

# Diabetes Mellitus - An Awareness Survey

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## Abstract:

Diabetes mellitus is a metabolic disease in which is characterized by high blood sugar levels over a prolonged period. The symptoms of this disease includes increased thirst, frequent urination, increased hunger. Diabetes is mainly caused due to insufficient production of insulin. It must never be left untreated as it could cause long term complications like myocardial infarction, ulcers, among other things. Prevention and treatment involve a healthy diet, physical exercise, not using tobacco and being a normal body weight.

## INTRODUCTION:

In 2014, the International Diabetes Federation (IDF) estimated that diabetes resulted in 4.9 million deaths.(1) The World Health Organization (WHO) estimated that diabetes resulted in 1.5 million deaths in 2012, making it the 8th leading cause of death. It is extremely important to treat diabetes as and when it is detected. As of today there are three types of diabetes mellitus :

- **Type 1 DM** results from the pancreas' failure to produce enough insulin. This form of diabetes can be managed with insulin injections.(2)
- **Type 2 DM** begins with insulin resistance, a condition in which cells fail to respond to insulin properly(3) As the disease progresses a lack of insulin may also develop. (1)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 (2)
- **Gestational diabetes**, is the third main form and occurs when pregnant women without a previous history of diabetes develop a high blood sugar level (3)

## OBJECTIVES AND REASON FOR THIS SURVEY:

This research was done primarily to find out the extent of awareness among non-medical people regarding Diabetes Mellitus.

## METHOD AND MATERIALS USED:

The survey was conducted on 60 non-medical personnel randomly selected. Each willing participant shared their personal knowledge on diabetes mellitus and the results were finally compiled and presented.

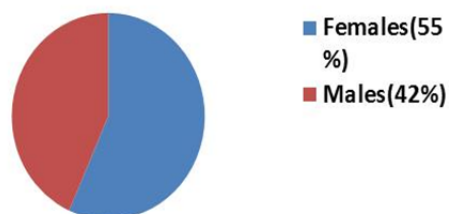
## Variables:

- Number of participants aware of diabetes mellitus.
- Number of participants aware of the normal blood sugar level
- Number of participants aware of the symptoms
- Number of participants aware of the preventive measures and treatment.

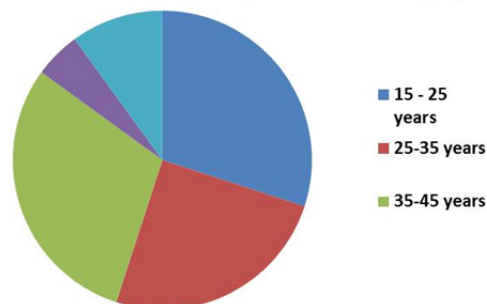
## RESULTS:

Total no: of people who took part in the survey : 60

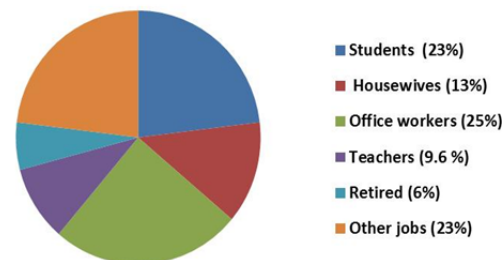
### Percentage of male and female participants

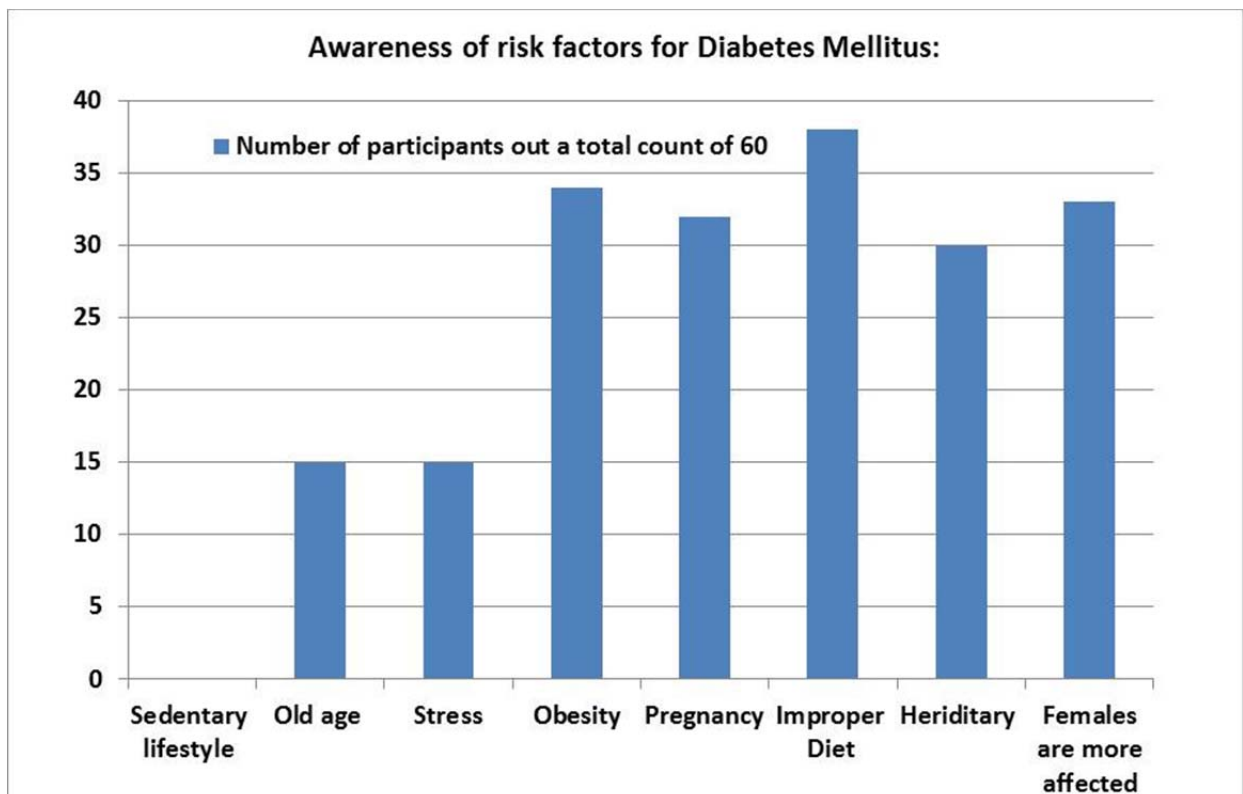
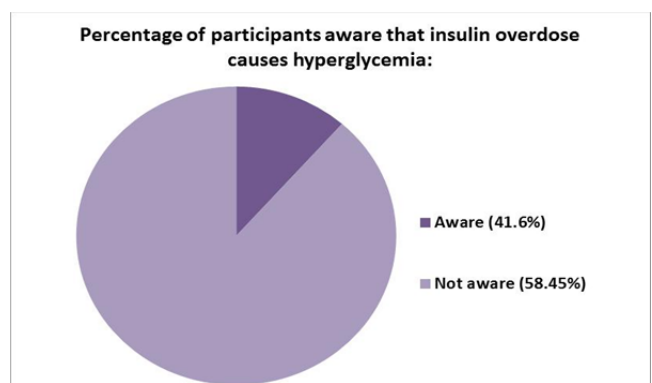
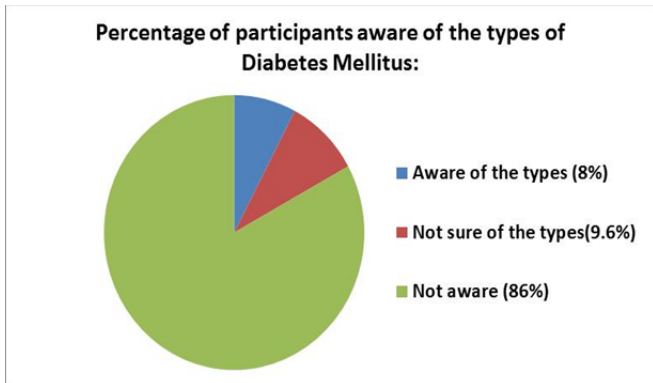
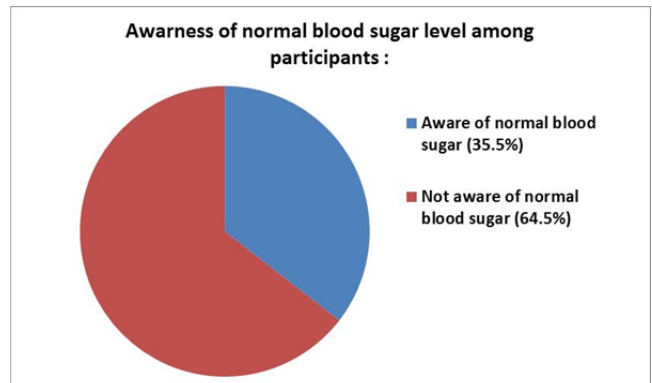
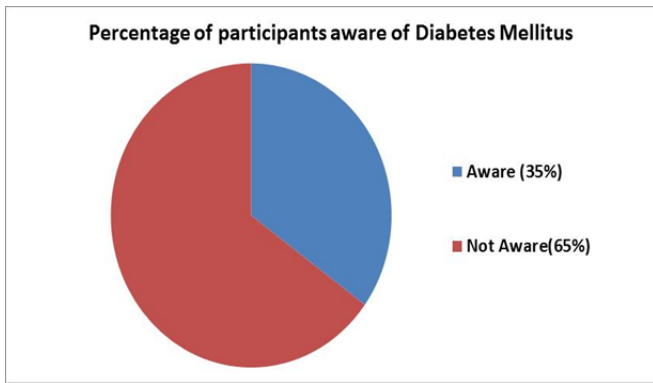


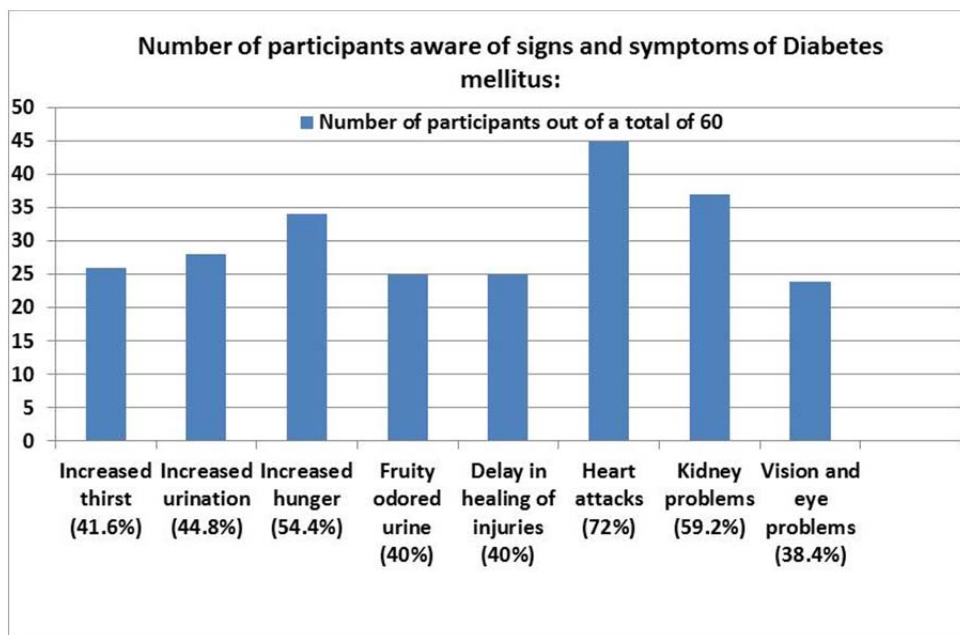
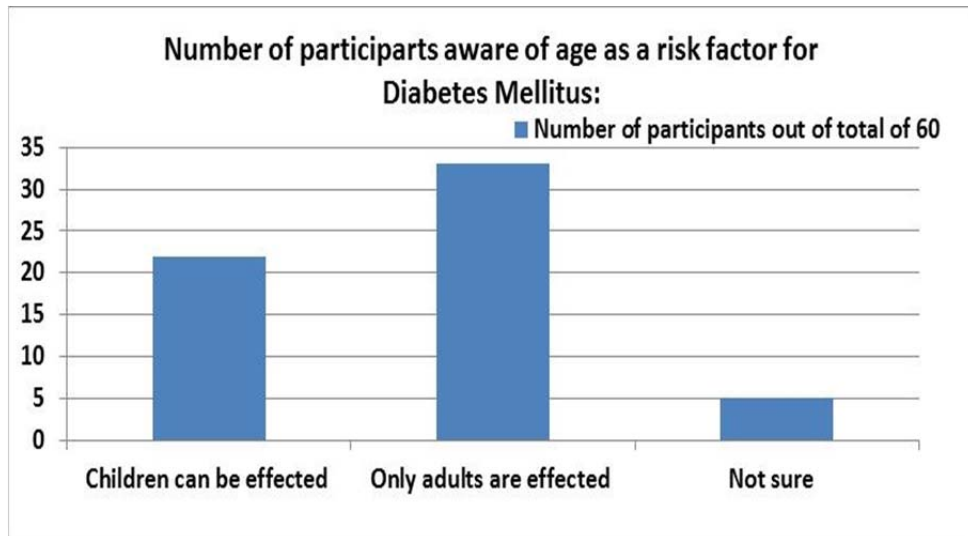
### Number of participants under each age group:



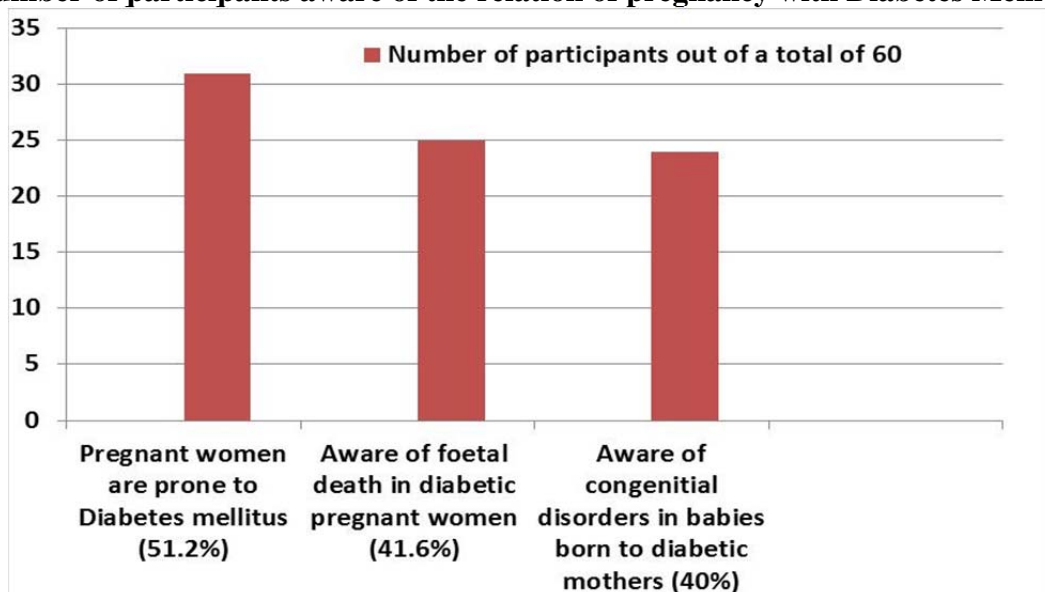
### Graph showing the percentage of participants under each category of occupations :

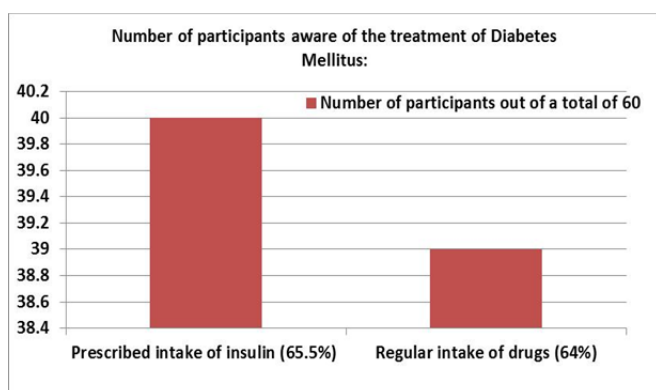
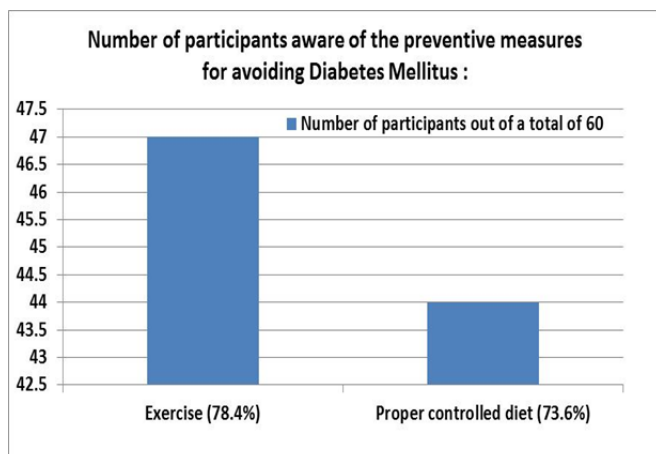






### Number of participants aware of the relation of pregnancy with Diabetes Mellitus:





#### DISCUSSION:

A total of 60 people had taken part in the survey, 34 males and 26 females. Nearly 57% of the participants were educated working professionals and 6% comprised of retired citizens. None of them were involved in any medical profession or course of study. 23% of the participants were students. On the whole only 35% of them were aware of Diabetes mellitus but more than 80% were not aware of its types as a large part of the participants were students. 15 of the participants were diabetic but 36% of the participants were aware of their own blood sugar level and also if it was within normal limits or not. According to the response of the individuals the most common risk factor for Diabetes is improper diet with nearly 60.8% agreeing to this fact while old age and stress

where least familiar as risk factors among the individuals. The participants were all generally aware of the symptoms of diabetes mellitus and heart problems increased hunger and kidney problem was the most familiar symptoms to the individuals. 32 out of 60 people said that pregnant women are prone to diabetes and nearly 40% of them were aware of the complications and congenital disorders the child born to a diabetic mother would face. More than 70% of the participants were of the opinion that exercise is a great preventive measure. Most of them were also well aware of insulin as a treatment but nearly 60% of them were not aware that hypoglycemia was a consequence of insulin overdose.

#### CONCLUSION:

I thereby conclude that 65% of the public as represented by the samples in this survey were not aware of Diabetes mellitus as 23% of them were students and that more awareness programs and diabetic centers must be set up to spread the awareness of this disease. The participants in the survey are quite aware and well informed about this disease except in the few areas mentioned before. An improved educational program that tackles the misconceptions and areas of weaknesses can potentially increase the level of public awareness of diabetes.

#### REFERENCES:

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