Modelling of Risk Factors of Diabetes in United Arab Emirates (UAE)

Suheer Haroun,
Faculty of Science, Department of Mathematics
University Teknology Malaysia (UTM), Malaysia.

Abstract

Objectives: The aim of this study was to model and determine factors influencing the risk of diabetes mellitus (DM) in the United Arab Emirates and to analyze data related to the topic.

Methods: The study was carried out in UAE, using a questionnaire to out-patients in a medical clinic that contained socio-demographic characteristics and risk factors were used for data collection. Sample survey data analyzed using descriptive techniques, correlations, and binary logistic regression models. Binary logistic regression were performed to find the crude and adjusted odds ratio (OR) and 95% confidence interval (CI) was calculated to find the significance of the observed OR. A p-value ≤ 0.05 was considered statistically significant All Analysis was performed using SPSS and Microsoft excels.

Results: study results showed that six main factors influence the risk of diabetes in UAE, which are, blood glucose, blood pressure, physical activity, waist size, gender and family history of diabetes. Marital status, smoking, and intake of fresh vegetables and fruits did not show any statistically significant association with risk of diabetes in UAE. Blood glucose is observed as the most statistically significant factor (for every one unit increase in blood glucose, the study expect a 5.422 increase in the risk of developing diabetes), at the meantime gender observed as the lowest statistically significant factor (if the respondent is male the probability of being diabetic is 0.809 percent) holding all other independent variables constant.

Conclusion: Results of the present study will be one of use in planning primordial, primary and secondary measures of prevention at the community. Encouraging physical activity, controlling blood pressure and blood glucose may significantly decrease the risk of diabetes mortality; effective health education programs promoting regular exercise and effective advices may needed to reduce the burden of diabetes in UAE.

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