



## RESEARCH ARTICLE

### EFFECTIVENESS OF NURSING CARE ON ORTHOPEDIC CLIENTS WITH IMMOBILITY

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#### ABSTRACT

The study was conducted on the effectiveness of nursing care on orthopedic clients with immobility. Pre- experimental one group pre-test and post- test design was adopted and study was conducted in Melmaruvathur Adhiparasakthi institute of medical science and research. In pre test 6.7 % clients had moderate level and 93.3% had severe level after given the nursing care 90% had mild level 10% had moderate level. There was significantly improvement of mobility, prevention of bed sore and disability, a remarkably maintained health status in relation to effectiveness of orthopedic clients with immobility. The data was analyzed through statistical analysis and results were found as in pre test none, shown occasionally the improvement score of mean 19.20 with the standard deviation of 4.39 and the paired "t" test was applied. The "t" value 23.96. Hence it was statistically proved that there is a significant improvement of orthopedic clients with immobility.

## INTRODUCTION

Mobility refers to the persons ability to move freely and immobility refers to the inability to move about freely. Nearly 80 million people suffer accidental injury in each year. Early mobilization is the trend, now- a – days. Orthopedic clients are immobilized by casts , traction or other means for long periods of time. It include maintaining muscle tone and circulation. To prevent bed sores by frequently changing the position of mobilized clients. A mobile person generally turns approximately once every 10-12 minutes while sleeping. This action provides for healthy blood circulation of body organs and movement of body fluids. When a person becomes temporarily or permanently immobilized, however, the blood supply to that part of the body that is under pressure is restricted. . It is important to make sure for measures are taken to prevent complications. There are two critical dangers for people who are immobilized; the primary problem is bed sore and secondary to thrombus formation.

**STATEMENT OF THE PROBLEM:** Effectiveness of Nursing care on Orthopedic Clients with Immobility.

#### OBJECTIVES

- To assess the pre intervention health status of orthopedic clients with immobility
- To evaluate the effectiveness of nursing care on orthopedic clients with improvement of mobility.

- To find out the association between the effectiveness of nursing care on orthopedic clients with selected demographic variables

#### HYPOTHESIS

#### RESEARCH HYPOTHESIS

**H1** There will be significant difference between the pre test and post test score of orthopedic clients with immobility.

## METHODOLOGY

Research design for the study is Pre-experimental research design (one group pretest –post test design) this study was conducted in Melmaruvathur Adhiparasakthi Institute of Medical Sciences and Research, Melmaruvathur, Kancheepuram District, Tamil Nadu. Sample size 30 with orthopedic clients with immobility Non-probability convenient sampling technique was used in this study. The structured tool was developed based on the objectives of the study and also based on research experts concerns, review of literature. The instrument consists of four parts, Proform for demographic variables, Observation check list, Self structured assessment rating scale, Protocol for nursing care on immobility.

**Section-I:** It consists of information about demographic variables such as age, gender, religion, educational

**Table 1. Comparison between mean and standard deviation of pretest and posttest of effectiveness of nursing care on orthopedic clients with immobility**

	Mean	N	Standard Deviation	Standard Error Mean
PRETEST	21.27	30	1.08	.20
POSTTEST	40.47	30	4.74	.87

**Table 2. Mean and standard deviation of improvement score for orthopedic clients with immobility Paired sample test**

	Mean	Std. Deviation	Std. Error mean	95% Confidence Interval of the Difference		t	df
				Lower	Upper		
Improvement score	19.20	4.39	80	17.56	20.84	23.96*	29

qualification, occupation, family income per month, marital status, type of family, residential area, personal habits, previous hospital stay, duration of hospitalization, previous accidental injury.

**Section-II:** Observational check list of immobility. vital parameters, comfortable positioning, personal hygiene, comfortable devices, back care, early ambulation, oral care, intake and output chart, administration of the medications, provide health teaching about exercise.

**SECTION-III:-** Self-structured rating scale such as temperature, pain, intensity of pain, range of motion, muscle strength, gait, edema, skin texture, tenderness, discharge from affected site, comfortable position, , comfortable devices, assessment of mobility, self care activities, bowel activity, voiding the urine.

**SECTION-IV:-** Protocol for nursing care Vital parameters, pain management including rest and sleep, comfortable position, maintain proper body posture and alignment, maintenance of skin integrity, active and passive exercises, early ambulation, maintenance of normal bowel and urinary elimination, promotion of self care activities, maintaining personal hygiene and provide health education.

## RESULTS AND DISCUSSION

The study findings the comparison between the Mean and standard deviation of immobility clients .the mean of pretest level was 21.27 and standard deviation was 1.08.and the post test score mean was 40.47 and standard deviation was 4.74.the improvement score for immobility mean 19.20 standard deviation 4.39 and t value 23.96..there is significant of pre test and post test level.

The association between the effectiveness of nursing care on orthopedic clients with immobility. In the end of the study the client showed improvement in health status were maintaining normal body temperature, nutritional status, wound healing, fluid & electrolyte balance, free from complications & improving the coping abilities of clients & family members.

## CONCLUSION

In pre test 6.7 % clients had moderate level and 93.3% had severe level .after given the nursing care 90% had mild level 10% had moderate level. There was significantly improvement of mobility, prevention of bedsore and disability, a remarkably maintained health status in relation to effectiveness of orthopedic clients with immobility.

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