



Nurse Directed Interventions on Health Promotion Behaviour among Type 2 Diabetes Mellitus Patients in Selected Rural Community-A Pilot Study

Pattan AD¹, Naresh Godara²

Ph.D Scholar, Parul Institute of Nursing, Parul University, Vadodara

Professor and Head Dept. of Community Medicine, Parul Institute of Medical Sciences and Research, Parul University, Vadodara

Email: abhay.pattan@gmail.com

ABSTRACT

*In the past, infectious diseases and malnutrition were the central elements on which a nation health policy was made. Although, many low and middle-income countries are still dealing with the said issues, health care and community promotion can tackle with the problems to some extent. In different nations, on the other hand, rapid changes in nutritional lifestyles and the lack of physical activities has taken place along with the changes in the pattern of non-communicable diseases like diabetes, osteoporosis, cardiovascular diseases and obesity and a large number of malignant diseases, just to name a few. Developing countries are experiencing an epidemiologic transition and what has become known as new world syndrome that is following an unhealthy nutritional pattern, adopting sedentary lifestyle, consuming junk food and increasingly taking drugs. Consequently, nations are prone to non-communicable diseases epidemics in future years. Type 2 diabetes is one of those diseases. To evaluate the effectiveness of nurse directed interventions on knowledge of patients with type 2 diabetes mellitus and to evaluate the effectiveness of nurse directed interventions on health promotion behavior of patients with type 2 diabetes mellitus. An Evaluative Research Approach was adopted to conduct the study in selected Community health center of Limda and Primary health center of Waghodia. 100 sample were selected by using simple random sampling technique Age in year (10% among the 100 sample) Male 60 and female 40 were there. Majority of the sample among non-formal educational 30% and primary education secondary education is 20% and among higher secondary education is 40%. Majority of the sample among the Hindu 60% Muslim 30% Christian 10%. Majority of the community sample are year of suffering with diabetes mellitus are <5 year =50%, 5 year to 10 years =40% and among 10-15 years = 10%. Distance from the hospital <5 km =%, 5-10km=40%, 10-15km=10%. Are you on any anti-diabetic drugs is 10 samples. Family History of Diabetes mellitus among them is 5 % and other are not suffering from them. Habits of the majority of sample is Smoking 40%, Alcohol 20%, Tobacco 4%. 10 sample have not attended or received any educational programmes to control of Type-2 Diabetes Mellitus. Dietary Pattern among the sample is Vegetarian 60% and mixed are 40%. the pre-test mean score is 0.97. The focus of this study was to evaluate the effect of selected type 2 diabetes of selected Community health centre of Limda and Primary health centre of Waghodia taluka. Evaluative Research Approach was used in present study. 100 samples were selected by using simple random sampling technique. Data was analysed and interpreted by applying statistical methods. **Keywords:** Health promotion behaviour, diabetes mellitus.*

Received 01.02.2023

Revised 27.03.2023

Accepted 20.04.2023

INTRODUCTION

Adult diabetes is a significant global health issue. Diabetes is now being recognised by the World Health Organization (WHO) as an open epidemic that is closely linked to patient lifestyle choices and socioeconomic factors. Given the increasing statistics in diabetes prevalence, WHO introduced diabetes as a covert epidemic and has called upon all countries worldwide to fight with this disease. Diabetes prevalence is worriedly increasing worldwide [1]. The total number of people with diabetes is projected to rise from 171 million in 2000 to 366 million in 2030.1 Currently, there are more than 3 million diabetic patients in Iran, which is going to be around 7 million, if necessary, measures are not taken in this regard. According to the latest report delivered by WHO, the world's adult population is going to increase by 65% from 1995 to 2025 and diabetes epidemic rise from 4% to 5.4%. The major part of this numerical will occur in developing countries [2].

With increasing choices, options and costs in health care and treatment, health care resources limitations and changing disease patterns, different assessments are carried out with respect to the evaluation of the

effectiveness of different types of treatment strategies [3]. Such assessments make the decision process difficult. This measure is given priority in order to treat chronic diseases, particularly diabetes, for such disease can be controlled through self-managing and adopting self-care behaviors [4].

MATERIAL AND METHODS

The research was carried out on a sample of 100 Waghodia, Vadodara. For data collection, we used a No probability convenience sampling technique. The data gathering instrument was a structured knowledge questionnaire and diabetes self-management Questionnaire (DSMQ). The information gathered was tallied and examined in terms of the study's objectives and inferential statistics.

RESULTS:

Section -A Sociodemographic Variable

Age in year (10% among the 100 sample) Male 60 and female 40 were there. Majority of the sample among non-formal educational 30% and primary education secondary education is 20% and among higher secondary education is 40%. Majority of the sample among the Hindu 60% Muslim 30% Christian 10%. Majority of the community sample are year of suffering with diabetes mellitus are <5 year =50%, 5 year to 10 years =40% and among 10-15 years = 10%. Distance from the hospital <5 km =%, 5-10km=40%, 10-15km=10%. Are you on any anti-diabetic drugs is 10 samples. Family History of Diabetes mellitus among them is 5 % and other are not suffering from them. Habits of the majority of sample is Smoking 40%, Alcohol 20%, Tobacco 4%.10 sample have not attended or received any educational programmes to control of Type-2 Diabetes Mellitus. Dietary Pattern among the sample is Vegetarian 60% and mixed are 4%.the pre-test mean score is 0.97.

The data indicates that there is statically significant difference found in outcome of Comparison of socio demographic variables and knowledge of health care personnel.13.90 % SD =1.97 it is significant according to the data.

Section B-Nurse directed intervention

Table 1: The effectiveness of nurse directed interventions on knowledge of patients with type 2 diabetes mellitus in experimental group

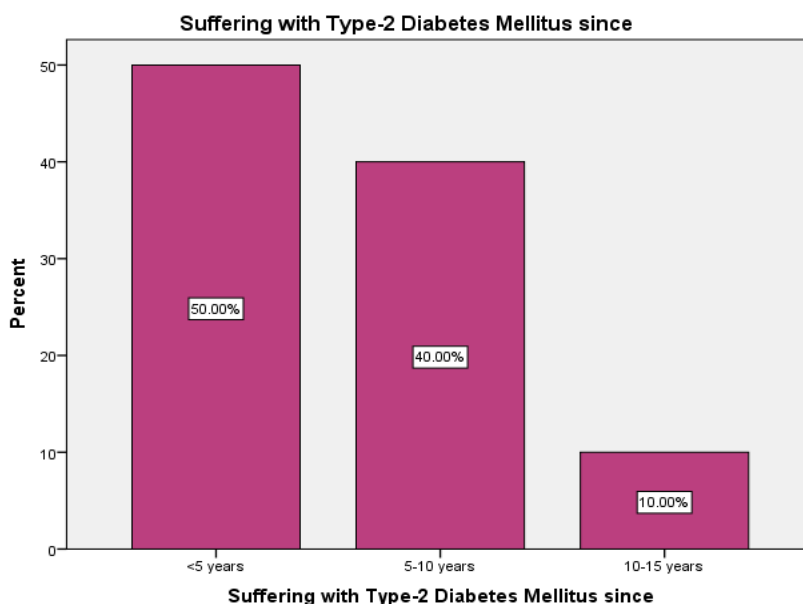
	Mean	N	Std. Deviation	t Value	df	table Value	Sig/Non Sig
Pretest	13.90	100.00	1.97	8.539	9	2.26	NS
Posttest	19.60	100.00	0.97				

*P<0.05 level of significane NS-Non significance

Illustrates the effectiveness of nurse directed interventions on knowledge of patients with type 2 diabetes mellitus in experimental group which was tested by using paired t test. Results showed that mean pre-test knowledge score was 13.90±1.97 and mean post-test knowledge score was 19.60±0.97 with obtained t value (t=8.539, df=9, p=2.26) was statistically highly No significant at p<0.05 level of significance. Findings revealed that nurse directed interventions were effective on knowledge of patients with type 2 diabetes mellitus among elderly in experimental group.

Table 2: Suffering with Type-2 Diabetes Mellitus since

Suffering with Type-2 Diabetes Mellitus since	Frequency	Percent
<5 years	50	50.0
5-10 years	40	40.0
10-15 years	10	10.0
Total	100	100.0



Regarding medical suffering with type 2 diabetes mellitus patients since in experimental group, majority 40(40%) were suffering for 5-10 years, 50(50%) were suffering for less than 5 years, 10(10%) were suffering for 10-15 years. In control group majority 50(50%) were suffering for less than 5. 40(40%) were suffering for 5-10 years, 10(10%) were suffering for 10-15 years.

CONCLUSION

The article concludes that the nurse directed intervention was effective type 2 diabetes mellitus patients

Ethical Clearance: Permission was gained from Parul University and respected area of research, Gujarat, India

Financial support and sponsorship: Self

Conflict of interest: Authors are having no conflict of interest

REFERENCES

1. World Health Organization. (2008). Prevalence of diabetes [Online]. [Last cited on 2008 Dec 11]. Available from: <http://www.who.int/diabetes/facts/en/>
2. Recommendations for healthcare system and self-management education interventions to reduce morbidity and mortality from diabetes. *Am J Prev Med.* 2002;22 (4 Suppl):10-4. [PubMed] [Google Scholar]
3. Issa BA, Baiyewu O. Quality of life of patients with diabetes mellitus in a Nigerian teaching hospital. *Hong Kong Journal Psychiatry.* 2006; 16:27-33. [Google Scholar]
4. Lau DC. (2010). The cost of diabetes: A game changer. *Canadian diabetes Journal.* 2010. pp. 16-9. [Online]. Available from: URL: <http://www.diabetes.ca/publications/cjd/2010/03/>
5. Corabian P, Harstall C. Patient diabetes education in the management of adult type 2 diabetes. Alberta Heritage Foundation for Medical Research. Health Technology Assessment [Online] [Last cited on 2001 Feb]. Available from: http://www.ihe.ca/documents/FINAL_WEB.pdf
6. A. R. Usefy, G. R. Ghassemi, N. Sarrafzadegan, S. Mallik, A. M. Baghaei, and K. Rabiei, (2010). "Psychometric properties of the WHOQOL-BREF in an Iranian adult sample," *Community Mental Health Journal*, vol. 46, no. 2, pp. 139-147

CITATION OF THIS ARTICLE

Pattan AD, Naresh Godara. Nurse Directed Interventions on Health Promotion Behaviour among Type 2 Diabetes Mellitus Patients in Selected Rural Community-A Pilot Study. *Bull. Env. Pharmacol. Life Sci.*, Vol 12[5] April 2023: 79-81.