**Background:** Hip fracture often attacks the older people and easily causes pain, limited daily physical activity and disability to the older patients. Consequently, it decreases their quality of life. Therefore, providing proper medical treatment, post-operative care, and rehabilitation are necessary for the older people undergoing hip fracture surgery. Review of literature shows that most studies have mainly focused on medical treatment or rehabilitation interventions of hip fracture in the older people. However, very few studies developed nursing intervention from Self-efficacy Care Model (SCM) and evaluate the efficacy of it in self-care efficacy and physical activity. Thus, these trigger the researchers' motivation.

**Purpose:** This study compared self-care efficacy and physical activity of older patients receiving Self-efficacy Care Model (SCM) or routine care (RC) after hip fracture surgery.

**Methods:** The older patients who were diagnosed as hip fracture, including femoral neck fracture, femoral intertrochanteric fracture, and femoral subtrochanteric fracture, required an initial hip fracture surgery by the orthopaedist were included. A quasi-experimental design with purposive sampling of 60 older patients; experimental group (receiving one week of SCM nursing intervention, n=30) and control group (RC, n=30), from two teaching hospitals in Taiwan participated. Data were collected from June, 2018 to November, 2018. Three measurement tools, including demographic questionnaire, Strategies Used by People to Promote Health (SUPPH), and Barthel Index (BI), were used to evaluate older patients before surgery and 1 month after hip fracture surgery. SUPPH has 29 questions for assessing four domains of coping with stress, reducing stress, making decisions, and enjoying life. BI has 10 questions for assessing physical activity status. The Chronbach-α of SUPPH and BI were .953 and .750, respectively, showing good reliability. Descriptive statistics, paired samples t-test, independent t-tests and Chi-square test were used for data analysis.

**Results:** The mean (SD) age of SCM group and RC group was 75.63±10.78 and 77.97±7.98, respectively. One month after hip fracture surgery, both groups had significant improvement in self-care efficacy (SUPPH) and physical activity (BI) (all \( p < .05 \)). The SCM group had better improvement in self-care efficacy, including coping with stress, reducing stress, making decisions, and enjoying life, than the RC group (all \( p<0.05 \)), but did not improve in physical activity (BI) (\( p=.609 \)). In the SCM group, patients who were female, age of 70-79 years, > 90 years, education level < primary school, unemployed, single, living with family, without comorbidity of heart disease, DM, renal disease, with open reduction internal fixation, had better self-care efficacy than RC group (all \( p<0.05 \)). In the SCM group, patients with femoral intertrochanteric fracture had better improvement in physical activity than RC group (\( p<0.05 \)).
Conclusion: Self-efficacy Care Model (SCM) nursing intervention can improve self-care efficacy of older hip fracture patients, especially in patients who were female, age of 70-79 years, > 90 years, education ≤ primary school, unemployed, single, living with family, without comorbidity. But, self-efficacy Care Model (SCM) intervention can only increase physical activity of patients with femoral intertrochanteric fracture. Until now, there is no self-efficacy Care Model (SCM) intervention developed from nurse’s perspective to help in caring of older patients after receiving hip fracture surgery. Therefore, we hope our results can help clinical nurses to have better quality of care for the older patients after hip fracture surgery. Our study is the first related nursing study in Taiwan. However, the data were collected from two large hospitals in the middle of Taiwan. The generalization of our results may be limited.

Title:
Self-Efficacy Care Model Helps Self-Care Efficacy and Physical Activity in Older People With Hip Fracture

Keywords:
hip fracture older people, self-care efficacy, physical activity, and self-efficacy care model

References:

Abstract Summary:
1. The self-efficacy Care Model (SCM) nursing intervention can significantly improve self-care efficacy of older patients after receiving hip fracture surgery. 2. The self-efficacy Care Model (SCM) nursing intervention can significantly increase physical activity in older patients with femoral intertrochanteric fracture receiving hip fracture surgery.

Content Outline:
I. Introduction
A. Hip fracture often attacks the older people and easily causes pain, limited daily physical activity and disability to the older patients. Consequently, it decreases their quality of life. Therefore, providing proper medical treatment, post-operative care, and rehabilitation are necessary for the older people undergoing hip fracture surgery.
B. Review of literature shows that most studies have mainly focused on medical treatment or rehabilitation interventions of hip fracture in the older people. However, very few studies developed nursing intervention from Self-efficacy Care Model (SCM) and evaluate the efficacy of it in self-care efficacy and physical activity.

II. Body
A. This study compared self-care efficacy and physical activity of older patients receiving Self-efficacy Care Model (SCM) or routine care (RC) after hip fracture surgery.
B. 1a. The older patients who were diagnosed as hip fracture, required an initial hip fracture surgery by the orthopaedist were included. A quasi-experimental design with purposive sampling of 60 older patients; experimental group (receiving one week of SCM nursing intervention, n=30) and control group (RC, n=30), from two teaching hospitals in Taiwan participated.
1b. Data were collected from June, 2018 to November, 2018. Three measurement tools, including demographic questionnaire, Strategies Used by People to Promote Health (SUPPH), and Barthel Index (BI), were used to evaluate older patients before surgery and 1 month after hip fracture surgery.
1c. Descriptive statistics, paired samples t-test, independent t-tests and Chi-square test were used for data analysis.
C. 1a. The mean (SD) age of SCM group and RC group was 75.63±10.78 and 77.97±7.98, respectively. One month after hip fracture surgery, both groups had significant improvement in self-care efficacy (SUPPH) and physical activity (BI) (all \( p < .05 \)).
1b. The SCM group had better improvement in self-care efficacy, including coping with stress, reducing stress, making decisions, and enjoying life, than the RC group (all \( p<0.05 \)), but did not improve in physical activity (BI) (\( p=.609 \)). In the SCM group, patients who were female, age of 70-79 years, > 90 years, education level < primary school, unemployed, single, living with family, without comorbidity of heart disease, DM, renal disease, with open reduction internal fixation, had better self-care efficacy than RC group (all \( p<0.05 \)).
1c. In the SCM group, patients with femoral intertrochanteric fracture had better improvement in physical activity than RC group (\( p<0.05 \)).

Conclusions
A. Self-efficacy Care Model (SCM) nursing intervention can improve self-care efficacy of older hip fracture patients, especially in patients who were female, age of 70-79 years, >90 years, education ≤ primary school, unemployed, single, living with family, without comorbidity.

B. Self-efficacy Care Model (SCM) intervention can only increase physical activity of patients with femoral intertrochanteric fracture. Until now, there is no self-efficacy Care Model (SCM) intervention developed from nurse’s perspective to help in caring of older patients after receiving hip fracture surgery.

C. Our study is the first related nursing study in Taiwan. However, the data were collected from two large hospitals in the middle of Taiwan. The generalization of our results may be limited.

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