



EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON HOME CARE MANAGEMENT OF DIABETES MELLITUS

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Abstract

This quasi experimental design was undertaken to assess the effectiveness of structured teaching programme on knowledge regarding selected aspects of home care management of diabetes mellitus such as diet, exercise, medication, foot care and prevention of complications. The aim is to assess and evaluate the effectiveness of structured teaching programme on home care management of diabetes mellitus among diabetic patients. 50 diabetic patients selected by convenience sampling method from outpatient department at selected hospital, salem. The data was collected using structured interview schedule. The paired 't' test was used to evaluate the effectiveness of structured teaching programme by comparing pre-test and post-test knowledge score. It was found that, pre test mean knowledge score was 16.62(SD=3.33), and post-test mean knowledge score was 29.46(SD=2.46), and paired 't' value was 54.35*. The observed (calculated) value of paired t-test not less than the table value at P < 0.05 level (1.9867). There was a significant association between pretest knowledge score on home care management of diabetes mellitus and educational status among diabetes mellitus patients.

Keywords: Diabetes mellitus, Home care management.

Introduction

Diabetes is no longer the disease of the rich or the aged known as the “silent killer”, it is reaching epidemic proportions and according to the world health organization (WHO) approximately 177 million people worldwide have diabetes. Indian has an estimate of 32.7 million diabetic people¹. Diabetes is partly hereditary; its manifestation depends upon one's life style also. Lack of exercise, excessive consumptions of oily and rich in foods and mental tension help to cause diabetes².

The management of diabetes requires ongoing interaction among the patient, the family, and the health care team. It is important that a diabetes nurse educator be involved in the care of the patient and the family. The diabetes is a complex, chronic condition, a great deal of patient contact takes place in outpatient and home settings.³ The major goal of patient care is to enable to reach an optimal level of independence in self care activities. This act as an inspiration for the researcher to conduct the study on home care management of diabetes mellitus among diabetic patients. Aim of the present study

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were To assess and evaluate the effectiveness of structured teaching programme on home care management of diabetes mellitus among diabetic patients and also find out the association between pre-test knowledge scores regarding home care management of diabetes mellitus and selected demographic variables.

Methodology

The research approach for this study was the quantitative research type. Quasi experimental design was used for this study.^{4,5} The study was conducted in Sri Gokulam hospital, salem. The sample size of the study was 50 diabetic patients. Non probability convenient sampling method was used. The sample selection was based on the following inclusion and exclusion criteria. The inclusion criteria were the patient age from 41 years to 70 years. Who were willing to participate in this study. Exclusion criteria were who have associated disease condition and who were not available during the period of data collection.

The structured interview schedule was used in this study. It contains 2 sections.

Section 1: Sought information on demographic variables such as age, sex, educational status, occupation, family income, dietary habits, personal habits, family history, duration of disease and follow up. There were totally 10 items.

Section II: Sought information to assess knowledge on home care management of diabetes mellitus among diabetic patients **i.e.:** knowledge on diabetes mellitus, diet, exercise, medication, foot care and prevention of complication. This section contained 36 questions. They were distributed as

- A. Knowledge on diabetes mellitus -9 items
- B. Diet – 6 items
- C. Exercise – 4 items
- D. Medication – 4 items
- E. Foot care – 6 items
- F. Prevention of complication – 7 items.

Reliability was checked by Karl Pearson coefficient of correlation and its value was $r=0.87$. which is highly positive. Paired T test and chi square test used for data analysis.⁶

Results

Table No. 01: Distribution of pre-test and post-test level of knowledge on home care management of diabetes mellitus among diabetic patients n = 50

Level of Knowledge	Pre test		Post test	
	Frequency	Percentage	Frequency	Percentage
Inadequate (< 50%)	34	68.0	-	-
Moderate (50-75%)	16	32.0	11	22.0
Adequate (> 75%)	-	-	39	78.0
Combined	50	100.0	50	100.0

Table No. 02: Distribution of effectiveness of structured teaching programme on home care management of diabetes mellitus among diabetic patients in pre-test and post-test n= 50

S.No.	Area of knowledge	Max. Score	Pre-test		Post-test		Mean Difference	Paired 't' Value
			Mean Score	SD	Mean Score	SD		
1.	Disease Condition	9	5.64	1.33	8.14	1.03	2.50	14.33*
2.	Diet	6	2.64	1.24	5.00	0.83	2.36	14.89*
3.	Exercise	4	1.08	0.69	2.48	0.73	1.40	13.09*
4.	Medication	4	2.08	0.85	3.36	0.72	1.28	10.26*
5.	Foot care	6	1.44	0.88	4.14	0.85	2.70	17.78*
6.	Prevention of Complications	7	3.74	1.34	6.34	0.74	2.60	16.08*
	Combined	36	16.62	3.33	29.46	2.46	12.84	54.35*

* Significant at $p < 0.05$ level

Table No.02 represents that, pre –test mean knowledge score was 16.62(SD=3.33), and post test mean knowledge score was 29.46(SD=2.46), and paired ‘t’ value was 54.35*.The observed (calculated) value of paired t-test not less than the table value at P< 0.05 level (1.9867). so the research hypothesis was accepted.

Table No. 03: Association between pre-test knowledge scores on home care management of diabetes mellitus and educational status among diabetic patients

		Pre-test knowledge				Chi – square value	df	P-value
S. No.	Demographic variables	< Median		Median				
		No.(29)	%	No.(21)	%			
01.	Education							
	Illiterate	12	41.4	2	9.5			
	Primary school	8	27.6	2	9.5			
	High School	6	20.7	6	28.6	15.89*	5	P<0.05
	Hr. Sec. School	1	3.4	2	9.5			
	Graduate	-	-	5	23.8			
	Post Graduate	2	6.9	4	19.0			

*‘significant at P<0.05 level

Table No. 03 represents the association between pretest knowledge score on home care management of diabetes mellitus and educational status. The obtained chi-square value 15.89 was significant at 0.05 levels. It is inferred that there was a significant association between pre-test knowledge scores on home care management of diabetes mellitus and educational status among diabetic patients.

Discussion

The study showed that majority of the patients who participated in the study was aged between 51-60 years were in males, illiterates, unemployed, income more than Rs 4000, non vegetarian, other personal habits, other family history, duration 0-5years,and regular follow up. Majority of the diabetic patients (68.0%) had inadequate knowledge, and (32%) had moderate knowledge and none of them had adequate knowledge in pre-test in post-test (78%) had adequate knowledge and (22%) had moderate knowledge and none of them have inadequate knowledge. It is evident that the post-test knowledge score on home care management of diabetes mellitus among diabetic patients was significantly higher than the pre-test knowledge scores. The overall findings of the study showed the effectiveness of structured teaching programme on home care management of patients with diabetes mellitus. The association between pretest knowledge score on home care management of diabetes mellitus and educational status. The obtained chi-square value 15.89 was significant at 0.05 levels. It is inferred that there was a significant association between pre-test knowledge scores on home care management of diabetes mellitus and educational status among diabetic patients.

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