P-1165 : Lifestyle modification to reduce the risk of coronary artery disease among patients with diabetes mellitus.

Nilesh Mishra, RN, RM, M.Sc. (N),

Lecturer, Department of Medical Surgical Nursing, Bombay Hospital College of Nursing
Indore, (M.P.) India

BACKGROUND OF THE STUDY

The risk of Coronary Artery Disease events at least by two to threefold in Type 2 Diabetic patients compared with Non-Diabetic patients. Lifestyle modification can be of major benefit in preventing associated complication especially Coronary Artery Disease among patients with Diabetes Mellitus. Lifestyle of Indian people is the important cause that increasing the burden of Diabetes Mellitus in India and lack of awareness about Diabetes Mellitus leads to its secondary complication especially Coronary Artery Disease. It also increases the mortality rate among patients with Diabetes Mellitus. Lifestyle modification can be helpful to reduce the risk associated with Diabetes Mellitus.

NEED OF THE STUDY

Lifestyle of Indian people is one of the important factor for increasing burden of Diabetes Mellitus in India. Due to lack of awareness about Diabetes Mellitus, risk for developing Coronary Artery Disease is greater than other secondary complications.

OBJECTIVES

1. Assess the pre-interventional and post-interventional knowledge of patients with Diabetes Mellitus regarding lifestyle modification
2. Find out the significant difference between pre-test and post-test knowledge.
3. Associate the pre-interventional knowledge of patients with Diabetes Mellitus with selected demographic & lifestyle variables.

RESEARCH METHODOLOGY

- **Research Approach** : Quantitative approach
- **Research Design** : Pre-experimental
(One group pre & post-test research)
- **Sample** : Patients with type 2 diabetes mellitus
(age of 40 years & above)
- **Sampling technique** : Non-probability purposive sampling
- **Sample Size** : (N=40)
- **Research Setting** : Krishna Diabetes Clinic & Educational Research Centre, Bhopal, India
- **Tool for data collection** : Demographic data, Lifestyle data, Structure questionnaire (30 MCQ)
- **Data analysis by** : Descriptive & Inferential Statistics

FINDINGS

Demographic data revealed that most of the patients with Diabetes Mellitus 16 (40%) belonged to the age group 50 - >60, 23 (57.5%) male, 34 (85%) married and 13 (32.5%) had completed higher secondary education, 30 (75%) belonged to urban area, 18 (45%) didn't have any known case of diabetes in the family whereas 11 (27.5%) had the history of diabetes in their parents. 17 (42.5%) had complained of Hypertension, 12 (30%) was obese, 9 (22.5%) had eye diseases and 2 (5%) had kidney diseases. Lifestyle characteristics showed 22 (55%) was vegetarian, 29 (72.5%) never smoked, 26 (65%) never practiced exercise daily, 33 (82.5%) did not adopted any form of recreational activity, 24 (60%) was using Peanut oil as cooking oil and (67.5%) visited doctor regularly.

REFERENCES

1. Tungdim, M.G., Ginzaniang, T., Poufullung, G., Verma, D. & Kapoor, S. (2014). Risk of cardiovascular disease among Diabetic patients in Manipur, Northeast India. *Journal of Anthropology*, 14 (1).
2. Williams, P.T. & Thompson, P.D. (2013). Walking versus running for hypertension, cholesterol, and Diabetes Mellitus risk reduction. *Arteriosclerosis, Thrombosis, and Vascular Biology*, 33.

Figure 1.1: Pie diagram showing percentage distribution of health problem with Diabetes of patients with Diabetes Mellitus.

HEALTH PROBLEM WITH DIABETES

Figure 1.2: Cone diagram showing percentage distribution of pre-interventional knowledge of patients with Diabetes Mellitus

RESULT

Table 1.1: Comparison between Pre-interventional and Post-interventional knowledge

Knowledge	Mean	Mean difference	(S.D.)	't' value
Pre-interventional	13	8.2	4.31	8.78*
Post-interventional	21.2		4.03	

The paired 't' value 8.7 showed that there was a significant improvement between pre and post interventional knowledge at the significance level of $P < 0.05$ at all the aspects of knowledge variables. The chi-square value showed the significant association with selected demographic variables (level of education, monthly income, duration of diabetes in years and any other health problem with diabetes) and with selected lifestyle variables (doctor visits by the patients with Diabetes Mellitus) at the level of 0.05.

DISCUSSION

The results showed that selected Nurse Led Intervention is effective to improve the knowledge of the patients with Diabetes Mellitus regarding lifestyle modification to reduce the risk of Coronary Artery Disease and selected demographic and lifestyle variables are the independent in relation to pre-interventional knowledge.

IMPLICATIONS

- This study shows about lifestyle pattern of patients with diabetes mellitus and their knowledge level of selected region of India.
- Tools can be used in diabetes clinics and hospitals for collecting comprehensive & prospective data.
- Data can be used to plan various strategies for awareness regarding diabetes.
- Selected intervention can be used for enhancement of knowledge.