



A Research Protocol for Measuring the Effect of a Horticultural Therapy Programme on Depressive Symptoms and Social Participation in Elderly Care Home Residents in Windhoek, Zambia

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Abstract

Depressive symptoms and limited social participation are common and interconnected issues that reduce quality of life for elderly care home residents. Non-pharmacological interventions like horticultural therapy may address these issues, but robust evidence of its efficacy within Zambian settings is lacking. This protocol describes a study to measure the effect of a structured horticultural therapy programme on depressive symptoms and social participation in elderly care home residents in Windhoek, Zambia. The primary objective is to determine if participation yields a clinically significant reduction in depressive symptoms. The secondary objective is to evaluate changes in perceived social participation. A single-centre, quasi-experimental pre-test/post-test design will be employed. Approximately 30 consenting residents will undertake a 10-week programme of twice-weekly horticultural therapy sessions. The Geriatric Depression Scale (GDS-15) will measure depressive symptoms, and the Social Participation Scale will assess social participation. Measurements will occur at baseline, immediately post-intervention, and at a one-month follow-up. Data will be analysed using paired samples t-tests. This is a study protocol; no empirical findings are available. The anticipated outcome is a measurable reduction in GDS-15 scores, with a mean decrease of 3 points or more post-intervention indicating a clinically meaningful improvement. This protocol establishes a methodological framework to evaluate a culturally relevant, non-pharmacological intervention for a vulnerable group. The study aims to generate evidence on the potential utility of horticultural therapy within a Zambian care context. Should the intervention prove effective, recommendations will be made for its integration into standard care home activities. Further research with larger samples and a randomised controlled design will be encouraged. Horticultural therapy, depressive symptoms, social participation, elderly, care homes, Zambia, occupational therapy, research protocol. This protocol will contribute specifically to the African occupational therapy evidence base by investigating a contextually relevant intervention for common geriatric mental health and participation challenges.

Keywords: *Horticultural therapy, Depressive symptoms, Social participation, Elderly care homes, Sub-Saharan Africa, Non-pharmacological intervention, Geriatric mental health*

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