

## **Effectiveness of Orthopedic Rehabilitative Nursing Care on Wellbeing of Patients with Lower Limb Fractures in Selected Hospitals at Bhubaneswar, Odisha**

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### **Abstract**

*Health as defined by each person integrates all the human dimensions physical, intellectual, emotional, socio cultural, spiritual and environmental aspects of the whole person. The nurse giving holistic nursing care must be equally considered all these inter- related and interdependent dimensions of the whole person. Rehabilitation is the process of achieving maximum restoration of physical, psychological and social function must be carefully planned and executed. It should be goal directed and based on a thorough assessment of the patient's medical, functional and psychosocial status. A pre- experimental research design with one group pretest and posttest is adopted for the study. The sample size for the study comprises of 120 patients admitted in ortho ward with the diagnosis of fracture femur and Convenient Sampling Technique used in this study. The result shows that 1<sup>st</sup> post-test and 4<sup>th</sup> post test scores of level of orthopedic rehabilitative nursing care of patients with lower limb fractures difference in mean percentage found that for social wellbeing was 41%, spiritual wellbeing was 56%, mental wellbeing was 48% and activities of daily living was 37%. The present study was conducted to assess the effectiveness of orthopaedic rehabilitative nursing care on wellbeing of patients with lower limb fractures. The study concluded that orthopaedic rehabilitative nursing care is highly effective and wellbeing of patients is independence, physically and socially, mentally, spiritually allowing them to return to their normal place of living where ever possible.*

**Keywords:** *Orthopaedic rehabilitative nursing care, lower limb fractures, Social, Mental, Spiritual wellbeing, Activities of daily living.*

### **Introduction**

Health as defined by each person integrates all the human dimensions physical, intellectual, emotional, sociocultural, spiritual and environmental aspects of the whole person. The nurse giving holistic nursing care must be equally considered all these inter- related and interdependent dimensions of the whole person. Rehabilitation is the process of achieving maximum restoration of physical, psychological and social function must be carefully planned and executed. It should be goal directed and based on a thorough assessment of the patients medical, functional and psychosocial status.

The incidence of accident in every 90 seconds and every 7 minutes a fatality with just 1% of the global vehicle population. India has 6% of the total accident in the world. The annual incidence is highest among school and the graduate students, 62.2 % had lower limb fracture followed by accident, superficial injuries were most common in 47.4%, crush injuries 14.1% and concealed injuries 12.4%. Majority of the injured victims 92.4% had treatment within 6 hours while 70% availed treatment within one hour after injury. In view of the above facts in mind, the investigator interested to do this particular study that is orthopedic rehabilitation nursing care. The aim of nursing care is to maximize the client's independence, physically and socially, mentally, spiritually allowing them to return to their normal place of living where ever possible. Rehabilitation care must include the cognitive and emotional aspects of recovery.

### **Statement of the problem**

“A study to assess the effectiveness of orthopaedic rehabilitative nursing care on wellbeing of patients with lower limb fractures in selected hospitals at Bhubaneswar, Odisha”

**Objectives**

- 1) To assess the social, mental, spiritual wellbeing and activities of daily living of patients with lower limb fractures.
- 2) To evaluate the effectiveness of orthopedic rehabilitative nursing care of patients with lower limb fractures.
- 3) To find the association between the social, mental, spiritual wellbeing and activities of daily living with selected set of socio- demographic variables like age, gender, religion, occupation, income education status, marital status, personal habits.

**Methodology**

**Research approach.** Quantitative research approach was adopted for the study.

**Research design.** A pre- experimental research design with one group pretest and posttest is adopted for the study.

**Population.** In this study all patients who have Muscular skeletal injury like fracture femur underwent open reduction and internal fixation admitted in ortho ward in selected hospitals at Bhubaneswar

**Sample.** The sample for the study was patients underwent open reduction and internal fixation with fracture femur that is fulfilling the inclusion criteria.

**Sample size.** The sample size for the study comprises of 120 patients admitted in ortho ward with the diagnosis of fracture femur.

**Sampling technique.** Convenient Sampling Technique.

**Criteria for sample selection****Inclusion criteria**

- 1) Orthopedic patients with fracture femur underwent open reduction and internal fixation.
- 2) Those who are speaking Tamil / English only selected.

**Exclusion criteria**

- 1) Orthopedic patients who have multiple fracture.
- 2) Pediatric Orthopedic patients.
- 3) Patients with pin traction and external fixation.
- 4) Patients undergo closed reduction.

**Data collection instrument and techniques**

The tool will be used for the study is,

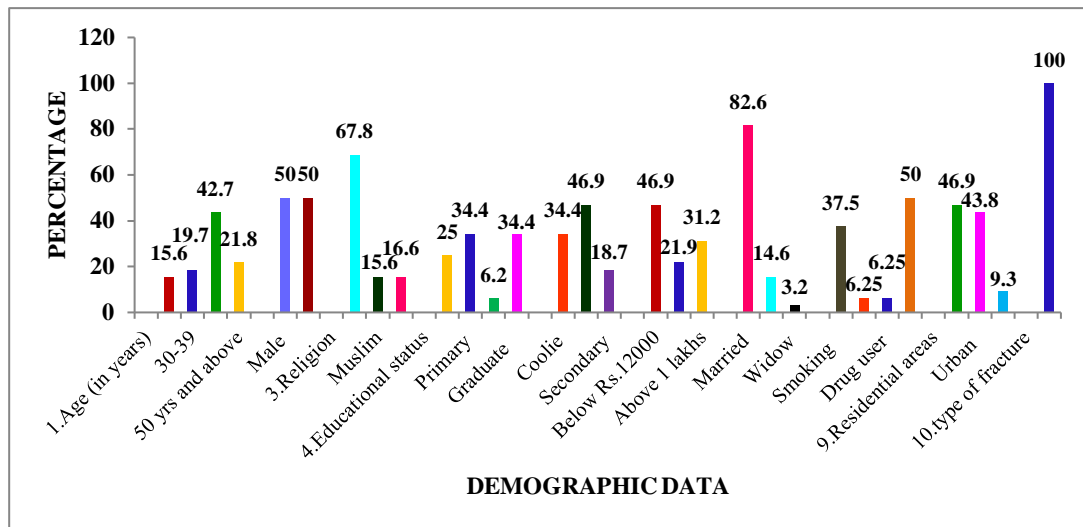
- 1) Demographic data
- 2) Social support scale
- 3) Mental well-being scale
- 4) Spiritual well-being scale
- 5) Activities of daily living scale
- 6) Orthopedic rehabilitative nursing care

**Data collection procedure**

The pre-test was conducted in patients with fracture femur admitted in selected hospital and underwent open reduction and internal fixation will be listed every day. Socio demographic variables, clinical details of the patients like social well-being, mental well-being, spiritual well-being and physical wellbeing of patents will be assessed after 48 hrs. of surgery.

Implementation of orthopedic rehabilitative Nursing care patients will be given training on early ambulation with weight bearing exercises, and isometric exercises to improve the physical wellbeing, the family members and friends will be involved with family counseling in order to improve the social well-being, teach and those clients with Bensons relaxation therapy to improve mental well-being and train the patients to do meditation by telling mantras in order to improve spirituality. Posttest will be assessed at the time of discharge and first follow up by using social support scale, mental well-being

scale, spiritual well-being scale, and activities of daily living scale in order to check the significant improvement in social, mental, spiritual, and physical wellbeing. Descriptive and inferential statistics were used for data analysis.



**Figure 1.** Frequency and percentage wise distribution regarding orthopedic rehabilitative nursing care of patients with lower limb fractures according to their demographic data

## Results

The result shows that 1<sup>st</sup> post-test and 4<sup>th</sup> post test scores of level of orthopedic rehabilitative nursing care of patients with lower limb fractures difference in mean percentage found that for social wellbeing was 41%, spiritual wellbeing was 56%, mental wellbeing was 48% and activities of daily living was 37%.

The data revealed that in pretest the level of social, spiritual, mental wellbeing and activities of daily living for orthopedic rehabilitative nursing care of patients with lower limb fracture had inadequate orthopedic rehabilitative nursing care, but the 1<sup>st</sup> post-test had moderately adequate and 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> post-test had adequate orthopedic rehabilitative nursing care. There was no association between level of social, spiritual, mental wellbeing and activities of daily living for orthopedic rehabilitative nursing care of patients with lower limb fracture. Correlation was found in 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> post test with level of social, spiritual, mental and daily living activities. Results reveal that our alternative hypothesis was accepted.

## Conclusion

The present study was conducted to assess the effectiveness of orthopaedic rehabilitative nursing care on wellbeing of patients with lower limb fractures. The study concluded that orthopaedic rehabilitative nursing care is highly effective and wellbeing of patients is independence, physically and socially, mentally, spiritually allowing them to return to their normal place of living where ever possible.

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