

Effectiveness of Planned Teaching Programme on Knowledge Regarding Self Care Behaviour among People Suffering with Diabetes Mellitus in Selected Urban Health Centres of Belgaum

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Abstract: *The purpose of the study was to assess the “Effectiveness of Planned Teaching Programme on Knowledge Regarding Self Care Behaviour Among People Suffering With Diabetes Mellitus in Selected Urban Health Centres of Belgaum”. A Pre-experimental, one group pretest-posttest design; was used. 45 samples of Non probability purposive sampling technique was used. majority of the subjects 41 (91.1%) had average Knowledge 4(8.9%) had poor Knowledge and none of them had good knowledge in the pre-test and in the post-test, majority of the subjects 45 (100%) had good knowledge. The t test statistics value of paired t test Calculated ‘t’ value ($t=51.5$) was greater than tabulated ‘t’ value ($t=1.960$). The p value is less than 0.05 level of significance shows significant difference in knowledge scores. This revealed that planned teaching programme was effective to provide knowledge regarding self care behavior among people suffering with diabetes mellitus.*

Keywords: people suffering with diabetes mellitus, self care behavior, planned teaching programme

1. Introduction

Diabetes is a disease that affects millions of people every year throughout the world. There is no permanent cure for diabetes, but there are several treatments which can control this disease. The success of any diabetes treatment totally depends on the patient.¹

Diabetes Mellitus is one of the first diseases described in Egyptian manuscript from 1500BCE mentioning “diabetes is hardest diseases to live with too great emptying of urine.”² Indian physicians same time discovered the disease and classified it as Madhumeha or honey urine noting that the urine would attract ants. The term diabetes was first used in 250 BCE by Greek Apollonius of Memphis. Type 1 and Type 2 diabetes were identified as separate conditions for the first time by the Indian physicians Sushruta and Charaka in 400-500BCE with Type 1 associate with youth and Type 2 with obesity. The term “Mellitus” was added by Thomas Willis in the late 1600s to separate the condition from diabetes insipidus which is also associated with frequent urination.³

Diabetes Mellitus is a group of metabolic diseases in which a person has high blood sugar, either because the pancreas does not produce enough insulin, or cell does not respond to the insulin that is produced.⁴

2. Literature

A study was conducted to determine the frequency with which self-care activities. Method is Audio recordings of 28 patient encounters in five primary care clinics were analyzed. We determined the frequency of self-care discussions and the amount of time devoted to these discussions. Result of the study showed that Self-care was discussed in all 28 encounters. Median encounter times for

each clinic ranged from 19.8 to 37.6 minutes, with self-care discussions taking from 0.1 to 17.2 minutes. Median discussion time devoted to all self-care activities was 5.2 minutes, representing 23.5% of a visit of median length. Blood sugar testing was discussed longer than the other activities. The least time was devoted to eye and foot examinations. Findings of the study revealed that patients with diabetes regularly discussed self-care activities during follow-up visits at family medicine clinics. Providers varied in their capacity to incorporate self-care planning into routine medical care for patients with diabetes.⁵

A cross sectional study was conducted to evaluate the prevalence of engagement in lifestyle behaviors for management of the disease, as well as the impact of health care professional support on these behaviors. Self-reported data were available from 2682 adult respondents, age 20 years or older, to the 2011 Survey on Living with Chronic Diseases in Canada's diabetes component, were evaluated using binomial regression models. Result of the study showed that The prevalence of reported dietary change, weight control/loss, increased exercise and smoking cessation (among those who smoked since being diagnosed) were 89.7%, 72.1%, 69.5%, and 30.6%, respectively. The study revealed that Health professional advice for lifestyle behaviors for type 2 diabetes self-management may support individual actions. Patients living with the disease for more than 6 years may require additional support in sustaining recommended behaviours.⁶

A descriptive study was conducted in Kancheepuram Tamil Nadu India to investigate the role of self-care in management of diabetes mellitus. The needs of diabetic patients are not only limited to adequate glycemic control but also correspond with preventing complications; disability limitation and rehabilitation. There are seven essential self-care behaviours in people with diabetes which predict good outcomes namely healthy eating, being

physically active, monitoring of blood sugar, compliant with medications, good problem-solving skills, healthy coping skills and risk-reduction behaviour. All these seven behaviors have been found to be positively correlated with good glycemic control, reduction of complications and improvement in quality of life.⁷

A cross sectional study was conducted among 100 patients attending the diabetic clinic at Klinik Kesehatan Seri Manjung which describes the knowledge, attitude and practice about health promoting behaviors regarding Diabetes mellitus by using a face to face interview. Only 56% of them practice all of the practices that were asked – healthy diet, regular exercise, monitoring blood glucose level, and monitoring body weight. The results indicate that the population needs to have a better structured educational programme to increase the knowledge on diabetes and its preventive measures which improve their practice towards Diabetes.⁸

3. Problem Statement

“A Study to assess the effectiveness of planned teaching programme on knowledge regarding self-care behaviour among people suffering with diabetes mellitus in selected Urban Health Centers of Belgaum.”

4. Objectives

- 1) To assess the knowledge regarding self-care behaviour among people suffering with diabetes mellitus in selected urban health centers of Belgaum
- 2) To determine the effectiveness of planned teaching programme on self-Care behaviour among peoples suffering with diabetes mellitus
- 3) To find out the association between pretest knowledge score with selected demographic variables.

5. Method / Approach

In this study Pre-experimental, one group pretest-posttest Research Design was adopted, based on the problem statement and objectives of the study, evaluative research approach was used. The primary objective was to evaluate the effectiveness of Planned Teaching Programme Here the investigator identifies and evaluate the effectiveness of Planned Teaching Programme on knowledge regarding self-care behaviour among people suffering with diabetes mellitus. The population and sample were diabetes mellitus patient who were fulfilling the inclusion and exclusion criteria & sample consisted of 45 diabetes mellitus patients. The purposive sampling technique was used. Tools used for data collection include two sections namely demographic variables proforma & Structured Knowledge questionnaire on diabetes mellitus

6. Result

For the data analysis and interpretation, various methods has been used by researcher that are descriptive and inferential statistics were widely used. The investigator collected the data for analysis and interpretation using Structured Knowledge Questionnaire. In order to examine the proposed association, the data was tabulated, analyzed and interpreted using descriptive and inferential statistics. The analysis of data is organized and presented under the following heading:

Section I:

Findings related to socio-demographic variables of people.

Section II:

Pretest and posttest comparison of Knowledge scores of people in different items of structured knowledge questionnaire.

Table 1: Frequency and percentage distribution of subjects according to sociodemographic variables of subjects & Pre-test and post-test comparison of knowledge scores of subjects in different items of structured knowledge questionnaire.

S. No	Socio-Demographic Variables	Freq	Percentage	Items	Total Score	Pretest	Posttest	gain in knowledge
1.	Age			DM predisposing factors & s/s	270	40.4%	97.8%	57.4%
	1. 40-49 year	91	75.83%					
	2. 50-59 year	28	23.33%					
	3. 60-70 year	01	0.8%					
2.	Sex			Diet	135	37.04%	95.6%	58.56%
	1. Male	34	75.6%					
	2. Female	11	24.4%					
3.	Religion			Drugs	270	35.6%	93.3%	57.7%
	1. Hindu	33	73.3%					
	2. Christian	4	8.9%					
	3. Muslim	8	17.8%					
	4. Others	0	0%					
4.	Marital status			Exercise	90	32.2%	92.2%	60%
	1. Married	45	100%					
	2. Single	0	0%					
	3. Widow	0	0%					
	4. Divorced	0	0%					
5.	Educational status			Skin care, foot care	90	43.3%	90%	46.7%
	1. Illiterate	03	6.7%					
	2. Primary	12	26.7%					
	3. Secondary	18	40%					
	4. Pre-University	12	26.7%					
	5. Graduate	0	0%					

6.	Income per month							
	1. Above 5000	34	75.6%	Regular checkup & complication	225	54.7%	93.8%	39.1%
	2. 3001-5000	6	13.3%					
	3. 1001-3000	5	11.1%					
	4. Less than 1000	4	08.9%					
7.	Occupation							
	1. Coolie	14	31.1%	Practice	720	54.3%	76.9%	22.6%
	2. Unemployed	02	4.4%					
	3. Self-employed	15	33.3%					
	4. Professional	14	31.1%					

7. Discussion

The major findings of the study were organized under the following headings:

1) Findings related to socio-demographic variables of people.

a) Age: Majority of the diabetic people 91(75.83%) were in the age group 40-49 years, 28(23.33%) were in age group 50-59 years and 1(0.8%) were in the age group 60-70 years.

b) Sex: With regards to sex, 34(75.6 %) of diabetic people were males while 11(24.4%) were females.

2) Findings related to effectiveness of planned teaching Programme in terms of gain in Knowledge

After applying the paired t-test in group, the calculated 't' values ($t=51.5$) was greater than the tabulated 't' value ($t=1.960$). This revealed that PTP was effective on knowledge of people.

3) Association between the pre-interventional knowledge scores and selected demographic variables

4) The calculated chi square values were less than the calculated chi square values of all the demographic variables. So, H_2 was rejected. There was no association between the pretest knowledge scores with the demographic variable.

8. Conclusion

The findings of present study shows that the mean pretest knowledge score was 20.06 which indicated that there was the need for Planned Teaching Programme.

The mean post-test knowledge score was 34.06 which showed that Planned Teaching Programme was effective in improving the knowledge of adults.

There was no significant association between selected demographic variable with pretest knowledge score of the respondent.

9. Future Scope

Nursing practice

Nurses play a major role in the health care system where along with the care they render health education is one of the most important aspects of nursing practice. The findings of the study will be taken as a guideline for nurses about the importance of self-care behaviour of people suffering from diabetes mellitus.

Nursing education

The findings of the study can be used by nurse educator for giving in service education on self-care behaviour of people suffering from diabetes mellitus. The structured knowledge questionnaire used in the study should be employed by nurses and students to refine their knowledge and skills on the topic from time to time to render effective patient care.

Nursing administration

Nurse administrator must plan, conduct and evaluate the programme, which was done for community as well as health professional. Nurse administrator should take efforts to guide and provide competent information through AV aids to make health education programme effectively and efficiently.

Nursing research

The findings of the study contribute to the body of knowledge of nursing research. The findings of the present study can be used by the future researchers. Also, by pursuing research in this area, the mortality and morbidity rate due to diabetes can be reduced to some extent.

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