ABSTRACT

There is a rise in prevalence of Type 2 diabetes in Kenya, and an increase in related complications, which lead to disability and death. Diet modification to control blood sugar, lipid levels and pressure are vital in lowering risk and complications development in the management of Type 2 diabetes. Adherence to diet on the other hand, is a behaviour, influenced by among others, socio-economic factors and perceptions. Studies indicate that adherence to diet therapy is below average, even when patients understand the importance of the therapy. Kisumu, which was in the year 2000 elevated to a city status, has experienced rapid urbanisation, which has aggravated “unhealthy” eating practices, posing a challenge to diet adherence. Information on diet adherence in the management of Type 2 diabetes in Kenya is in most cases lacking, making it difficult to make focused recommendations. Studies to assess factors influencing diet adherence in the management of Type 2 diabetes are inadequate, and those done, have focused mainly on socio-economic factors leaving out perceptions. The objectives of this study were to assess: the level of diet adherence, the influence of socio-economic factors on diet adherence and finally the influence of risk perceptions on diet adherence in dietary management of Type 2 diabetes. The study, done in a period of three months, adopted a cross sectional study design. A sample of 240 adults (Yamane’s formula) 35 years and above, who had been diagnosed and had been managing Type 2 diabetes, for at least six months, were selected, through systematic random sampling, where every second patient was picked. Information on dietary behaviour was collected using a dietary habit assessment form, while each risk perception was inferred using eight closed ended questions, in a risk perception assessment form. Principle factor analysis was done to derive possible adherence and risk perception factors among the study population. Linear regression was used to derive an adherence pattern, and to assess the relationship between adherence, risk perceptions and socio-economic factors. The study revealed that majority of the participants (73.9%) had a diet adherence level of 80%, and only 22.3% had 100% diet adherence. It identified an adherence pattern focused mainly on controlling blood glucose and reducing development of complications, adherence one; replacing cooking oils with fats ($R^2$=0.976, $\rho$<0.001), adherence two; reduce intake of sugar, margarine, butter and salt ($R^2$=0.952, $\rho$<0.001) and adherence three; reduce salt and increase whole grain intake ($R^2$=0.768, $\rho$<0.001). It also revealed that diet adherence is influenced by four risk perceptions. These were perceived severity ($\beta$=0.225, $\rho$=0.006), perceived susceptibility ($\beta$=0.305, $\rho$<0.001), perceived behaviour control ($\beta$=0.229, $\rho$=0.015) and perceived benefits ($\beta$=0.242, $\rho$=0.009), and socio-economic factors, age ($\beta$=0.163, $\rho$=0.048), affordable diet ($\beta$=0.170, $\rho$=0.048) and diet available in the locality ($\beta$=0.224, $\rho$=0.008). In conclusion, there is need to improve diet adherence in order to control and reduce complications development in Type 2 diabetes management. Recommendations were that during counselling sessions, efforts should address the identified factors and risk perceptions, in order that they positively influence diet adherence in the management of Type 2 diabetes in Kenya.