A DISCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE OF DIABETIC CLIENTS REGARDING DIABETIC MELLITUS IN CMI HOSPITAL DEHRADUN

*By : Rajvir Kaur**

***Lecturer, Department of Nursing, Ajit Nursing Institute, Sunam, Punjab.**

Abstract

Diabetes mellitus is a major public health problem all over the world. For adequate rehabilitation of the diabetic patients and to permit them to have an independent life to certain extent, they must have an understanding of the disease, its treatment, diabetic diet, managed their condition better than those without this knowledge. This research paper tries to assess the knowledge of diabetic clients regarding diabetes mellitus. A group of 50 subjects were used for the study at combined medical hospital Dehradun. The data was collected through the socio-demographic profile data sheet. Standard interview schedule was used. The study revealed that there was no significant difference between the knowledge and age, gender, religion, marital status and type of family.

Key Words: Knowledge, Diabetic client, Diabetes mellitus

About Author:

The Author Mrs . Rajvir Kaur did her MSc in Nursing (Medical Surgical Nursing) from combined Institute of Medical Sciences, Dehradun. Working as lecture in Dept. Medical Surgical Nursing at Ajit Nursing Institute, Sunam (Punjab). She has 5 years of teaching experience.

Introduction

Diabetes mellitus is a chronic disease of carbohydrate metabolism and to lesser degree fat and protein metabolism. It is characterized by hyperglycemia and glycosuria, resulting from inadequate production and utilization of insulin. The causes of diabetes are increasing day by day in India. The multicentre ICMR (Indian council of medical research) study showed a prevalence of 2.5% in urban and 1.8% in rural population, above the age of 15 years. One in every 8th individual in India is diabetic. Industry body ''ASSOCHAM'' has estimate at present 25 million Indian shall be suffering from diabetes in 1995 and this number could increase to 57 millions by 2025.

The United Nations estimates the number of people globally affected by diabetes to be 246 million and approximately half of those are in India, China, Nepal and other Asian countries.

Prevalence of Diabetes in India is among the highest in the world and growing October 15, 2008-Waltham, Mass. Decision Resources, one of the world's leading research and advisory firms focusing on pharmaceutical and healthcare issues, finds that the prevalence of Diabetes in India is among the highest in the world with more than 28 million cases in 2007. The average age of onset of diabetes mellitus is around 40 years while is around 55 years in other countries. It has been studied that diabetes is the 3rd leading cause of death in United States and is stated with many complications.

WHO expert committee in 1965 classified diabetes into juvenile onset and maturity onset diabetes. While the next committee in 1978 and 1980 replaced these terms by insulin dependent diabetes

mellitus (IDDM) and non-insulin dependent diabetes mellitus (NIDDM).

Many types of diabetes are recognized: The principal three types are:

Type 1: Results from the body's failure to produce insulin. Presently most persons with type 1 diabetes take insulin injections.

Type2: Results from insulin resistance, a condition in which cells fail to use insulin properly, sometimes combined with absolute insulin deficiency.

Gestational diabetes: Pregnant woman who have never diabetes before but who have high blood sugar (glucose) levels during pregnancy are said to have gestational diabetes. Gestational diabetes affects about 4% of all pregnant women.

Other forms of diabetes mellitus are categorized separately from these. Examples include congenital diabetes due to genetic defects of insulin secretion, cystic fibrosis-related diabetes, steroid diabetes induced by high doses of glucocorticoids, and several forms of monogenic diabetes.

Factors that affect blood sugar level are Food, Exercise and physical activity, Medications, Alcohol, Fluctuations in Hormone level. Often diabetes goes undiagnosed because many of its symptoms seem so harmless. Recent studies indicate that the early detection of diabetes symptoms and treatment can decrease the chances of developing the complications of diabetes. Diabetes symptoms include: excessive thirst, extreme hunger, unusual weight loss, increased fatigue, irritability, blurred vision.

A number of drug options exist for treating diabetes including: sulfonylurea, alpha glucosidase inhibitors, thiazolidinedions.

In recent years, research has focused on increasing attention or knowledge on diabetes mellitus for people with diabetes mellitus. Diabetes mellitus is a major public health problem all over the world. The number of Diabetic patients treated in hospital either for the control of diabetes or the treatment of complications increasing tremendously. It is very difficult to hospitalize all the patients due to shortage of beds and other resources. More over patients feel more comfortable in a home environment rather in the hospital. Therefore they are better treated as outpatients.

For adequate rehabilitation, they must have an understanding the disease, its treatment, diabetic diet, managed their condition better than those without this knowledge. Patients tend to be less frightened and depressed if they know how and why they should do certain things.

The investigator during the interaction with the diabetic patients observed that the diabetic patients were ignored about the balanced and healthy diet, importance of exercise and feet care and treatment of diabetes. Therefore there is a need for a system of organized and systematic assessment of the diabetic client about their knowledge regarding diabetes mellitus.

Hence the researcher felt the need to determine the knowledge of diabetic clients regarding diabetic mellitus and identification of the relationship between the knowledge of the client related to diabetes mellitus with selected variables.

Materials and Methods:

A descriptive survey is considered to be most suitable for finding out the knowledge of the selected population as it provides information about the disease condition. Non-experimental research design was adopted .The study was conducted at Combines Medical Institute and at Dehradun. Convenient sampling technique was used to select the subject for the study. The combine medical hospital Dehradun was selected conveniently and from it total 50 subjects were taken.

Instruments:

a) Socio-demographic profile data sheet: the socio-demographic profile data sheet consist of items seeking information on identification of study subjects like gender, age, education religion, marriage, type of family, family income, occupation.
b) A structured interview schedule: A structured interview schedule was developed to assess the knowledge of study subjects regarding diabetes mellitus. Structured interview schedule was prepared in English and translated into Hindi without changing the meaning and was validated from Hindi language expert. A pilot study was conducted on 5 subjects to assess the practicability of the study and formal feasibility to conduct the study.

Procedure for Data Collection:

Having received a formal permission from senior medical office of combined medical hospital Dehradoon the investigator was introduced by the senior medical officer and explained the purpose of the study. The confidentiality of the response was assumed, a written consent was obtained from subjects Firstly on the day the purpose of the study was explained to the clients and after that the data

was collected, it was then analyzed by using descriptive and inferential statistics. Calculations were carried about manually using a calculator and with the help of Microsoft excel. Descriptive statistical test like mean, mean percentage, standard deviation were applied. In inferential statistics ANOVA, "t" test and chi square were applied.

Results

Demographic characteristics of the sample: The maximum percentage (40%) of sample were in the age group of 50-59 years majority of the sample were females (56%), most of the sample (58.0%) were illiterate, 100% of sample were married, majority of the sample were (56.0%) were from joint family, maximum percentage (72.0%) were Hindu, most of the sample were (32.0%) were house wife ,most of the sample's monthly income were <3000 and 4000-5000 respectively.

The data revealed that:

a. The majority of samples31 (36.0%) of diabetic clients are having average knowledge regarding diabetes mellitus and minimum 14 (15.5%) of diabetic clients are having poor knowledge regarding diabetes mellitus (Fig.1).

b. The graduate having highest knowledge, mean score 21.88 (mean %= 29.7) and illiterate having lowest knowledge mean score (mean %=25.6) this difference were statistically significant $p<0.05$ level. Hence it can be concluded that the education level among diabetic clients had effect on the knowledge (Fig.2).

c. The employ having highest knowledge, mean score+18.33 (mean % = 27.2%) and the laborer having lowest mean score + 16.20 (mean% = 24.0%) and this difference was found statistically significant $p<0.05$ level. Hence it can be concluded that the occupation among diabetic clients has effects on the knowledge (Fig 3).

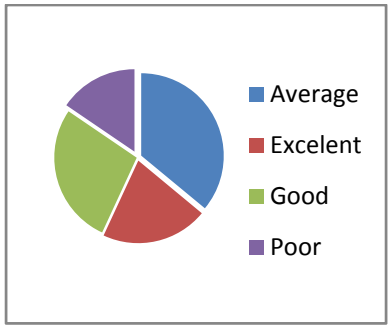

Fig. 1

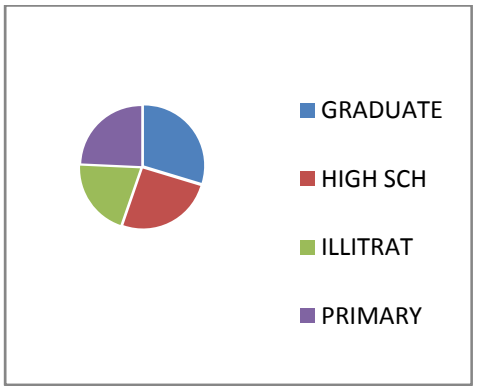

Fig. 2

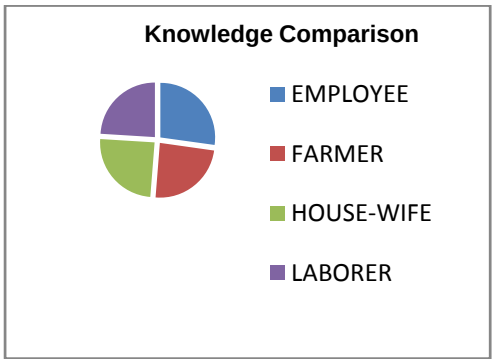

Fig. 3

Discussion:

Daniel W. Faster (2003) conducted a study to elicit knowledge and practice regarding diet, self care, complications, and medications regarding diabetes mellitus among diabetes individuals. Current study was an attempt to assess the knowledge of diabetic clients regarding diabetes mellitus. Out of 50 subjects 2 (20.9%) from the total sample had excellent knowledge, 3(27.6%) had good knowledge,31 (36.0%) of diabetic clients are having average knowledge regarding diabetes mellitus and minimum 14 (15.5%) of diabetic clients are having poor knowledge regarding diabetes mellitus, the graduate having highest knowledge, mean score 21.88 (mean %= 29.7) and illiterate having lowest knowledge mean score (mean %=25.6) this difference were statistically significant $p<0.05$ level, the employ having highest knowledge, mean score+18.33 (mean % = 27.2%) and the laborer having lowest mean score + 16.20 (mean% = 24.0%) and this difference was found statistically significant $p<0.05$ level.

Conclusion:

The reported findings provides the knowledge of diabetic clients regarding diabetes mellitus was helpful to for the development of teaching module for diabetic clients and management and prevent the complications of diabetic clients. The knowledge obtained from the study can be used to answer the queries of patients regarding diabetes mellitus. The researcher could not find and any difference in mean score between knowledge and age, gender, religion, marriage and type of family. Out of 50 subjects 2 (20.9%) from the total sample had excellent knowledge, 3(27.6%) had good knowledge,31 (36.0%) of diabetic clients are having average knowledge regarding diabetes mellitus and minimum 14 (15.5%) of diabetic clients are having poor knowledge regarding diabetes mellitus, the graduate having highest knowledge, mean score 21.88 (mean %= 29.7) and illiterate having lowest knowledge mean score (mean %=25.6) this difference were statistically significant $p<0.05$ level, the employ having highest knowledge, mean score+18.33 (mean % = 27.2%) and the laborer having lowest mean score + 16.20 (mean% = 24.0%) and this difference was found statistically significant $p<0.05$ level.

References:

1. American Diabetic Association, 1996, "National recommendation and principal for individuals with a Diabetes mellitus care" 1996, 19:523-534.
2. Alain.G.Betoni et al 2001, "Riak of infection related to diabetic care" Vol. 24. Pp No. 95-98
3. Amuna, P. and F.B. Zotor, 2008 "Epidemiological and nutrition transition in developing countries: Impact on hman health and development" soc.,68 Pp.N.-82-90.
4. Andrea Howard et al, 2004 "Effect of alcohol Consumption on Diabetes Mellitus" Vol. 3 Pp.No-211-219.
5. Benjanin C. Tunner et al, 2001 "ill effects of evening alcohol consumption" Diabetic care, Vol-24, Pp.No. 1881-1883.
6. British Journal of Ophthalmology, 2008 "The change of oxidative stress products in diabetes mellitus and diabetic retinopathy" Pp. No. 548-551.
7. Brook P.A, 1977 "Diabetic patients understanding about their diet and treatment" nursing time Vol.73Pp No.117-119.
8. Daniel W. Faster, 1991 "Harrison's Principals of internal medicine." Published by Me Grew Hill Company. 1991 Pp No, 1742-1748