

The Effectiveness of an Occupational Therapy Fall Prevention Program in Community Dwelling Elderly



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SETTINGS AND BACKGROUND

Setting:

To prevent falls in an assisted living facility located in North Bethesda, Maryland. A falls prevention program was implemented by a registered Occupational Therapists (OT). The population for the walking program were current patients residing in the assisted living facility who met the inclusion criteria of the capstone project. The program was implemented through one-on-one intervention and conducted at a minimum three times a week (3x/week) for one month.

Background:

The purpose of this capstone project is to explore the explicit role of occupational therapy in fall prevention. Falls in the elderly is an increasing problem impacting our current healthcare system, with long lasting effects such as financial hardships, disability, psychological trauma, and decreased independence in activities of daily living. This capstone projects explores a multi-factorial approach towards fall prevention, with occupational therapists providing one-on-one interventions over the course of 1 month.

PICO QUESTION

Will the engagement of a daily walking program utilizing a multi-factorial approach decrease the risk of falls in ambulatory residents within an assisted living facility

SIGNIFICANCE

The role of occupational therapists in the prevention of falls is lacking, with only a few specific articles detailing the prevention of falls via the occupational therapy perspective. In the article by authors Woodland & Hobson (2003) they state the lack of representation of occupational therapy in fall prevention within the literature. This capstone's goal is to provide the profession more knowledge about occupational therapy's role in fall prevention, with the possibility of improving our interventional approach to fall prevention.

LITERATURE REVIEW

A total of nine articles were used for the review. The articles were grouped in four subthemes including multi-factorial elements to fall prevention, effectiveness of walking as a fall prevention method, implementation of fall prevention in the community, and the roll of occupational therapy in fall prevention.

Multi-factorial elements to fall prevention. Cheng (2018) conducted a meta-analysis of fall prevention interventions (Multi factor, single factor, exercise) across major research databases, with the finding that multi factorial approaches(e.g., education+exercise+task modification) may be more effective than a single factor approach (e.g., walking) in fall prevention.

Effectiveness of walking as a fall prevention intervention method. Okubo et al. (2015) and his colleagues conducted research on the effect of daily walking in decreasing fall risk in community elderly. They found that walking was effective in fall prevention, more so than targeted balance training.

Implementation of a fall prevention program in the community. Zimmerman et al. (2017) and colleagues conducted research on the outcomes of a falls prevention program in assisted living facilities. They found that a fall program can be implemented successfully in an assisted living facility, with recommendations of addressing patient strength and gait.

The role of Occupational therapy in fall prevention In an article by Leland et al. (2012) it was noted that there was a lack of literature on the OT role in fall prevention. Woodland et al. (2003) conducted research on fall prevention utilizing the occupational therapy perspective. They identified that occupational therapy is not as represented compared to other professions regarding fall prevention interventions.

METHODS

Participants

Two participants were engaged in an OT walking program 3x/week for four weeks. Each session was 30-40mins long in duration,

Objective Measures

ABC Scale- Activities-specific balance confidence Scale, The ABC scale is a structured 16 item questionnaire that assess an individual's confidence in performing various activities without losing balance (Lajoie, 2004).

BIMS- Brief Interview of Mental Status, is a cognitive screening tool that is widely used in nursing homes (Saliba, 2012), as part of an initial assessment for patient cognitive status.

Semi-Structured Interview- was utilized in order to guide the researcher in pursuing patient responses or ideas that may not have otherwise been detected through the other measures.

Methods for Data Collection

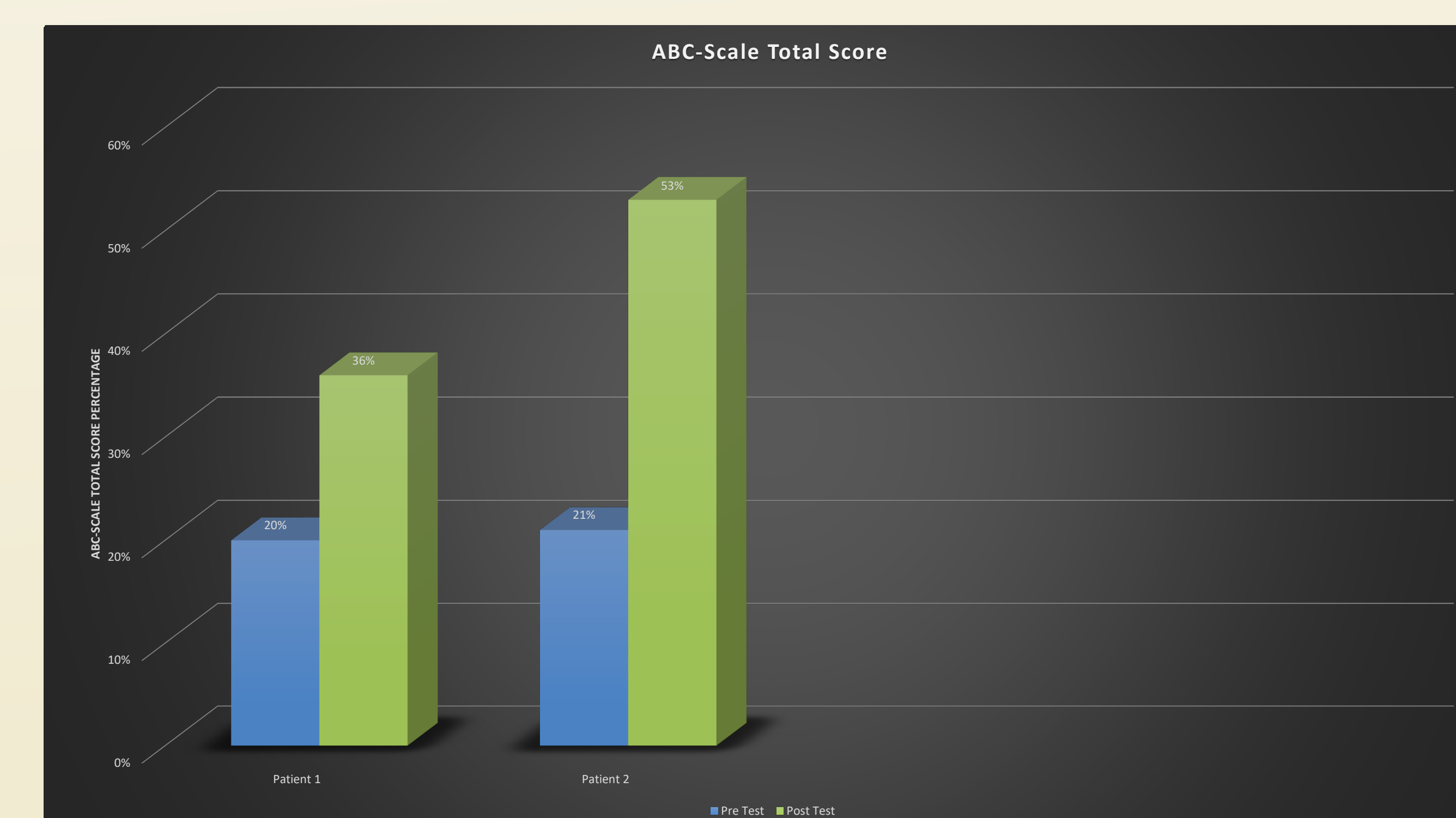
The BIMS and ABC Scale was administered prior to the initiation of the program to establish patient eligibility as well as participant baseline. At the culmination of the program, the same therapist also administered the ABC scale.

Models of Practice Guiding the Project

The Person-Environment-Occupation framework (PEO), a framework that holistically approaches a client in assessment and intervention.

RESULTS

The results show a increase in patient confidence on the ABC Scale in the performance of 16 specific activities, the graph also shows that the program participants are more confident in the performance of activities with a decrease in fear of losing balance. The participants also did not have any reported falls while participating in the program.



SUMMARY

This shows the unique contribution that occupational therapy fall prevention program can provide, by effectively decreasing the occurrence of falls, decreasing the fear of falling, and improving patient engagement in activities of daily living. This capstone project also serves as a call to action to other occupational therapists, to continue to utilize our profession's unique ability to address this public health issue.

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