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Resistance Training and Psychological Well-Being in People Diagnosed with Cancer: A Feasibility Study

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Background: Cancer often brings psychological challenges such as distress, depression, and anxiety, which can negatively affect health outcomes. Exercise is known to improve these symptoms, yet the mechanisms underlying its psychological benefits remain unclear.

Aims: This feasibility study examined the effect of a six-week resistance training programme on exercise-self-efficacy, self-esteem, and the severity of depression and anxiety symptoms in adults diagnosed with cancer.

Methods: Twelve adults (mean age 62 years; mixed cancer types and stages) completed three resistance training sessions per week for six weeks. Psychological health outcomes of Exercise Self-Efficacy, Hospital Anxiety and Depression Scale, and The Rosenberg Self-Esteem Scale were assessed at baseline, mid-point, and post-intervention.

Results: Resistance training was associated with significant improvements in exercise self-efficacy and reductions in depressive symptoms, alongside clinically relevant decreases in anxiety. Higher self-efficacy was strongly related to lower depression and moderately related to lower anxiety across timepoints.

Conclusion: Resistance training appears to enhance psychological health in adults with cancer, with self-efficacy emerging as a key mechanism. These findings support the feasibility of incorporating resistance training into rehabilitation pathways and warrant larger, controlled trials to confirm effectiveness and refine mechanistic understanding.

Keywords

Resistance training; cancer; psychological health; self-efficacy; mechanisms

Conflict of Interest & Ethical Approval

yes

Abstract submitters declaration

yes

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