



Group exercise with individualised goals *and* physical and psychosocial wellbeing in palliative care

Irene Campagnolo Maschio, Physiotherapist and Konstantina Chatziargyriou, Quality Improvement Manager

Background

Exercise has been shown to be beneficial in palliative care for physical performance and overall quality of life. However, more data are needed on the effects of exercise in physical and psychosocial wellbeing in this care setting^{1,2}.

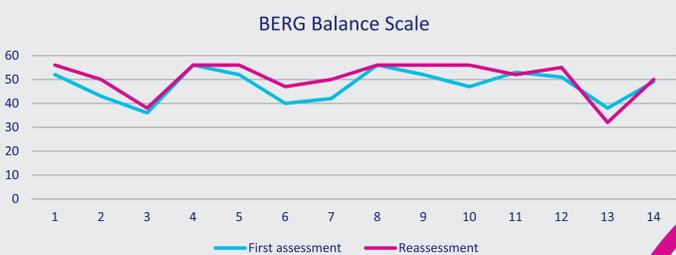
Aims

To assess the impact on the patients' physical and psychosocial wellbeing of an eight week group exercise programme with individualised goals.

Method

We conducted a quantitative and qualitative analysis on data collected from the 19 adult patients included in the study (17 cancer diagnosis, 1 pulmonary fibrosis, 1 neurodegenerative condition). Inclusion criteria: patients willing to participate in a group exercise programme and able to complete the baseline assessment (6 minute walk test, Timed up and go, Berg balance scale, EORTC QLQ-C30, HADS, open text questions about their experience of undertaking the intervention).

Table 1: Individual patients BERG Balance Scale from baseline to the end of the intervention



Case Study

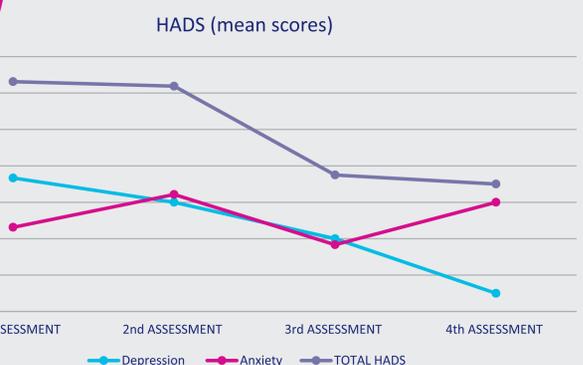
A. started the group being barely able to complete few exercises at the parallel bars in 1 ½ hour. However, the "very friendly, encouraging" group and the motivation she got from seeing the other participants "all doing well" helped her improve mobility and "confidence in myself". After 8 sessions she had doubled the distance she could walk and said: "I have exceeded my own expectations".

Case Study

C. came to the group to improve mobility and breathlessness but deteriorated quickly. At baseline, she had been able to walk 300m in 6 minutes unaided; on her last session 6 weeks later, she managed just 40m. However, she thoroughly enjoyed the group which gave her the courage to share, face and adapt to her rapid decline. Were her expectations of gaining a "more positive attitude" fulfilled? She answered: "Yes! Yes! Yes! (...) The small exercise room and the careful approach to different tasks (...) gave me courage, support and the desire to keep going".



Table 2: HADS scores from baseline to the end of the intervention



Results

At the end of the intervention, quantitative analysis showed a 16% improvement in the 6 Minute Walk Test, 16% in the Timed Up and Go, 6% in the BERG Balance Scale (Table 1). The EORTC analysis, showed an 18% decrease of fatigue, 12% of dyspnoea and a 16% improvement in physical functioning. Although only the BERG Balance Test showed a statistically significant difference, we observed a positive trend in all the physical tests administered.

Looking at the impact of the exercise group on psychosocial functioning, we observed a general improvement in the HADS score (Table 2), with an increase in the anxiety and a decrease in the depression scores, although again not statistically significant. We did not observe relevant changes in the Global health status/Quality of Life and role, emotional, cognitive and social functioning in the EORTC analysis.

Qualitative analysis showed that the referrer's focus when advising patients to attend the exercise group was on mobility (as in strength, balance, stamina) or breathing, with no mention to the psychosocial aspect. Similarly, patients' expectations were all mainly related to mobility, few mentioned confidence (but again, strongly associated with mobility) and only one mentioned "a more positive attitude" as a desired outcome; they hoped to receive motivation, encouragement, peer support and even a bit of competition from being part of a group.

All questionnaires returned after the 4th and 8th week mentioned gains in mobility; only one mentioned "companionship" and another "wellbeing" as an achieved outcome. Expectations were fulfilled, with one "to an extent" and four who saw them exceeded.

The group was perceived as friendly, helpful and supportive; the small size (up to four participants) was valued as intimate so that people found it easy to share experiences. The presence of professionals was valued, because of the reassurance and guidance received and the exercises being tailored to individual needs.

Conclusion

Peer and professional support, investment in the patient's goals and a general openness to share and discuss experiences seem to be key elements in the observed increased sense of control, physical and social participation and enjoyment of life. Although it seems difficult to measure these outcomes with numbers, they are definitely captured in patients' answers to the open question questionnaires and within the therapeutic relation.

Despite limitations (small sample, no control group), we were able to explore how personalised exercises in a small group can foster patients' resilience possibly through the reappraisal of their condition: we observed the reframing of the encounter with illness and present and future deterioration, and a reconnection with their own body and life experience. Considering the 1948 WHO definition of health as a "state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity", it seems that group exercises with individualised goals can foster an improvement of health in palliative care patients.

From what we observed, a group exercise intervention in palliative care seems feasible and valid in improving physical and psychosocial wellbeing in the population studied. Data analysis raised questions around the appropriateness of the scales used to assess psychosocial function; measuring resilience might be a possible better way forward. A control group has been started to deepen the analysis.

1. Salakari, M., Surakka, T., Nurminen, R., Pykkänen, L. Effects of rehabilitation among patients with advanced cancer: a systematic review. Acta Oncologica. 2015; 54 (5): 618-628
2. Malcolm, L., Mein, G., Jones, A., Talbot-Rice, H., Maddocks, M., Bristowe, K. Strength in numbers: patient experiences of group exercise within hospice palliative care. BMC Palliative Care. 2016; 15:97 DOI 10.1186/s12904-016-0173-9