

Assessment of Stress and Coping Abilities of Patients with Fracture of Lower Extremity at Selected Hospital, South India.

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Abstract:

PURPOSE: This study is undertaken to assess the level of stress and coping abilities of patients with fracture of lower extremity.

METHODS: Participants were patients admitted with fracture of lower extremity between the age group of 20-60 yrs. Data was collected for about one week using Lovibond Depression Anxiety stress scale to assess the level of stress and Katowice coping scale to find the coping ability of patients.

RESULTS: Out of 20 samples nearly half of the patients 45% experienced moderate level of stress and 35% had severe stress. Male patients reported highest level of coping 20% compared to women 15%. The analysis revealed that the relationship between stress and coping ability of patients with lower extremity fracture is significant with r value 0.82.

CONCLUSION: The results of the study showed that stress level was high among the patients with lower extremity fracture. Hence interventions were implemented to improve adequate coping strategies in managing stress among the patients using relevant audio-visual aids. Inculcating positive coping strategies can promote the well-being of patients which in turn may help in speedy recovery and reduce the hospital stay of the patients.

Index Terms – Level of stress, Coping abilities and Level of coping, correlation of stress with coping

I. INTRODUCTION

Musculoskeletal injury refers to damage of the muscles, bones due to direct trauma or strenuous activity. It may also involve the other structures such as tendons, blood vessels, nerves and other soft tissues. It is one of the major causes of morbidity and the second most common cause of disability worldwide as measured by years of people living with disability. In USA- 1.5 million people were injured per year. In India – 45 lakhs of peoples are injured per year. This disorder represents a burden on society decreasing the productivity of individual and raising the cost spent for healthcare system. The prevalence of Musculoskeletal disorders ranges from 14% to as high as 42% globally. On the other hand, in India, epidemiological studies indicate the community-based prevalence of about 20% and occupation-specific prevalence found to be as high as 90% in various studies. It was also estimated that 40% of people over the age of 60 years suffer from musculoskeletal disorders by the World Health Organization (WHO).

II. NEED FOR THE STUDY

The WHO estimated that in some segments of the workforce, ergonomic hazards account for more than 50% of all and the burden would be much higher and will be increasing immensely in the fore coming years. In India due to the rapid demographic change there is raise in the prevalence of Non communicable diseases and musculoskeletal injury which is a part of it is still not given much focus than other diseases such as diabetes mellitus, hypertension etc. Although the Government of India has established many National Health programs since 1980 to prevent and control musculoskeletal disorders, focus towards musculoskeletal disorders is not appreciable. More over the investigator during the clinical exposure with patients suffering from musculoskeletal injury found lack of awareness, poor coping abilities to overcome the burden caused by injury. The patients were also overwhelmed with stress due to their dependency state and financial burden on the caregiver due to injury. So, this study focusses on identifying the level of stress, explore the coping abilities expressed by the patient during their course of treatment in hospital.

III. OPERATIONAL DEFINITION

Stress: Stress is change in the body's reaction that requires physical, mental or emotional adjustment

Coping ability: Coping refers to one's own effort, to solve their personal as well as interpersonal problems to combat stress and conflict.

Lower extremity fracture: fracture is complete or incomplete break in the continuity of bones in the lower limb. For the purpose of the study patients with fracture in any one of the limbs were selected.

IV. OBJECTIVES

- To assess the level of stress among patients with fracture of lower extremity.
- To assess the coping abilities among patients with fracture of lower extremity.
- To correlate the stress and coping abilities of patients.
- To compare the stress and coping abilities of patients with the selected demographic variables.
- To impart knowledge on coping strategies.

V. INCLUSION CRITERIA

Both male and female patients with lower extremity fracture.
 Patient between the age group of 20 to 60 years.
 Patient who could speak Tamil or English.

VI. ASSUMPTIONS

Stress may be experienced by the patients during the mode of treatment.
 Stress and coping abilities used by each individual person may vary due to factors like age, sex, education etc.,

VII. DELIMITATION

The duration of the study is limited to 1 week.
 The sample size taken for the study is only 20.

VIII. METHODOLOGY

A descriptive research design was adopted to study the perceived level of stress among patients with lower limb fracture admitted in orthopaedic ward of Sri Narayani Hospital, Vellore District, South India. The study was conducted with 20 patients. All patients who had fracture of lower extremity and fulfilled the inclusion criteria were selected using convenient sampling technique. The researcher has used the Lovibond Depression Anxiety stress scale to assess the stress among the patient with lower extremity fracture which ranges from mild stress to severe stress. Katowice coping scale was used to assess the coping among the subjects with lower extremity fracture. The scoring is interpreted as inadequate coping, moderate and adequate coping. The tool was assessed for its reliability by using Karl Pearson's correlation method and the r value is 0.82. The data was collected for a period of 1 week. The demographic variables consist of personal and clinical variables such as type of fracture, age, sex, religion, occupation, education, income of family, personal habits, marital status and residential area.

IX. RESULTS AND DISCUSSION

The results revealed that one third of the patients 35% experienced severe stress, 45% had moderate stress and 20% had mild stress. The level of coping was high among the male 20% compared to female (15%). Significant association was found between coping and some of the demographic and clinical variables such as type of fracture, income of family, marital status, religion, duration of hospital stays. The analysis revealed that the relationship between stress and coping ability of patients with lower extremity fracture is significant. The Karl Pearson Coefficient correlation between stress and coping is 0.82. It shows positive correlation.

Table - 1: Level of stress among patient with lower extremity fracture.

Stress Level	Respondent Stress Level	
	Frequency	Percentage
Mild	4	20%
Moderate	9	45%
Severe	7	35%

Table - 2: Level of Coping among patient with lower extremity fracture.

Level of coping	Respondents Stress Level	
	Frequency	Percentage
Inadequate	9	20%
Moderate	7	45%
Adequate	4	20%

Table - 3: Correlation of stress and coping of patient with lower extremity fracture

Variables	Frequency	Karl Pearson Coefficient Correlation
Stress	20	0.82
Coping	20	

X. LIMITATION

The size of the sample was limited to 20 only.

The study is limited to patient with lower extremity fracture.

XI. CONCLUSION

The present study assessed the stress and coping abilities of patient with lower extremity fracture. The study finding reveals that there was significant relationship between stress and coping. Based on the statistical findings it is evident that provision of stress management strategies will help the patient to adapt the grief responses. So, interventions were planned to promote coping strategies among patients with relevant audio-visual aids. Effective Coping skills can promote physical and mental health of the patients which would help in their speedy recovery thereby reducing the stay in hospital as well the burden of the family.

XII. Reference

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