

Announcement of Doctoral Dissertation Defense*

Candidate: Tinagene Pia L. Inguito

Date, Time, and Place: February 14, 2008 4-6pm RM 503, School of Nursing

Dissertation Title: Factors Related to Long-Term Adherence to Regular Exercise in Older Women Post Hip Fracture

Dissertation Abstract**:

Background

In older women, decrease in mobility, functioning, muscle mass/strength, and bone mineral density have been shown to occur during and beyond the first year after hip fracture. Repeatedly, it has been demonstrated that ongoing adherence to exercise post hip fracture improves clinical outcomes. Unfortunately, majority of older women post hip fracture do not continue to adhere to regular exercise. Understanding factors related to exercise behavior is critical so that interventions can be developed to increase exercise, particularly in the 1 to 4 year post fracture period.

Purpose

The purpose of this study was to test the impact of the Exercise Plus Program, a theoretically-based exercise intervention, on long-term adherence to regular exercise in older women 1 to 4 years post hip fracture.

Methods

A descriptive study was conducted using a convenience sample of 101 older women 1 to 4 years post hip fracture who participated in a one-time telephone interview. Model testing using path analysis and the Amos 7.0 statistical program was done to test the hypothesized relationships among age, education, treatment group (exposure to a self-efficacy based intervention), pain, fear of falling, resilience, social support for exercise, stage of change, self-efficacy expectations for exercise (SEE), outcome expectations for exercise (OEE), and exercise behavior.

Results

Majority of study participants were white, widowed, had a high school education, independent with activities of daily living, lived in the community, experienced no falls over the past year, were in the action stage of change, exercised less than 2 hours per week, and had a mean age of 80(SD=7.6). Model testing showed that the hypothesized model had an excellent fit to the data ($\chi^2_m = 31.88$ (df=23, p=.103), $\chi^2_m/df_m = 1.39$, CFI=.92, and RMSEA=.06). Path analysis revealed 8 of 32 paths were statistically significant and 32% of the variance in exercise behavior was explained by variables in the model. SEE, pain, and social support for exercise had direct effects on exercise behavior. Education, fear of falling, and resilience had indirect effects on exercise behavior, OEE, and stage of change through SEE.

Conclusions

This study supports the growing evidence that self-efficacy expectations have significant positive influences on older adults' exercise behavior beyond 1 year post hip fracture. Study limitations were that it consisted of a small homogenous sample, study participants were at different times in the post hip fracture recovery trajectory, and it included self-reported data. Ongoing research is needed to test interventions that will strengthen SEE, OEE, resilience, and social support for exercise; and decrease pain and fear of falling post hip fracture.

Dissertation Committee Chair:

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Marianne Shaughnessy, PhD, CRNP, Assistant Professor

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**The Open Presentation is open to the university community and invitees of the candidate. Any member of the Graduate Faculty may observe the Final Examination. Only committee members may vote. For more information, see Procedures for Examination of the Doctoral Dissertation.*

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Updated: February 24, 2006