

# EFFECTIVENESS OF SEVEN STRETCHING EXERCISE TO IMPROVE THE PHYSICAL PERFORMANCE AMONG OLDER ADULT RESIDING AT SAMARPANAM OLD AGE HOME, CUDDALORE

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## ABSTRACT

*A quasi experimental study was conducted to assess the effectiveness of seven stretching exercise to improve the physical performance among older adult at samarpanam old age home cuddalore. A total 30 subjects who fulfilled the inclusion criteria were selected by using convenient sampling technique. Data were collected through demographic variables and Oswestry low back pain disability questionnaire and analyzed through descriptive and inferential statistics. pre test level of physical performance were assessed followed by stretching exercise implemented to experimental group. The pretest findings shows that 11(73.3%) of older adult had moderate disability 3(20%) of them had severe disability and 1(6.7%) had complete disability in experimental group. Where as in post test 6(40%) of older adult had no disability, 1(6.7%) of them had mild disability, 5(33.3%) of older adult had moderate disability and 3(20%) had severe disability in experimental group. In comparison clearly depicts that the 't' value 1.714 (p value< 0. 036) shows that there was a significant improvement in physical performance. It also depicts that none of the demographic variables have significant relation with level of disability since the 'p' value is greater than 0.05.*

**Keywords:** Effectiveness, seven stretching exercise, physical performance, older adult.

## BACKGROUND OF THE STUDY:

Old age is the golden age and often referred to as second childhood. They require special care during this period. With the number of older adult in society rising frailty becomes an increasingly prevalent health condition with regular physical activity can prevent function decline and reduces frailty symptoms.

## NEED FOR THE STUDY:

India's older population will increase dramatically over the next four decades. The share of India's population ages 60 and older is projected to climb from 8 percent in 2010 to 19 percent in 2050.

India's populations ages 50 and older relatively small at 16 percent, but notes that India will experience rapid growth among this age group. The United Nations population division project that India's population ages 50 and older will reach 34 percent by 2050, by the year of 2050, and 65 years older people is expected to increase from 5 percent to 14 percent, (80 years) 1 percent to 3 percent.

## STATEMENT OF THE PROBLEM:

Effectiveness of seven stretching exercise to improve the physical performance among older adult residing at samarpanam old age home, Cuddalore.

## OBJECTIVES:

- ❖ To assess the pre test level of physical performance among older adult.
- ❖ To find the effectiveness of seven stretching exercise to improve the physical performance among older adult.
- ❖ To compare the pre test and post test level of physical performance among experimental and control group.
- ❖ To associate the pre test level of physical performance among older adult with selected demographic variables.

## MATERIALS AND METHOD:

**Research Approach:** Quantitative research approach.

**Research Design:** Quasi experimental Non equivalent control group design.

**Setting:** Samarpanam old age home pudupalayam, Cuddalore.

**Population:** Both male and female older adult residing at samarpanam old age home, Cuddalore.

#### VARIABLES:

**Independent variable:** Seven stretching excersise

**Dependent variable:** Improvement of physical performance

**Sample:** Older adult who were above 60 years of age residing at samarpanam old age home, cuddalore.

**Sample Size:** 30 Male and female older adult (15 – experimental 15-control).

#### CRITERIA FOR SAMPLE SELECTION:

##### Inclusive Criteria:

###### Older adult:

- Who were above 60 years.
- Who were residing at samarpanam old age home ,cuddalore
- Who were available during data collection time .
- Who were willing to participate in the study .
- Who were able to communicating in English or Tamil.

##### Exclusive Criteria:

###### Older adult:

- ❖ Who were below 60 years of age .
- ❖ Who were critically ill .
- ❖ Who were not willing to participate in the study .
- ❖ Who were using assisted devices for activities of daily living .
- ❖ With hearing impairment and mentally challenged .

#### DESCRIPTION OF TOOL:

##### SECTION- A:

##### DEMOGRAPHIC VARIABLES:

The selection consists of 10 items pertinent to older adult such as age, sex, BMI, education, marital status, diet, religion, history of comorbid illness, current treatment for comorbid illness.

##### SECTION- B :

Oswestrylow back pain disability questionnaire scale. Comprise of 7 items such as ballistic stretching, dynamicstretching,active stretching,passive (or relaxed)stretching, staticstretching, isometric stretching,PNF stretching.

#### SCORING INTERPRETATION:

##### Score Disability level

0 – 4	No Disability
5-14	Mild Disability
15-24	Moderate Disability
25-34	Severe Disability
35-50	Completely Disabled

#### DATA COLLECTION PROCEDURE:

Formal written permission was obtained from principal, college of nursing for conducting the main study. Permission also obtained from samarpanam old age home administrative officer. The main study was conducted from to 03/09/2018 to 10/09/2018 at samarpanam old age home Cuddalore. A total of 30 study participants were selected by convenient sampling technique. All participants were informed about the study. Informed consent was obtained from study participant

##### FIRST PHASE:

Demographic data was obtained and pre – test level of physical performance was measured from the patients using Oswestry low back pain disability questionnaire.

##### SECOND PHASE:

30 Older adult were grouped into two group A and B. Group A (experimental) practices the Seven stretching exercise for 10 minutes daily at early morning and group B (control) not practicing the seven stretching stretching exercises.

##### THIRD PHASE:

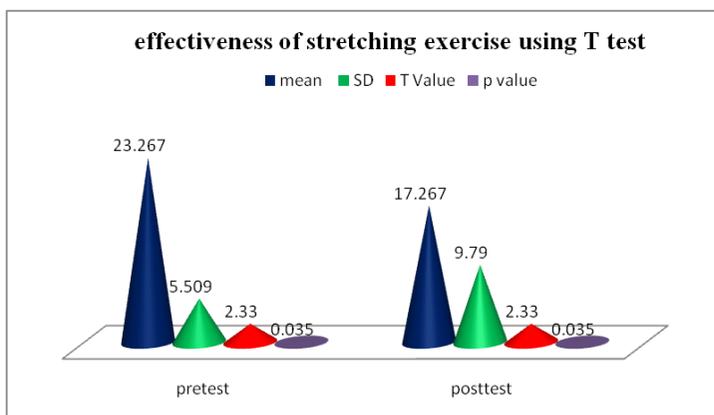
Post test level of physical performance was measured by Oswestry low back pain disability questionnaire reading 7 days after intervention.

**RESULTS AND FINDINGS:****Findings related to pre test level of physical performance among older adult:**

- ❖ The pretest findings shows that 11(73.3%) of older adult had moderate disability 3(20%) of them had severe disability and 1(6.7%) had complete disability in experimental group.
- ❖ Where as in control group 4(26.7%) of older adult had mild disability, 6(40%) of them had moderate disability and 5(33.3%) of them and sever disability in post test.

**Findings related to post test level of physical performance among older adult:-**

- ❖ The post test findings shows that 1(6.7%) of older adult had no disability 6(40%) of them had mild disability , 7(46.6%) of older adult had moderate disability and 1(6.7%) had severe.
- ❖ shows that in experimental group, 6(40%) of older adult. had no disability, 1(6.7%) of them had mild disability, 5(33.3%) of older adult had moderate disability and 3(20%) had severe disability in post test

**Finding related to effectiveness of seven stretching exercise to improve the physical performance among older adult:**

**Fig 1** shows that The 'p' value 0.036 that stretching exercise program on improving level of physical performance significantly reduce the severity of disability level among older adult. The study also shows the comparison of pre and post test level of disability among people in experimental group the 'T' value was 2.33. The results showed that stretching exercise program on improving level of physical performance significantly reduced the severity of disability level among older adult ( $p = 0.035$ ).

**Findings related to association between the pre test level of physical performance with selected demographic variables:**

The study to finding depicts that none of the demographic variables have significant relation with level of disability since the 'p' value is greater than 0.05.

**CONCLUSION:**

Seven Stretching exercise was effective in improving the physical performance among older adult. It also Depicts that non significant p-value of the chi-square test for each variable had clearly infers that improving the physical performance of older adult has not been influence by the any of the selected demographic variables

**NURSING IMPLICATION:**

The findings of the study has implication in the field of nursing education ,nursing practice ,nursing administration ,nursing research.

**Nursing Practice:**

The finding of the study will help the nursing practice to staff can be trained to assess the older adult and provide stretching exercise in hospital , nursing homes and rehabilitation centers .

**Nursing Education:**

The finding of the study will help the nursing education to develop the practice and benefits of stretching exercise could be introduced in the curriculum.

**Nursing Administration:**

The nurse administrations should support the staff for arranging regular health education regarding stretching exercise. Nurse administration can organize support groups for older adult frequent educative , Expanded stretching exercise ,can be planned for the older adult.

**Nursing Research:**

Future studies can be conducted on effect of stretching exercise on older adult for longer duration and older adult using assistive device for daily activities.

**RECOMMENDATIONS:**

- Similar study can be conducted for a large sample to generalize the findings.
- A comparative study can be conducted to evaluate the effective of stretching exercise among older adult.

**KEY WORDS:** Effectiveness of seven stretching exercise to improve the physical performance among older adult.

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