THE RISK FACTORS ASSOCIATED WITH THE DIABETES MELLITUS WITH SPECIAL REFERENCE TO KALUTARA DISTRICT

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As a remarkably serious significant problem today in Sri Lanka, it is important to be aware of diabetes mellitus and its risk factors. The present study was aimed at, to build a logistic regression model which is easier to interpret in terms of risk factors associates with the diabetes mellitus.

The data studied in the recent paper by A. P. De Silva, which were used stratified random cluster sampling method, were used to build the logistic regression model. The data were analysed using representative sample of 1034 adults between the ages of 35 to 65 years. Among them 19.53% (n = 202) in the study sample was reported as having diabetes mellitus. Descriptive analysis was done for numerous demographic variables and the association between diabetes mellitus and those factors has been identified. All predictor variables (factors) were included in the multiple logistic regression model and then identified the risk factors, which have the impact of diabetes mellitus.

When considering the variable Ethnicity, Tamils were at increased risk of having diabetes mellitus than the other communities living in Sri Lanka (adjusted OR = 2.54, 95% CI = 1.42 to 4.52). The prevalence of diabetes mellitus was found among males and females was almost similar, therefore gender was not a significant factor for diabetes mellitus, but the mean age of prevalence from diabetes mellitus was around 55 years for both males and females. The members who inherit diabetes mellitus from their families were three times more likely to effect of diabetes mellitus than the others (adjusted OR = 3.49, 95% CI = 3.45 to 3.53). The occurrence of diabetes mellitus is one and half as likely to occur among those who are involved in physical activities than among those who do not (adjusted OR = 1.57, 95% CI = 1.19 to 2.59). In the study sample higher risk of affecting for diabetes mellitus was found among the non-educated persons living in the society (adjusted OR = 1.10, 95% CI = 1.04 to 2.97), but there is no definite pattern in between diabetes mellitus and education.

This study showed that the following risk factors were statistically significant for diabetes mellitus: age, people who inherits diabetes mellitus from their families, ethnicity, education level, higher amount of sugar intake, not consuming the required quantity of fruits, immigration patterns and insufficient level of physical activities.