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A study to assess the effectiveness of individualized teaching programme on practices of caregivers regarding care of pressure points in immobilized patients admitted in selected hospital

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Abstract

Immobility refers to the inability to move freely. The bed ridden patient faces various problems which include depression, nervousness, and poor hygiene and bed sore. The family care givers knowledge and practice regarding management of immobilized patient will enhance the quality of life of patient. The aim of study was to Assess the Effectiveness of Individualized Teaching Programme On practices of Caregivers Regarding Care of Pressure Points in Immobilized Patients Admitted in Selected Hospital was conducted by Payal Saini towards the partial fulfilment of the requirements for the degree of Masters of science in nursing at M.M.College of Nursing, Maharishi Markandeshwar University, Ambala during the year 2014-2016. The objectives of the study were to assess and compare the practices of caregivers regarding care of pressure points in immobilized patients in experimental and control group before and after administration of individualized teaching programme; to determine the association of care giver's practices regarding care of pressure points in immobilized patients with selected variables in experimental and control group.

Material and methods: the research approach adopted for the study was "Quantitative research approach using quasi experimental, non-equivalent control group pre-test and post-test design. The study was conducted at MIMIMSR & Hospital, Mullana, Ambala, Haryana. The data was obtained from the 60 caregiver's of immobilized patients admitted in the orthopaedic ward (30 caregivers in control group and 30 caregivers were put in experimental group).sample was selected by the purposive sampling technique. Sociodemographic Performa and observational checklist tools were used to assess the practices of Caregivers Regarding Care of Pressure Points in Immobilized Patients. Teaching plan was administered on subjects in the experimental group. The data was analyzed and interpreted by using descriptive and inferential statistics using SPSS version 20.0 and p value ≤ 0.05 was considered significant for the study. A result of study was Post test caregiver's practices score was significantly higher in experimental group than control group. On day 1st, in experimental group, the pre-test mean practices score was 2.50 ± 1.35 was subsequently increase upto 45.17 ± 1.66 on day 5th (post-test 3). The differences among practices score was found to be statistically significant as evaluated by repeated measures ANOVA ($p < 0.005$). Conclusion is that Individualized teaching programme was effective to improving the practices of caregivers regarding care of pressure point in immobilized patients.

Keywords: Effectiveness, Individualized Teaching Programme, Caregiver's Practices, Care of Pressure Points, Immobilized Patients

Introduction

Patients get admitted to hospitals for getting rid of their suffering. Basically, they come to hospital with problem that they want to resolve with the help of health care professionals as they want to move to their normal stage of functioning. The care giver plays a vital role in patient's attain fast recovery and are free of any complications. Years ^[1].

Pressure ulcers are defined as the lesion caused by unrelieved pressure, resulting in damage to the underlying tissue. They usually occur over bony prominences and are classified as stages by the degree of tissue damage observed. The etiology of pressure ulcer is multidimensional pressure; shear, friction, moisture and poor nutrition contribute directly to the physiological etiology of pressure ulcers. Other factors associated with the development of pressure ulcers includes immobility and psychosocial factors, such as inadequate personal and financial resources and noncompliance with acknowledged preventive behaviours ^[1, 2].

Immobility is defined as unable to independently move or change positions or movement is restricted for medical reasons. The greater the extent and the longer the duration of immobility, the more pronounced the consequences. Immobility is widely documented in the literature as a cause of increased mortality and complications [3]. Immobilized patients are at greater risk for skin breakdown and delayed wound healing. The musculoskeletal system is severely affected by immobility and prolonged bed rest. It is generally easier to prevent the complications than to treat or cure them [4].

Care givers play an important role in providing care to their clients. They are the one who will be with the patients every time than physicians and nurses. Hence, the care givers knowledge regarding general measures such as positioning, exercise, skin care, nutrition and support will enhance the quality of outcome and prevent complication. Care giving is a difficult job and many care givers show psychological stress and declaim in physical and mental health especially if care giving condition persists more than one year. If adequate knowledge is provided to care givers, then it will assist them to cope with the stressors and enhance the quality of life of themselves and their patients [5].

Health teaching in any mode is an important means to bringing about healthy behaviour among clients. It emphasizes a scientific attitude towards health, which enables client and their caregivers to assist themselves according to the recognized scientific knowledge, and it is very important for modern healthy living [6].

There has been a growing awareness that patient and their caregivers should assert more active part in their treatment. The perfects of increased information and better communication are linked to improvements in patient's outcome and to control of their health care problems [7].

In various settings it proved that the individual planned teaching is one of the means to bring a positive outcome. Therefore I think to use the individual planned teaching programme on practices of caregivers regarding care of pressure points in immobilized patients.

Materials and methods

This study was conducted in the MMIMS&R Hospital Mullana, Ambala, and Haryana. The study was conducted after acquiring approval from the Ethics Committee of the Institute. Those who agreed to participate in this study were encouraged to enroll themselves for the Individualized teaching programme regarding care of pressure points in immobilized patients and a written informed consent was taken from the participants.

The study was conducted on care givers of immobilized patients within the age group of 18 -65 years and who were came under the very limited category of immobilization admitted in Orthopaedic ward of selected hospital, Ambala., who are 24 hours stay with patient in the hospital and lies between age group of 18-65 years. Caregivers of that patient who got discharge before conducting teaching programme and post test and caregivers of that patient who had developed pressure ulcer were excluded in the study.

Quantitative experimental research approach and Quasi experimental non -equivalent control group (pre-test –post-test) research design was used [9]. The setting of the present study was orthopaedic ward of MMIMS&R Hospital, Mullana, Ambala, and Haryana. The data was obtained from the 60 caregiver's of immobilized patients admitted in the orthopaedic ward (30 caregivers in control group and 30 caregivers were put in experimental group). Sample was selected by the Convenience sampling technique. Sociodemographic Performa and observational checklist tools were used to assess the practices of Caregivers Regarding Care of Pressure Points in Immobilized Patients. teaching plan was administered on subjects in the experimental group. The study subjects available during the first month were taken into the control group while those available during the second month were taken into experimental group to prevent contamination by using convenience sampling technique.

Barden risk assessment scale was applied on total 100 patients in whom 60 patient's caregivers were included in the study as show in the Table no 1

Table 1: Data collection

Group	No. of strata	Total patients in per strata	Included patients	Excluded patients
Control group	1	7	5	2
	2	8	5	3
	3	9	5	4
	4	8	5	3
	5	8	5	3
	6	10	6	4
Experimental group	1	8	5	3
	2	9	5	4
	3	10	4	6
	4	8	5	3
	5	8	5	3
	6	9	5	4

Five caregivers of immobilized patients data collection was completed in first five days then next five days data was collected from the next five caregivers. Total data collection was completed in time periods of 2 months.

In control group

On day 1st practices of caregivers regarding care of pressure points in immobilized patients was observed with observational checklist and second day provided only routine care. On the third day to fifth day post test practices

of caregivers regarding care of pressure points in immobilized patients was observed with same observational checklist.

In experimental group

On first day, the practices of caregivers regarding care of pressure points in immobilized patients was observed with observational checklist before administering the individualized teaching programme. On the second day gave 20 minutes teaching to the caregivers with lecture method

with using flex chart and comfort devices after that 20 minutes demonstration on back massages for was given. Then took return demonstrations every 4hourly till they were become competent. During return demonstration reinforcement was given to the caregivers. On the third day to fifth day the practices of caregivers regarding care of pressure points in immobilized patients was observed with same observational checklist after Administering the individualized teaching programme to the caregivers.

Statistical analysis: The data was analyzed and interpreted by using descriptive and inferential statistics using SPSS version 20.0 and p value ≤ 0.05 was considered significant

Table 2: Mean, standard deviation, mean difference, standard error of mean difference and t- value of post test score among caregiver’s of immobilized patients in experimental and control group, N=60

Post test	Experimental group (n=30)	Control group (n=30)	M _D	SE _{MD}	t-value	p-value
	Mean ± SD	Mean ± SD				
Post test 1 (day3)	45.17±1.663	2.57±.1.40	42.59	.358	119.9	0.001*
Post test 2 (day4)	45.17±1.663	2.58±1.42	42.59	.358	119.9	0.001*
Post test 3 (day5)	45.10±1.663	2.56±1.39	43.54	.361	117.9	0.001*

Maximum, score=46, Minimum score=00
 * Significant (p≤0.05) NS not significant (p>0.05)

Table no 2 indicates that the computed ‘t’ value was found to significant in 1st, 2nd, and 3rd, post-test practices of caregivers in control and experimental group. The mean practices score in experimental group was (45.17) in post-test 1st and post-test 2nd. The mean practices score in control group was (2.57) in post test 1st and post-test 2nd. The

for the study. Chi square, repeated measures ANOVA, One way ANOVA, and independent ‘t’ test to analyse the data.

Results

This study included a total of 30 subjects, out of which 30 in experimental and 30 control group. Chi square value for the sample characteristics of experimental and control group was shows that both group were homogenous and comparable with regard to these selected sample characteristics before administer the individualized teaching programme in terms of caregiver’s and patients personal variables.

computed ‘t’ value was found significant (t= 119.9, p=0 .001) at 0.05 level of significance. In post-test 3rd (t=117.7, p=0.001) at 0.05 level of significance. Thus, it is inferred that the individualized teaching was effective. The practices score was significantly higher in the experimental group than control group.

Table 3: Repeated Measure ANOVA showing Comparison of practices score: pre test to 3rd post test in experimental group and control group, N=60

Group	Teachings	mean± SD	df	F	P value
Experimental group (n=30)	Pre-test (day1)	2.50±1.35	29	195.6	.001*
	Post-test 1(day3)	45.17±1.66			
	Post-test 2(day4)	45.17±1.66			
	Post-test 3(day5)	45.10±1.66			
Control group (n=30)	Pre-test (day1)	2.57±1.40	29	156.2	.84 ^{NS}
	Post-test 1(day3)	2.57±.1.40			
	Post-test 2(day4)	2.58±1.42			
	Post-test 4(day5)	2.56±1.39			

* Significant (p≤0.05) NS not significant (p>0.05)

Table no 4 shows that on day 1st, in experimental group, the pre test means practices score was 2.50±1.35 and subsequently increase upto 45.17±1.66 on day 5th (post test 3rd). The differences among practices score was found to be statistically significant as evaluated by repeated measures ANOVA (p=0.001). On 1st, in control group, the pre test mean practices score was 2.57±1.40 and upto 2.60±1.38 on day 5th (post test 3rd). The differences among practices score was found to be not significant as evaluated by repeated measures ANOVA (p=0.84). Thus, it is inferred that individualized teaching programme was effective in improving

Computed ANOVA/T values reveals that there was no association of practices of the caregivers regarding care of pressure points in immobilized patients with caregiver’s and patient’s socio-demographic variables.

Discussion

The immobilized patient faces various problems which include depression, nervousness, poor hygiene and bed sore.

Pressure ulcers are a serious medical problem that can affect a patient in any health care setting. Pressure ulcers typically occur among patient who can’t move or have lost sensation and result from prolonged periods of immobility with uninterrupted pressure on skin, soft tissue muscle, or bone [24]. If there is a scenario that the ward nurse has to take care of more than five bedridden patients then the burden over the nurse’s increase and she may miss some needs of all patients. The family care givers knowledge and practice regarding management of immobilized patient will enhance the quality of life of patient [15].

Findings are described by Poudyal, M. Neupane, A descriptive cross sectional study was conducted on the caregivers of immobilized patient admitted in orthopaedic ward. The finding revealed that nearly half (45.9%) of the respondents were between age group 16-30 years, more than half (56.4%)were female, (84.2%) were married. In the present study, similar findings in terms of half of the subjects in the experimental group (50%) and nearly half in the control group (46.67%) were in the age group of 36-45

and 16-35 years respectively and findings were different in terms of Half of the subjects in the experimental group (53.35) and in control group (70%) were males. Similar findings in terms of most of the subjects (80%) in experimental and (76.6%) in control were married Findings are described by Fathia A (2014), majority (90%) of caregivers had a very good practices scores (81-100%) in the post test. The mean difference between post-test and pre-test practices scores on prevention of pressure sores which was found to be significantly high (40) = (p<0.05)92. The findings are similar post test practices score is higher in experimental group than pre test practices score regarding care of pressure points which is find that significant high at 0.05 level of significance.

Findings are described by Walia *et al.* The result was. Majority (90%) of caregivers had a very good knowledge scores (81-100%) in the post test. The mean difference between post-test and pre-test knowledge scores on prevention of pressure sores which was found to be significantly high (29) = (p<0.05)³⁰ In the present study the findings are similar that is on day 1st, in experimental group, the pre-test mean practices score was 2.50±1.35. Subsequently increase upto 45.17±1.66 on day 5th (post-test 3). The differences among practices score was found to be statistically significant as evaluated by repeated measures ANOVA (p<0.005).

The findings are described by Malathi G Nayak, that the mean post test practice score (22.73) and the planned teaching programme was effective in increasing the practices level of family care giver of bedridden patients regarding pressure ulcer prevention in families of patient at risk the post test mean practices score was high that is 35.10±1.663 than pre-test practices score that is 2.50±0.66 Findings are similar in the present study that is post test practices score is significant higher than pre test practices score regarding care of pressure points in experimental group. Individualized teaching programme was effective in terms mean practices score is 45.10±1.663 on day 5th (post test 3). The pre test mean practices score was 2.50±1.35 subsequently increase upto 45.10±1.663 on day 5th (post test 3). The differences among practices score was found to be statistically significant as evaluated by repeated measures ANOVA (p=0.001)

Conclusion

The study was concluded that the Individualized teaching programme was effective to improving the practices of caregivers regarding care of pressure point in immobilized patients

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Conflicts of interest

There are no conflicts of interest.

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