



# A Tailored Intervention for the Elderly: A Feasibility Study

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## Background

Falls are a common problem, yet serious consequences in ageing society globally(1) as it is a significant cause of the hip fracture(2) and fear of falling in older adults(3). The fear of falling is a person's perception of uncertainty to maintain balance position and anxiousness to fall (4). The fear of falling after hip surgery has drastically impacted on multidimensional of health resulting in the high cost of care, decrease self-confidence to perform activity (5,6), reduced the functional ability after hip surgery(7), delayed functional recovery during the rehabilitation period(8), and decreases quality of life(9). The nursing intervention of the self-efficacy theoretical base could improve older adults' self-confidence to exercise and increase the level of activities of daily living during the rehabilitation period.

## Objective

The aims were to examine the feasibility of the tailored intervention program to reduce the fear of falling and improve functional ability and to investigate the effect of the tailored intervention program on the fear of falling, functional ability, and the incidence of re-falling in older adults undergoing hip surgery.

## Material and Method

**Design:** A quasi-experimental one group pretest-posttest study design.

**Sample:** The sample in this study consisted of two groups. The first sample group was 15 older adults with fall-related hip fracture admitted at the Ramathibodi Hospital for underwent hip surgery. The participants were recruited by purposive sampling method based on the inclusion criteria. The second sample group was 10 nurses with at least five years of experience in direct nursing care for the patient with bone and joint problems working at the Ramathibodi Hospital, Bangkok, Thailand.

**Intervention:** A Tailored intervention was a developed intervention individually designed based on self-efficacy theory. The intervention consists of the comprehensive discharge planning and the rehabilitation program.

The comprehensive discharge planning is a discharge plan consisting of health education about hip fracture and postoperative self-care given to participants and their caregivers before surgery to discharge from the hospital, while the rehabilitation program designed specifically to total hip arthroplasty, hemiarthroplasty, and open reduction and internal fixation consisted of an exercise program and activities daily life practice. The intervention was employed by the researcher and nurse research assistants. In the 2nd and 4th weeks after discharge from the hospital, the researcher followed-up the participants by calling to encourage and convince them to keep exercising and performing self-care activities.

## Data Collection

After approval from the local Institutional Review Board, the researcher approached the participants who met the inclusion criteria, and consent forms were signed before enrollment. Data collection was carried out at baseline, before discharge, and 6 weeks after surgery by using demographics and health information questionnaire, the incidence of re-falling record form, the feasibility of implementing the program questionnaire, the Fall-Efficacy Scale, and Modified Barthel Activities of Daily Living (MBAL) Thai version.

## Data Analysis

Data were analyzed by using descriptive statistics, Friedman test, and Wilcoxon Signed Rank Test. A statistically significant level was set at  $p < .05$ .

## Results

The results of this study revealed that there were 15 older adults participated in this study. Most of the participants were female (66.70%) and age ranged between 64 and 88 years ( $M \pm SD = 77.33 \pm 7.30$  years). The percentage mean score of the tailored intervention program for implementation in the clinic was 92.36 % and no dropout rate (0 %) of participants of this study. After discharge from the hospital (6 weeks after surgery), there was no re-falling in the participants. Figure 1 display the mean score of the fear of falling and functional ability across times point.

Figure 1. The Mean Score of the Fear of Falling and Functional Ability across Times Point



## Conclusion

Integrating theory into clinical practice by applying self-efficacy theory on health promotion intervention emphasized that professional nursing is vital to health promotion, meliorate physical ability, and enhance the quality of care in older adults underwent hip surgery.

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