Subgroup effects of an occupational therapy-based intervention for people with advanced cancer

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Introduction: Many people with advanced cancer have decreased ability to perform and participate in everyday activities, indicating a need for occupational therapy (OT) intervention. We recently performed a randomised, controlled trial (RCT) assessing the efficacy of an occupational therapy-based program, the 'Cancer Home-Life Intervention', in people with advanced cancer (N=242). The intervention is a tailored, adaptive programme comprising six components: 1) an initial interview; 2) prioritisation of resources, energy and activities; 3) adaptation of activities; 4) adaptation of posture and seating positioning; 5) provision of assistive technology; and 6) modification of the physical home environment. The primary outcome was ADL motor ability, measured with the Assessment of Motor and Process Skills (AMPS). We found no overall effect from baseline (T1) to 12-week follow-up (T2), but heterogeneity of treatment effect may disguise subgroup differences.

Objective: To explore the effect of the ‘Cancer Home-Life Intervention’ on the ADL motor ability in subgroups of people with advanced cancer.

Method: This exploratory subgroup analysis of treatment effect interaction was undertaken using multiple regression analysis. Subgroups were defined by age, gender, primary tumour, perceived activity problems, years of education, and physical function. The dependent variable was ADL motor ability change from T1-T2 and the independent variable was the treatment groups (intervention versus control).

Results: The subgroup analyses showed no statistically significant effect on ADL motor ability in the six subgroups defined by age, gender, years of education, type of primary tumour, functional limitations and problems performing prioritised occupations. No modifying effect of age (0.30 [95% CI: -0.05 to 0.64]) and gender (0.23 [95% CI: -0.11 to 0.57]) was found.

Conclusion: There was no subgroup effect of the ‘Cancer Home-Life Intervention’ on ADL motor ability, but there were some indications that participants aged <69 years benefited more than those aged ≥69 years.
Keywords

Activities of daily living; neoplasms; occupational therapy; randomized controlled trial; moderator variables