

ORAL Submission

ALLIED (NURSING, TECHNICAL ASPECTS SUCH AS GRAFT PROCESSING, CRYOPRESERVATION, ETC) (ORAL-637)

A 6-WEEK INTERNET PROGRAM OF EXERCISE AND MINDFULNESS TRAINING TO IMPROVE OUTCOMES OF HSCT PATIENTS

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Aims & Objectives: Late effects in haematopoietic stem cell transplant (HSCT) survival include psycho-social dysfunction, reduced physical fitness, and disease. Guided exercise and mindfulness based stress management (MBSM) programmes have shown promise in improving patient outcomes. Challenges in equitable and effective healthcare delivery to vulnerable populations may be addressed via telecommunication technology.

Aims: To examine the feasibility and benefits of delivering a 6 week personalised exercise and MBSM program for patients at home via videoconference, and to evaluate its acceptability and utility.

Patients / Materials & Methods: Forty patients 6 to 48 months post-HSCT and aged 18 to 75 were invited to participate. Patients with severe medical issues or high scores on measures of anxiety and depression were excluded. An in-person assessment session included a Modified Bruce Test, strength tests, 6-minute walk test, training for a home-exercise program, introduction of MBSM techniques, and provision of materials including audio recordings for skill practice. Measures included the Goal Attainment Scale, Karnofsky Scoring, FACT-BMT, Pittsburgh Sleep Quality Index, Hospital Anxiety and Depression Scale, and Godin-Shephard Leisure Time Index. Participants received 1 hour of both exercise training and MBSM training per week for 6 weeks and were assessed at 3 and 6 months post training. **Results:** 24 of 40 eligible patients responded to the invitation and completed the program (54% male, 37.5% rural/remote). Cardiovascular fitness, strength, and anxiety symptoms showed significant improvement at both 3 and 6 months post-training ($p < .05$). Self-reported quality of life was significantly higher at 3 months ($p < .05$), and self-reported emotional wellbeing, sleep subscales and activity levels were significantly improved at 6 months ($p < .05$).

Discussion & Conclusion: A 6-week internet-based exercise and MBSM programme was an acceptable, safe, and potentially effective intervention for improving physical and psychological outcomes in this vulnerable patient population. A multicentre RCT will be conducted to confirm the findings of this single centre trial.

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