A pilot trial to investigate the impact of a personalised self-management lifestyle programme using mobile technology on the health and wellbeing of cancer survivors

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Background: Cancer survivorship is increasing yet cancer treatment can cause de-conditioning and reduce physical capacity. Consequently there is a need to identify interventions which can improve health. This study investigated the impact of a personalised self-management programme on the physical and psychological health of cancer survivors with lifestyle related health risks.

Methods: For the purpose of this research the Moving on Programme was developed which is an intervention for cancer survivors to self/manage lifestyle. A randomised control pilot trial was conducted on 123 cancer survivors with a BMI > 25. Participants were randomly assigned to the control (n = 61) or intervention (n = 62) groups. The intervention group attended the Moving on Programme and engaged in personalised goal-setting to incrementally increase physical activity and made dietary changes. Participants in the control group received only brief standard advice. Objective measures of health behaviour were collected via Fitbit. Data on anthropometric, physiological, dietary behaviour and psychological measures were collected on all participants at baseline, three and six months. A sample of participants were interviewed (n = 13) to examine acceptability of the intervention.

Results: Overall, the results demonstrate a positive effect of the Moving on Programme. There was a significant reduction in BMI observed within the intervention group (p = 0.05) in the first three months. Positive participant outcomes also included improvement in physical and psychological wellbeing, and social functioning with reduced fatigue. Qualitative data demonstrated the acceptability of the intervention and participants identified that the Moving on Programme fulfils a deficit that exists in cancer survivorship and rehabilitation.

Conclusions: The Moving on Programme designed for this study, demonstrated physical and psychological benefits to participants. The use of behaviour change techniques and mobile technology was used effectively as an acceptable intervention that supports weight loss, promotes healthier behaviours and improves wellbeing in cancer survivors.


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