

# **Assessment of Modifiable Risk Factors Among Type 2 Diabetes Mellitus Patients**

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## **ABSTRACT:**

**Background:** With the evidences available in the ancient literature of Sanskrit, diabetes mellitus (DM) could possibly be termed as 'honey-urine disease' which is associated with gross emaciation and wasting. DM is the most commonly referred metabolic disorder that affect majority of the people globally. Hence, the present study was conducted for assessing modifiable risk factors among type 2 DM patients.

**Materials & Methods:** Patients were evaluated by history taking, examination and performing relevant investigations. For each subject a separate clinical proforma, incorporating detailed history with duration, clinical examination and relevant information was used. Lipid profile was evaluated. Fasting and PPG were defined as value of plasma glucose measured after overnight (8–12 h) fasting and after 2 h of meals respectively. Pharmacological intervention is required in clients with HbA1c levels greater than 7.0%. The HbA1c test is recommended for the diagnosis of diabetes mellitus and can also guide appropriate ongoing management of patients with diabetes.

**Results:** 71.5% of the subjects were non-smokers (143 subjects) while 15.5% were smokers (31 subjects) and 13.0% had quit smoking (26 subjects). 58.0% of the subjects did not use tobacco (116 subjects) while 31.0% used tobacco (62 subjects) and 11.0% had quit using tobacco (22 subjects). 75.0% of the subjects did not consume alcohol (150 subjects) while 8.5% consumed alcohol (17 subjects) and 16.5% had quit consuming alcohol (33 subjects). 49.0% of the subjects were vegetarians (98 subjects) while 46.0% were non-vegetarians (92 subjects) and 5.0% had a mixed diet (10 subjects). 48.5% of the subjects engaged in 50-100 minutes of physical activity per week (97 subjects) while 24.0% engaged in less than 50 minutes per week (48 subjects) The least number of subjects reported no physical activity (1 subject, 0.5%). 53.0% of subjects had low density lipoprotein (LDL) dyslipidaemia (106 subjects) while 47.0% had normal LDL levels (94 subjects) The highest dyslipidaemia was observed in triglyceride (TG) (45.0%) and the lowest in TC (35.0%).

**Conclusion:** Our study's findings unequivocally demonstrate that HbA1c, the established benchmark for evaluating glycemic control, exhibits a robust association with the lipid

profile. The study among subjects with HbA1c levels exhibited a favorable lipid profile of TG , total cholesterol (TC), LDL and high density lipoprotein (HDL). These findings suggest a positive correlation between normoglycemic HbA1c levels and a desirable lipid profile, indicative of reduced risk. This characteristic renders it an optimal indicator for predicting dyslipidemia in individuals with type 2 diabetes mellitus.

**KEY WORDS:** Risk factor, Diabetes mellitus, Diabetes Mellitus, Lipid, Blood suga