



A STUDY TO ASSESS THE QUALITY OF LIFE OF THE PATIENTS WITH UPPER LIMB PLASTER CAST IN SELECTED HOSPITALS, KOLKATA, WEST BENGAL.

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ABSTRACT A descriptive survey study was undertaken to assess the quality of life of the patients with upper limb plaster cast admitted in orthopaedic ward of selected hospitals, Kolkata. The objectives of the study were to determine the quality of life of patients with upper limb plaster cast and find out the association between quality of life and selected demographic variables. The conceptual framework of the study was based on System Model, described by Betty Neuman. The study was conducted at orthopaedic ward of S.S.K.M Hospital, N. R. S. Medical College and Hospital, Calcutta National Medical College and Hospital and R. G. Kar Medical College and Hospital, Kolkata. The population of the study was consisted of patients with upper limb plaster cast admitted in orthopaedic ward of the selected hospitals. Non probability purposive sampling technique was used to obtain 60 samples. Demographic proforma and structured questionnaire items for quality of life assessment (modified) based on S. F –36 Health Survey were used to collect data. Findings of the study revealed that the quality of life of most of the patients (51.67 %) had moderately affected and 48.33 % of patients had severely affected. The computed Chi square value indicated that there was a significant association between quality of life and monthly family income ($\chi^2_{df(1)} = 4.48; p < 0.05$). The study was believed to be helpful in the nursing education, practices, administration and research.

KEYWORDS :

STATEMENT OF THE PROBLEM: A study to assess the quality of life of the patients with upper limb plaster cast in selected hospitals, Kolkata, West Bengal.

NEED OF THE STUDY

Orthopaedic plaster casts are used in the management of fractures, to support and correct deformities. When the plaster cast is applied in upper limb, it restricts the patients from performing many activities of daily living and other normal functioning. The restriction of movements of dominant hand, inability in doing ADL make them dependent. Besides this, the patients suffer from pain and discomfort in upper limbs. The physical limitation and restriction affects their physical health and social functioning. It hampers their psychological well-being in the form of nervousness, emotional problems. It also jeopardises their health and well-being. So the researcher wants to know the impact on the quality of life of such patients.

OBJECTIVES

- To determine the quality of life of patients with upper limb plaster cast.
- To find out the association between quality of life of patients with upper limb plaster cast and selected demographic variables: age, sex, education, occupational status, no of family member and monthly family income.

RESEARCH METHODOLOGY

RESEARCH DESIGN AND POPULATION

Descriptive survey design was adopted to assess the quality of life of the patients with upper limb plaster cast admitted in the hospitals.

SAMPLING TECHNIQUE AND SETTING

Non probability purposive sampling technique was used because here samples were chosen from the selected hospitals, S.S.K.M. Hospital (I.P.G.M.E & R), N.R.S Medical College and Hospital, Calcutta National Medical College and Hospital and R. G. Kar Medical College and Hospital, Kolkata. All of these hospitals are equipped with adequate orthopedic ward. Patients who willingly gave their consent to participate in the study, who fulfilled the predetermined criteria and which was taken as most appropriate one for this study.

SAMPLE SIZE

60 patients with upper limb plaster cast were included in the study.

INCLUSION CRITERIA

In the orthopaedic ward

- Patients who were admitted with only upper limb plaster cast in one limb.
- Patients who were willing to participate in this study and were present during the period of data collection.
- Who could understand Bengali/ English.

TOOL FOR DATA COLLECTION

Tool- I Demographic Proforma: It had two parts

Tool- IA Structured interview Schedule for demographic variables i.e age, sex, education, occupational status, no of family member, monthly family income.

Tool- IB: Medical record analysis proforma on patient profile

There were three items

- Mode of injury
- Type of injury
- Presence of chronic disease (yes/ no).

Tool- II: Structured Questionnaire Items for Quality of life Assessment (modified) based on S. F –36 Health Survey

It was composed of questions on Physical Health and Mental Health. There were twenty two items to collect data from the patients regarding quality of life. Each question had four options and each answer was scored separately (a lot- 4, moderate -3, a little -2, not at all -1). That indicated the level of quality of life from worst to good. Question items for assessment of physical health were 11 and for mental health were 11.

PROCEDURE FOR DATA COLLECTION

Permission was sought from selected hospitals. The investigator explained the purpose of the study to the patients and obtained their consent and gave structured questionnaire items to be filled. For the illiterate samples the researcher explained the questionnaire and the scoring system. She herself put a tick for the suitable option which the subject suggested. It took nearly 20 - 25 minutes to complete.

DATA ANALYSIS

The obtained data were analysed with the help of both descriptive and inferential statistics based on the objectives of the study.

- To determine the quality of life of patients with upper limb plaster cast.
- To find out the association between quality of life of patients with upper limb plaster cast and selected demographic variables: age, sex, education, occupational status, no of family member and monthly family income.

RESULTS

Table 1: Area wise Mean, Mean Percentage, Median and Standard Deviation of score of Quality of life, Physical health and mental health n=60

Area	Maximum possible score	Minimum possible score	Mean score	Mean % Score	Median	SD
Quality of life	88	22	64.93	73.78	65	9.37
Physical health	44	11	33.76	76.72	35	5.43
Mental health	44	11	34.15	77.61	35	5.73

Table 1 shows that the mean, mean % and median of the three areas- quality of life, physical health and mental health score tend to be higher that indicates more higher the score, more affected quality of life, physical health and mental health.

Table 2: Frequency and percentage distribution of Quality of life score

n=60		
Area (Quality of Life)	Frequency	Percentage
Severely affected (66-88)	29	48.33
Moderately affected (44-65)	31	51.67
Mildly affected (22-43)	Nil	-

Maximum possible score-88,

Minimum possible score-22

Table 2 shows that most of subjects (51.67 %) had moderately affected quality of life and 48.33 % of subjects had severely affected quality of life.

Findings related to association between quality of life of patients with upper limb plaster cast and selected demographic variables.

Table-3 Chi-square values showing the association between quality of life and selected demographic variables in terms of occupational status, no. of family member and monthly family income.

Demographic Variables	Score of quality of life			Chi square	df	Significance
	< Median	≥ Median	Total			
Occupational status				1.14	1	Not significant
Working	13(36%)	23(64%)	36			
Retired & Unemployed	12(50%)	12(50%)	24			
Total	25	35	60			
No. of Family Member				1.31	1	Not significant
Up to 4	13(50%)	13(50%)	26			
5 and above	12(35%)	22(65%)	34			
Total	25	35	60			
Monthly Family Income				4.48*	1	Significant
Up to Rs. 2500	10(29%)	24(71%)	34			
Above Rs.2500	15(58%)	11(42%)	26			
Total	25	35	60			

$X^2df_{(1)}=3.84, p<0.05, *$ Significant

The computed Chi square value ($\chi^2df_{(1)}=4.48, p<0.05$) indicated that there was a significant association between quality of life and monthly family income.

CONCLUSION

The quality of life of the majority of the patients with upper limb plaster cast was affected severely or moderately in the form of physical, psychological and social health and well-being. There was a significant association between quality of life and monthly family income of the patients with upper limb plaster cast.

RECOMMENDATIONS

This study can be replicated by using a larger sample with different demographic characteristics for generalization of findings.

A comparative study can be conducted to see the difference in the quality of life between institutionalized and home dwelling patients.

An interventional study can be conducted among patients with upper limb plaster cast to maintain quality of life.

A comparative study can be conducted to see the difference in the quality of life between the patients with upper limb and lower limb plaster cast.

Quality of life intervention protocols that facilitates maintenance of quality of life can be developed and tested.

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