

# Original Research Paper

Nursing

# EFFECTIVENESS OF NURSING INTERVENTION ON ATTITUDE OF FAMILY CAREGIVERS OF PATIENTS WITH PARAPLEGIA

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Paraplegia is a profound disability whose impact begins immediately and has lifelong physical and psychological impact. Paraplegia renders a person dependent on caregivers. Assistive technology is often required to facilitate mobility, communication, self-care or domestic activities. The present study focussed on the effectiveness of nursing intervention on attitude of family caregivers of patients with paraplegia. The research design adopted in the study was quasi experimental pretest post test control group design and was conducted in physical medicine and rehabilitation wards. The sample consisted of 80 family caregivers who satisfy the inclusion criteria. Nursing intervention consisted of the structured, individual patient and caregiver education of 3 sessions of 45 minutes duration using power point slides on exercises, nutrition, skin care, sexual functioning, psychological aspects, bladder training, bowel training, demonstration and return demonstration of exercises and provision of an information booklet describing the interventions to be followed by the patients and family caregivers. Post test was conducted on 25th day and 90th day. The effect of intervention was found to be significant which indicates that there exists a significant difference in attitude scores of family caregivers of patients with paraplegia.

# KEYWORDS: Nursing intervention; Attitude; Family caregivers of patients with paraplegia

#### INTRODUCTION

Paraplegia is a profound disability whose impact begins immediately and has lifelong physical and psychological impact. Spinal cord injury is associated with a risk of developing secondary conditions that can be debilitating and even life-threatening eg. deep vein thrombosis, urinary tract infections, muscle spasms, osteoporosis, pressure ulcers, chronic pain, and respiratory complications. Acute care, rehabilitation services and ongoing health maintenance are essential for prevention and management of these conditions. The psychosocial problems are sexual dysfunctions, problems of social adjustments, burden on family, strained partner relationships and sleep disturbances. The frequent hospitalization, inability to return to pre-injury occupation, immobility and lack of autonomy can adversely affect the quality of life of patients with paraplegia.

Paraplegia renders a person dependent on caregivers. Assistive technology is often required to facilitate mobility, communication, self-care or domestic activities. An estimated 20-30% of people with spinal cord injury show clinically significant signs of depression, which in turn has a negative impact on improvements in functioning and overall health. There is a positive effect of group therapy on the impact of well being of spouses of SCI survivors and on their quality of life.  $^{2}$ 

## **OBJECTIVES OF THE STUDY**

- To evaluate the effectiveness of nursing intervention on attitude of family caregivers of patients with paraplegia
- 2. To determine the association between attitude of family caregivers and selected socio demographic variables

## MATERIALS AND METHODS

A quantitative research approach was adopted in the present study. The research design adopted in the study was quasi experimental pretest post test control group design and was conducted in physical medicine and rehabilitation wards of Government Medical Colleges, Kottayam and Thiruvanant hapuram. The subjects were selected through non probability purposive sampling technique. The sample consisted of 80 family caregivers who satisfy the inclusion criteria. Among the 80 family caregivers, 40 family caregivers were in the control group and 40 family caregivers were in the experimental group. Only one primary family caregiver was included in the study

The tools used for data collection include sociodemographic data sheet of family caregivers and Likert attitude scale. Pretest done and the routine care was provided to the control group. The nursing intervention was administered to the experimental group individually on day 2, day 3 and day 4 at their bedside in PMR wards. Nursing intervention consisted of the structured, individual patient and caregiver education of 3 sessions of 45 minutes duration using power point slides on exercises, nutrition, skin care, sexual functioning, psychological aspects, bladder training, bowel training, demonstration and return demonstration of exercises and provision of an information booklet describing the interventions to be followed by the patients and family caregivers. Post test was conducted with the same tools on  $25^{th}$  day and  $90^{th}$  day.

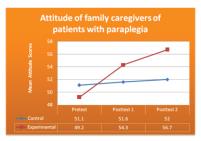
### RESULTS

Most of the family caregivers of patients with paraplegia (52.5% and 67.5%) both in control and experimental groups were spouses. Interestingly 30% of family caregivers in control group and 45% in experimental group were between the age group of 35 - 45 years. It is noticeable that the most of the family caregivers were females (75% and 82.5%) in both groups. Most of the participants were Hindus (60% and 65%) in control and experimental group. Nearly half of the family caregivers in control and experimental groups (42.5% and 50% respectively) were with high school education. Most of the family caregivers in both groups (65% and 92.5%) reported that they were unemployed. Nearly half of the family caregivers in control and experimental group (50% and 47.5%) reported that their family monthly income was between Rs 5001 - 10,000.  $^2$  values were calculated and was not significant at 0.05. Hence it is inferred that the groups were not homogenous in terms of socio-demographic variables.

Table 1: Comparison of attitude of family caregivers of patients with paraplegia in control and experimental group n=80

Attitude		Mean	SD	t	р
Pretest	Control	51.1	10.2	0.88	0.38
	Experimental	49.2	9.1		
Post test1	Control	51.6	10.1	1.24	0.22
	Experimental	54.3	9.3		

Results of comparison of attitude scores of family caregivers of patients show that in pretest, the t value (0.88) was not significant between the control group (51.1 $\pm$  10.2) and experimental group (49.2  $\pm$  9.1). Hence both groups were comparable. In post test 1, the t value obtained was t = 1.24 which was statistically not significant. The finding was interpreted that there is no statistically significant difference in attitude scores of family caregivers in control and experimental group, but there is increase in mean scores in experimental group (54.3) compared to that of control group (51.6).



Comparison of mean Attitude scores of family caregivers of patients with paraplegia in different time intervals among control and experimental group

Table 2: Repeated measures of ANOVA of Attitude of family caregivers of patients with paraplegia in experimental group

				n = 40
Group	Mean	SD	F	р
Pretest	49.2	9.1		
Post test 1	54.3	9.3	319.81**	p < 0.01
Post test 2	56.7	9.3		

<sup>\*\*</sup>p < 0.01

The results show that attitude scores of family caregivers of patients with paraplegia in experimental group were  $40.2\pm9$  in pretest,  $54.3\pm9.3$  in post test 1, and  $56.7\pm9.3$  in post test 2. The obtained F value ( $319.81^{**}$ ) was significant at 0.01 level. This shows that there was a statistically significant difference in the pretest and post test attitude scores of family caregivers of patients with paraplegia in experimental group. The least significant difference test for pair wise comparison yields a significant difference at 0.05 level between pretest and post test attitude score of family caregivers of patients in experimental group. The finding was interpreted that there was a statistically significant difference in attitude scores of family caregivers of patients with paraplegia who received nursing intervention and effect was sustained in post test 1 and post test 2.

#### DISCUSSION

In the present study majority of the family caregivers of patients with paraplegia expressed favourable attitude in control and experimental group (65% and 67.5% respectively). None of them expressed highly favourable or unfavourable attitude. There is no statistically significant difference in attitude scores of family caregivers in control and experimental group in post test 1. The effect of intervention between the period of measurement (F = 319.81, p < 0.01) was found to be significant which indicates that there exists a significant difference in attitude scores of family caregivers of patients with paraplegia in experimental group between different measurement period.

The present study findings were congruent with a study to evaluate the use of on-demand video to provide patient education on spinal cord injury. It was reported by 88% of online evaluators and 96% of in-person evaluators that they gained new information from the forum; 52% and 64% said

they changed their attitude, and 61% and 68% said they would probably change their behaviour or take some kind of action based on information they learned.  $^{^3}$ 

Similar findings were reported in a randomized controlled trial to evaluate the effect of pshychoeducational intervention on general health of family caregivers of patients with spinal cord injury. This study included 62 family caregivers, who were randomly categorized into intervention (n= 33) and control (n=29) groups. Caregivers of the intervention group took part in the training sessions. The results revealed that a significant difference was found between the two study groups regarding the mean score of attitude, 2 and 6 weeks after the intervention (p = 0.001).

The findings of the present study were parallel to that of a qualitative descriptive study on perceived facilitators and barriers to self-management in individuals with traumatic spinal cord injury. A total of 26 interviews were conducted and they included 7 individuals with traumatic SCI, 7 family caregivers. The following five facilitators to self-management were identified: physical support from the caregiver, emotional support from the caregiver, emotional support from the caregiver, peer support and feedback, importance of positive outlook and acceptance, and maintaining independence/control over care. The study concluded that the caregiver and the individual's own mood/outlook, among other facilitators and barriers, makes significant contributions to the self-management of individuals with traumatic SCI.<sup>5</sup>

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