



Medical Surgical Nursing

A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING CARE OF PLASTER CAST AMONG CAREGIVERS IN SELECTED HOSPITAL BHOPAL, (M.P.)

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ABSTRACT **Introduction:** A fracture is a breakdown in the stability of the bone and it will occur at any age and in any bone. Some minor fractures are treated on the ambulatory basis, others fractures are more complex for that the surgical intervention is required with hospitalization and rehabilitation. Hospitals in the India lack specialized nursing care due to the untrained, unskilled nurses especially in the orthopaedic care centers. So, to maintain the ratio between the nurse and client is highly impossible. As there is grave need to train and educate the caregivers regarding the care of plaster cast, an effort is made by the researcher to prepare an informational booklet regarding the plaster cast and its care.

Objectives:

- Assess the knowledge regarding care of plaster cast among caregivers.
- Associate the knowledge regarding care of plaster cast among caregivers with their selected demographic variables.
- Disseminate information through booklet on care of plaster cast among caregivers.

Methodology: A sample of 60 caregivers was selected using by purposive sampling technique. Structured knowledge questionnaire were used by the investigator for the data collection. Information Booklet was distributed to caregivers to enhance the knowledge. **Result & Conclusion:** The computed knowledge score of care givers, 60% of caregivers had inadequate knowledge, 40% had moderate knowledge and none of them had adequate knowledge regarding care of plaster cast which showed that caregivers need more information about the care of plaster cast. The computed chi square values of knowledge of caregivers with their selected demographic variables. In relation to caregiver's gender, education and type of family chi square values were 4.29, 10.65, 8.16 which shows these three were associated at level of $P < 0.05$ significance.

KEYWORDS : Care givers, Care of plaster cast, Knowledge, Informational booklet.

INTRODUCTION

Fracture is the break in the continuity of the bone and the cause of the fractures are road traffic accidents, falls, osteoporosis and others. Fractures can be usually treated by the plaster casts. Plaster casts are made up of the plaster of Paris that hold the bone tightly to fix it up and bind it tightly at its place. The plaster casts are beneficial for the patients, but the patients and care givers should have the knowledge regarding the care of plaster casts.

Statement Of The Problem

"A descriptive study to assess the knowledge regarding care of plaster cast among caregivers in selected hospital Bhopal, (M.P.)"

OBJECTIVES

The following are the major objectives of the study.

1. Assess the knowledge regarding care of plaster cast among caregivers.
2. Associate the knowledge regarding care of plaster cast among caregivers with their selected demographic variables.
3. Disseminate information through booklet on care of plaster cast among caregivers.

Hypothesis

- ❖ H_1 : There will be significant association between knowledge score regarding care of plaster cast among care givers with their selected demographic variables at $P < 0.05$ level of significant.

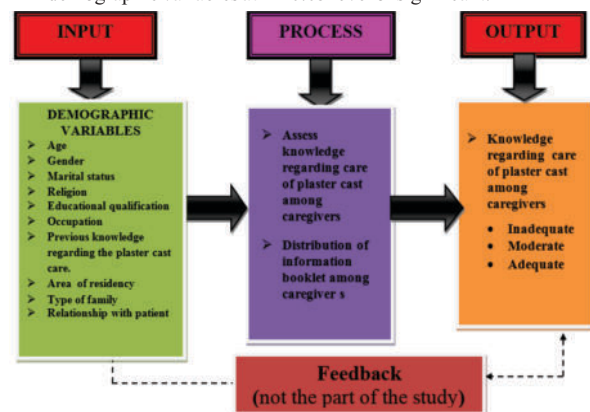


Figure – 1.1 Theoretical Framework based on Ludwig Von Bertalanffy, General System theory (1968)

METHODOLOGY

A quantitative research approach descriptive study on survey design was adopted for this study. Main study was done at Bhopal Fracture Hospital, Bhopal (M.P.) The population comprised of caregivers in selected Bhopal Fracture Hospital, Bhopal.

A sample of 60 caregivers was selected using by purposive sampling technique. Structured knowledge questionnaire were used by the investigator for the data collection. Information Booklet was distributed to caregivers to enhance the knowledge. The structured knowledge questionnaire and Informational Booklet were validated by experts. Furthermore, Pilot study was conducted on 10 samples to assess the reliability of the questionnaire where Karl Pearson correlation coefficient ($r = 0.85$) proved the reliability.

After conducting the pilot study, main study was carried out on 60 care givers. First, the knowledge score of care givers was assessed. Thereafter, informational booklet was provide to the sample.

RESULT

Description of demographic variables

- The data depicted that with regard to caregiver's age most of the caregivers were in the age group of 21 to 30 years that is 35%.
- Regarding gender 63.33% were males and 36.67% were female.
- Regarding marital status 61.66% were married, 33.34% were unmarried, 5% were to widow/ widower and none of them from divorced.
- Regarding religion 65% were Hindu, 21.66% were Muslim, 10% were Christian religion and 3.34% were other religion.
- Regard to education of caregiver 46.67% were graduate and above, 18.33% were higher secondary, 20% were matriculation/10th and 15% were primary education.
- Regarding occupation 60% were working in private sector, 16.66 were working as farmer, 15% were from government sector and 8.34% were business.
- Regarding previous information of plaster cast care was 58.34% had no information and 41.66% had information regarding the care of plaster cast.
- Regarding area of residency 61.66% belong to urban area and 38.33% belong to rural areas.
- Regarding type of family 56.66% belong to joint family, 43.34% belong to nuclear family.
- Regarding relationship with patient 25% were daughter/son.

Table: Association Of Level Of Knowledge Regarding Care Of Plaster Cast With Their Selected Demographic Variables. n= 60

Selected demographic variables	KnowledgeScore			df	X ²
	Inadequate	Moderate	Adequate		

1. Age in Years					
a. 21-30	14	7	0	03	6.43
b. 31-40	14	5	0		
c. 41-50	6	6	0		
d. 51-60	2	6	0		
Sex					
a. Male	19	19	0	1	4.29*
b. Female	17	5	0		
2. Marital status					
a. Married	21	16	0	2	1.86
b. Unmarried	14	6	0		
c. Widower/ Widows	1	2	0		
d. Divorce	0	0	0		
3. Religion					
a. Hindu	22	17	0	3	1.03
b. Muslim	9	4	0		
c. Christian	4	2	0		
d. Other	1	1	0		
4. Education					
a. Primary Education	6	3	0	3	10.65*
b. Matriculation /10th	9	3	0		
c. Highersecondary	10	1	0		
d. Graduate and above	11	17	0		
5. Occupation					
a. Private sector	20	16	0	3	1.85
b. Govt. Sector	5	4	0		
c. Farmer	7	3	0		
d. Business	4	1	0		
6. Previous knowledge regarding the plaster cast care					
a. Yes	14	11	0	1	0.27
b. No	22	13	0		
7. Area of residency					
a. Rural	16	7	0	1	1.4
b. Urban	20	17	0		
8. Type of family					
a. Joint	15	19	0	1	8.16*
b. Nuclear	21	5	0		
9. Relationship with patient					
a. Daughter/ Son	9	6	0	5	3.68
b. Brother / Sister	5	2	0		
c. Father / Mother	8	4	0		
d. Grandfather/ Grandmother	3	4	0		
e. Wife /Husband	4	5	0		
f. Other	7	3	0		

*Significant at $p \leq 0.05$ level.

df= (1) 4.29, $p \leq 0.05$ level.

df= (3) 10.65, $p \leq 0.05$ level.

df= (1) 8.16, $p \leq 0.05$ level

The data in table 4.3 depicted the computed chi square values of knowledge of caregivers with their selected demographic variables. In relation to caregiver's gender, education and type of family chi square values were 4.29, 10.65, 8.16 which shows these three were significant. On the other hand to caregivers age, marital status, religion, occupation, previous information regarding care of plaster cast, area of residency and relationship with patient chi square values obtained 6.43, 1.86, 1.03, 1.85, 0.27, 1.4 and 3.68 respectively which shows these demographic variables were not associated to level of knowledge of caregivers.

Table: Frequency And Percentage Of The Level Of Knowledge Of Caregivers About Care Of Plaster Cast

n=60

Score	Level of Knowledge	Frequency(f)	Percentage (%)
0-13	Inadequate knowledge	36	60%
14-26	Moderate knowledge	24	40%
27-40	Adequate knowledge	00	00

Above table Showing that 60% of caregivers had inadequate knowledge, 40% had Moderate knowledge and none of them had adequate knowledge regarding care of plaster cast.

CONCLUSION

The present study was inspirational and enriching experience to the investigator, to explore and improve the knowledge on the subject. It

also helped in great deal to improve the knowledge of the care givers at selected Hospital. The constant encouragement and support of guide, hospital staff as well as keen interest of the care givers to participate in the study contributed to successful completion of the study. The care givers were found happy and satisfied to receive the selected intervention of informational booklet. It was realized that the present study can be effective for caregivers and due to that decrease the patient's complication. The finding of the study will have direct implication on nursing practice, nursing education, nursing administration and nursing research. It can be concluded that informational booklet is an effective education strategy to enhance the knowledge of care givers in care of plaster cast. Moreover, it can be used in early prevention of fracture complication for orthopedic patient.

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