

A STUDY ON MANAGEMENT AND ASSOCIATED COMPLICATIONS IN DIABETES MELLITUS AND PATIENT COUNSELLING

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ABSTRACT

Epidemiological data shows that Diabetes Mellitus (DM) in India is increasing due to sedentary lifestyles. The purpose of this study was to establish a level of knowledge about diabetes mellitus. Knowledge of Diabetes is an integral component for attaining optimal disease control and prevent the impending chronic co-morbidities of Diabetes Mellitus, which include major long term complications relating to damage of blood vessels, leading to diabetic foot, nephropathy, stroke, retinopathy, neuropathy and infections which do not heal quickly due to hyperglycemia. Diabetes doubles the risk of cardiovascular diseases and about 75% of deaths in diabetes are due to coronary artery diseases. which impact significantly on the quality of life of the

patient. Pharmacist being one of the indispensable members of the health care team has an immense responsibility for counseling of the patient. Patient counseling helps the patients to attain better understanding of their illness and the role in the treatment. It also motivates patients to adopt healthy lifestyle which would avoid future complications.

KEYWORDS: diabetes mellitus, complications, retinopathy, neuropathy, patient counseling.

INTRODUCTION

Diabetes mellitus is a metabolic disorder characterized by hyperglycemia, glycosuria, hyperlipidemia, negative nitrogen balance and ketonaemia.

Symptoms of high blood sugar include poly uria, poly dipsia and poly phagia. If left untreated, it can cause many complications including diabetic keto acidosis and non ketotic hyperosmolar coma. Serious long-term complications include cardiovascular disease, stroke, kidney failure, foot ulcers and damage to the eyes.

Diabetes is due to either the pancreas not producing enough insulin or the cells of the body not responding properly to the insulin produced. There are three main types of diabetes mellitus.

- Type 1 DM results from the body's failure to produce enough insulin. This form was previously referred to as "insulin-dependent diabetes mellitus" (IDDM) or "juvenile diabetes". The cause is unknown.
- Type 2 DM begins with insulin resistance, a condition in which cells fail to respond to insulin properly. As the disease progresses a lack of insulin may also develop. This form was previously referred to as "non insulin-dependent diabetes mellitus" (NIDDM) or "adult-onset diabetes". The primary cause is excessive body weight and not enough exercise.
- Gestational diabetes, is the third main form and occurs when pregnant women without a previous history of diabetes develop a high blood glucose level.

MATERIALS AND METHODOLOGY

This study was carried out to assess the knowledge of Diabetes and to provide patient counseling about disease management and lifestyle modifications in Diabetes mellitus patients.

- Case report form
- Questionnaire form
- Patient leaflet explaining the complications for counseling

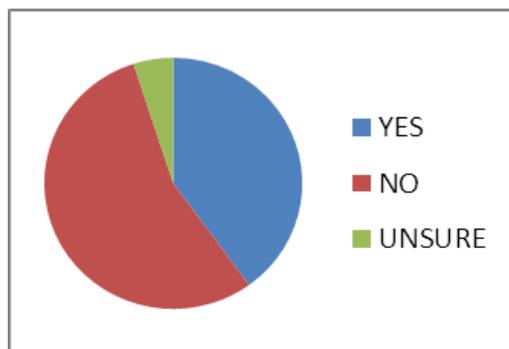
A questionnaire was provided to 100 patients, out of them 45 males and 55 females, aged between 20-90 years. The questionnaire consisted demographic details and questions relating to the patients knowledge of the disease, its complications and its management. The results where expressed as mean, standard deviation and in number (%) MS word have been used to generate graphs, tables, etc.

RESULTS AND DISCUSSION

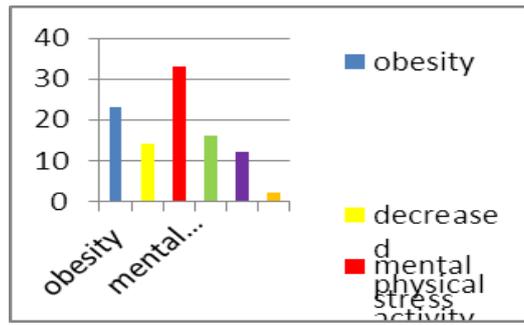
We studied a total of 100 patients of which 45% were male and 55% were female with a mean age of 41-50 years (29%). Among the 100 participants 60% had positive family history and 40% had no family history of diabetes, 83 subjects thought that diabetes is caused due to some other factors. Among the factors provided, mental stress was most frequently chosen factor 33% followed by decreased physical activity 14%, hypertension 16%, family history 12% and obesity 23% 58% of the respondents said that diabetes is not preventable and 27% believed that diabetes is preventable by diet control 20% exercise 24% or both diet and exercise 56%. this indicates a significant lack of knowledge of primary prevention of diabetes in population.

- Results show that significant number of participants 88% answered that frequent urination, thirst are signs of high blood sugar. Although it is well known that patients passively learn to recognize the symptoms once they suffer from it.
- Although 51% said that it is necessary to check blood glucose regularly and 51% of them maintain a record of their reports, it was surprising to know that only 26% of the subjects were aware of the target values of blood glucose
- 55% participants were unaware that the usual cause of diabetes is lack of insulin the body. 83% of the respondents agreed that they take extra dose, when they eat sweets or eat heavily.
- These results highlight the need for educational programs aimed at improving the knowledge of diabetes, its causes, possible complications and self-received patient management.

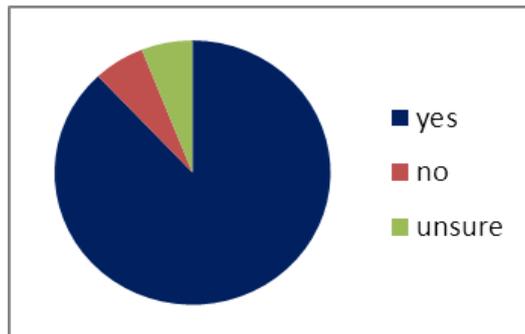
1. Do you know about diabetes?.



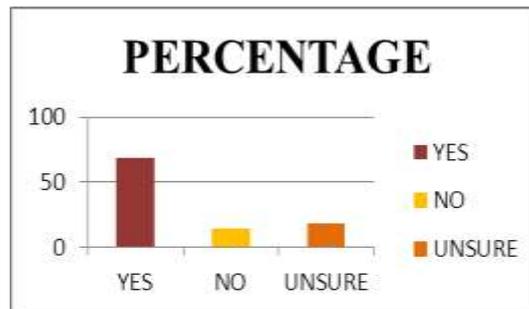
2. what factors do you think that contribute to diabetes?.



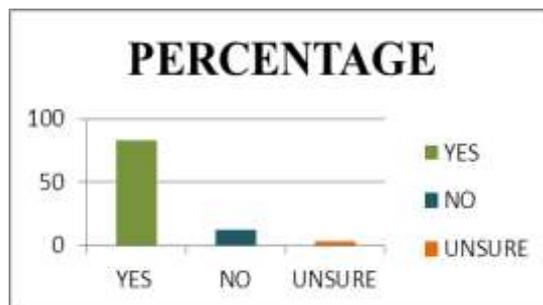
3. Are frequent urination thirst, signs of high blood sugar?.



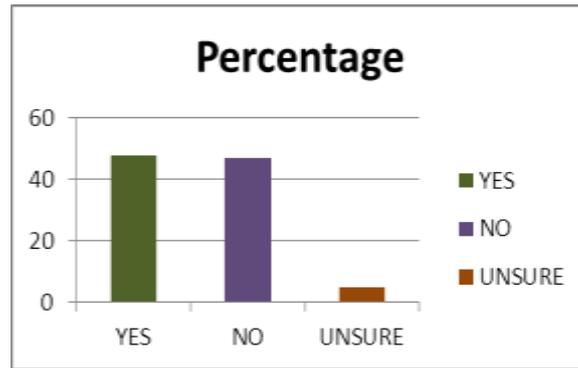
4. Do you know what kind of diet should a diabetic eat?.



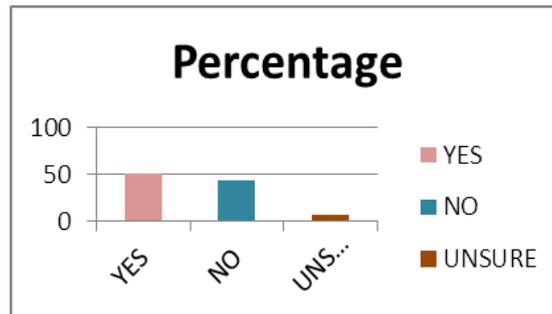
5. Do you take an extra tablet or insulin when u eat sweets?.



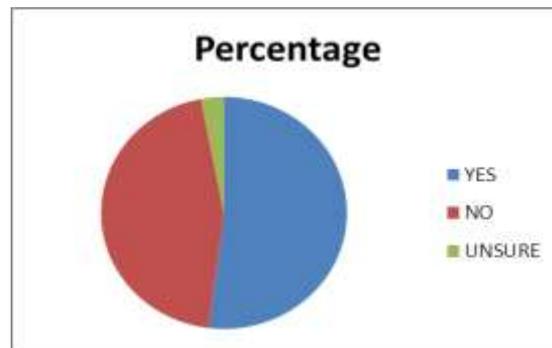
6. If you avoid taking only sugar and sweets your blood glucose level will be under control.



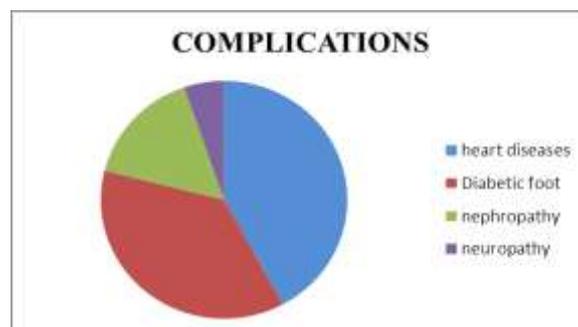
7. Do you keep a record of blood glucose level?.

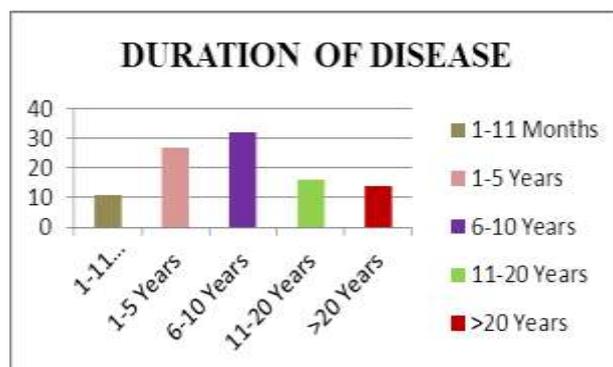


8. Do you know a diabetic patient should check his or her blood glucose level regularly?.



9. Number of patients with complications.





CONCLUSION

From the study it is identified that patient counseling by clinical pharmacists regarding disease, medication and lifestyle modification of diabetic patients, can be effectively implemented and important health indicators improved significantly.

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