

ABSTRACT

Diabetes mellitus is a metabolic disease which is categorized as hyperglycemia, resulting from lack of insulin secretion, insulin action or both. This disease is a multi factorial trait that appears by interactions of genetic, immunological and environmental factors. Now days there are three common known types of diabetes, type 1, type 2 and gestational diabetes. Diabetes associates with socio-demographic factors and blood groups. But association between socio-demographic factors and blood group with diabetes mellitus is conflicting. Thus, the aim of this study was to test the association between socio-demographic factors and ABO/Rh blood group with diabetes mellitus. The study was conducted through Case –control method of study in Dangila, Ethiopia. The total number of individuals included as study subjects were 401, of these 201 were diabetic patients (81 type I and 120 type II diabetic patients) and 202 were non-diabetics. From 403 participants 225 were males and 178 were females. The data was analyzed using SPSS version 21.0. A significant association was obtained between sex, age, marital status, blood group and Rh factors with diabetes mellitus but not with residence and family histories. Male from sex, above 40 years from age, married from marital status were more susceptible for diabetes, contrary females, 16-40 years and singles were lower risk of diabetic than other comparable categories. In case of blood group, type A was more susceptible and blood type O and AB were lower risk rate of diabetes mellitus. Additionally blood AB/Rh negative individuals were not affected by type I diabetes mellitus. Further study is recommended to investigate the cause of the association between socio-demographic factors, blood groups and Rh factors with diabetes mellitus.

Key words/Phrases; Association, Blood group, Diabetes mellitus, Rhesus factor, Socio-demographic factors