); Oei et al. (2023); Boing et al. (2023); Leite et al. (2021); Kaltsatou et al. (2011); Schad et al. (2023); He et al. (2022); Dibbell-Hope (2000)	Quality of Life: 7/12 (58.3%) Anxiety: 2/12 (16.7%) Depression: 4/12 (33.3%) Body Image: 5/12 (41.7%)	Quality of Life: 5/7 (71.4%) Anxiety: 0/2 (0%) Depression: 1/4 (25.0%) Body Image: 3/5 (60.0%)
Visual Art-Based Interventions	Involves creating and using visual art, such as painting, drawing, or sculpting, to express and explore emotions and improve mental well-being.	Mollaoglu et al. (2023); Czamanski-Cohen et al. (2019); Jalambadani & Borji (2019); Oster et al. (2006)**; Oster et al. (2014)**; Thyme et al. (2009)**; Thyme et al. (2022)**; Jang et al. (2016); Puig et al. (2006); Svensk et al. (2009)	Quality of Life: 5/10 (50.0%) Anxiety: 5/10 (50.0%) Depression: 5/10 (50.0%) Body Image: 1/10 (10.0%) Coping Resources: 2/10 (20.0%)	Quality of Life: 4/5 (80.0%) Anxiety: 4/5 (80.0%) Depression: 3/5 (60.0%) Body Image: 0/1 (0%) Coping Resources: 1/2 (50.0%)
Music-Based Interventions	Involves listening to music and its elements to enhance emotional and mental well-being.	Li et al. (2012); Zhou et al. (2011); Hsieh et al. (2019); Bulfone et al. (2009); Hanser et al. (2006); Koolae et al. (2017); Karadag et al. (2019)	Quality of Life: 1/7 (14.3%) Anxiety: 4/7 (57.1%) Depression: 3/7 (42.9%) Body Image: 1/7 (14.3%) Symptom Severity: 1/7 (14.3%)	Quality of Life: 0/1 (0%) Anxiety: 3/4 (75.0%) Depression: 2/3 (66.7%) Body Image: 1/1 (100%) Symptom Severity: 1/1 (100%)
Poetry-Based Interventions	Involves reading, writing, and discussing poetry to support emotional healing and personal growth	Daboui et al. (2022)*; Daboui et al. (2020)*	Quality of Life: 1/2 (50.0%) Anxiety: 1/2 (50.0%) Depression: 1/2 (50.0%)	Quality of Life: 1/1 (100%) Anxiety: 1/1 (100%) Depression: 1/1 (100%)

CONCLUSION

- Visual art and music are both promising approaches to enhance psychological well-being and quality of life in breast cancer survivors
- Dance-based interventions showed inconsistent results, with improvements in certain psychological domains but a lack of progress in others
- Early RCTs on poetry therapy suggest promising efficacy, but further research is needed to solidify its role as a therapeutic option
- Limitations such as small sample sizes, short intervention durations, and variability in participant engagement should be considered

FUTURE DIRECTIONS

- Conduct long-term follow-up studies to assess the sustained impact of art-based interventions
- Explore personalized dance interventions to improve patient engagement and mental health outcomes
- Investigate mechanisms of action in visual art and music therapies to enhance intervention design and effectiveness

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* Denotes studies conducted as 5-year follow-ups of the same patient population

Denotes studies conducted with the same patient population, but different outcomes were reported