ABSTRACT

Background: Globally pre-diabetes has been associated with an increased incidence of type 2 diabetes and every year about 5 - 10% pre-diabetic subjects will progress to diabetes. It is important to appreciate factors associated with pre-diabetes so that a holistic approach can be taken in tackling the rising burden of type 2 diabetes.

Objective: To determine risk factors associated with the development of pre-diabetes among adults attending the general outpatient clinic of ISTH, Irrua, Edo state.

Methodology: A descriptive cross-sectional study was conducted among 273 adults who were 40 years and above. Selection of the subjects was by systematic random sampling. Socio-demographic and clinical information were collected from March to June 2014 using a self administered questionnaire following which anthropometric parameters, BP and FPG were measured. Data analysis used chi-square to identify association between categorical variables and binomial logistic regression analysis to identify the true independent risk factors for pre-diabetes.

Results: There were 109 males and 164 females respondents made up of 39 pre-diabetics and 234 non pre-diabetics. The mean age of pre-diabetics was 51.6 ± 9.8 years while the non pre-diabetics was 55.2 ± 11.2 years. The prevalence of pre-diabetes was 14.3%. There was significant association between age (p = 0.009), tribe (p = 0.009), family history of diabetes (p = 0.017), family history of hypertension (p = 0.027), systolic blood pressure (p = 0.012) and pre-diabetes. However on binomial logistic regression analysis, factors independently associated with pre-diabetes were age (OR = 0.314; 95% CI: 0.114 – 0.866, p = 0.025) and systolic blood pressure (OR = 2.344, 95% CI
1.075 – 5.113, p = 0.032). Increasing age was associated with a lower likelihood of pre-diabetes whereas increasing systolic blood pressure was associated with a 2 fold risk of pre-diabetes.

**Conclusion:** The prevalence of pre-diabetes in this study was 14.3% and this was independently associated with age and systolic blood pressure. The presence of these risk factors should provide guide for screening adult Nigerians for pre-diabetes in our primary care setting.