A Study to Identify the Contributing Factors of Non-Insulin Dependent Diabetes Mellitus Among Diabetic Patients Attending Medicine Outpatient Department in Selected Hospitals of Raipur, Chhattisgarh

Rincy Thomas*

Professor, Department of Medical Surgical Nursing, Shankaracharya Swami Swaroopanand College of Nursing, Bhilai, India

Abstract: A study to identify the contributing factors of Non-Insulin Dependent Diabetes Mellitus among diabetic patients attending medicine outpatient department in selected hospitals of Raipur, Chhattisgarh. The objectives of the study were: 1. To identify the contributing factors of Non-Insulin Dependent Diabetes Mellitus among diabetic patients attending medicine outpatient department in selected hospitals of Raipur Chhattisgarh. 2. To associate the contributing factors of Non-Insulin Dependent Diabetes Mellitus among diabetic patients with selected socio-demographic variables. 3. To develop health education pamphlets regarding contributing factors and prevention of Diabetes Mellitus for the general population. An extensive review of related literature was undertaken. The conceptual framework of this study was based on Fish Bone Model proposed by (Kaoru Ishikawa 1990). Descriptive approach was adopted to identify the contributing factors of non-insulin dependent diabetes mellitus among diabetic patients to accomplish the objectives of the study. Non probability purposive sampling was used to select the sample. The tool used for the study is a selfstructured interview schedule to collect the demographic data and to assess the risk factors of non-insulin dependent diabetes mellitus. Content validity of the tool and pamphlet were ensured by verifying it nine experts. A pilot study was conducted in District Hospital Durg, Chhattisgarh. 10 diabetic patients were selected to refine the methodology and find the feasibility of the study. The data for the main study was collected from Dr. Bhim Rao Ambedkar Memorial Hospital, Raipur, Chhattisgarh. The data collected were analysed in terms of frequency, percentage, standard deviation and χ^2 association was presented in the forms of tables and graphs.

Keywords: Contributing Factors, Diabetic patients, Non-Insulin Dependent Diabetes Mellitus.

1. Introduction

Diabetes is a chronic disease that occurs either when the pancreas does not produce enough insulin or when the body cannot effectively use the insulin it produces. Type 2 diabetes is the most common form and comprises of 90% of people with diabetes around the world. The prevalence of type 2 diabetes

rates continue to increase with increasing number of patients at risk of serious diabetes-related complications. V. Mohan (2007) reported that India leads the world with largest number of diabetic subjects earning the dubious distinction of being termed the "diabetes capital of the world".

Report of a WHO study group on prevention of diabetes mellitus, Reviews current and potential opportunities for the prevention of diabetes mellitus and the improvement of prognosis through the early detection and treatment of complications. So, this can be achieved through the detection of risk factors and teaching the general public about the prevention of diabetes.

The analysis was done based on the objectives and hypothesis to be tested. Descriptive and inferential statistics were used for the analysis of the data. The data and findings have been organized and presented under the following sections:

Section A:

Distribution of subjects according to socio-demographic variables.

Section B.

Percentage analysis of items for identifying the contributing factors of Non-Insulin Dependent Diabetes Mellitus.

Section C:

Overall score of contributing factors of Non-Insulin Dependent Diabetes Mellitus.

Section D:

Chi-square analysis for assessing association between contributing factors and selected socio-demographic variables.

2. Results

The highest mean score percentage of personal contributing factors is 67.33%, psychological contributing factor is 28.3%, dietary contributing factors is 27.25%, and health related contributing factors is 19.41%.

^{*}Corresponding author: rincy887@gmail.com

Table 1

Overall score of contributing factors of non-insulin dependent diabetes mellitus

	Psychological factors	Personal factors	Dietary factors	Health related factors	Total
Mean	1.7	4.04	1.09	2.33	9.16
Mean %	28.3%	67.33%	27.25%	19.41%	32.71%
S.D.	1.1	1.38	0.7	1.4	4.58
C.V.	64.7%	34.1%	64.2%	60.08%	50%

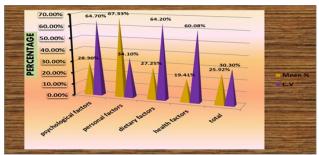


Fig. 1. Overall percentage score of contributing factors

The findings also revealed that various contributing factors of Non-Insulin Dependent Diabetes Mellitus has significant association with selected socio-demographic variables. Psychological contributing factors has significant association with sex (χ^2 = 5.77) at 0.05 level of significance and has significant association with family type (χ^2 = 3.99) at 0.05 level of significance. Personal contributing factors has significant association with age (χ^2 =17.02) at 0.05 level of significance and has significant association with income /month (χ^2 =11.83) at 0.05 level of significance. Dietary contributing factors has no

significant association with demographic variables at 0.05 level of significance. Health related contributing factors has significant association with socio-demographic variables at 0.05 level of significance.

3. Conclusion

So, from the study it was concluded that personal contributing factors (i.e., no regular exercise) have highest score and dietary contributing factors had the least score in causing non-insulin dependent diabetes mellitus.

References

- [1] Joshi SK. Diabetes mellitus: A review of its associations with different environmental factors. *Kathmandu University Medical Journal* (2010), Vol. 8, No. 1, Issue 29, 109-11.
- Brunner. L.S et al., The Lippincot Manual of Nursing Practice. 4th edition Philadelphia: J.B. Lippincot company; 1986, pp. 1286-1288.
- [3] Black, J.M. et al., Medical Surgical Nursing. Clinical management for positive outcomes. 6th edition, India: An Imprint of Elsevier Science; 2001, pp. 986-988.
- [4] Mohan et.al., Epidemiology of type 2 diabetes: Indian scenario V March 2007 www.icmr.nic.in/
- [5] Ari S. Eckman. Type 2 diabetes risk factors. 6/28/2011. www.nlm.nih.gov/medlineplus