## Prevalence and Influencing Factors of Type 2 Diabetes among Obese Patients (Diabesity) among Patients Attending Selected Healthcare Facilities in Calabar, Nigeria

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Abstract : Diabesity, a syndrome where diabetes and obesity occur simultaneously in a single patient, has emerged as a recent challenge to the medical world and is already at epidemic proportion in some countries. Therefore, this study aimed to determine the prevalence of diabesity among adult patients attending the General Outpatient clinic of three healthcare facilities in Calabar in a bid to improve healthcare delivery to patients at risk. A cross-sectional descriptive study design was employed using a mixed method approach that comprised quantitative and qualitative components i.e., Focused Group Discussion (FGD) and Key Informant Interview (KII). One hundred and ninety (190) participants aged 18 to 72 years and body mass index (BMI)  $\geq$  30kg/m2 were recruited as the study population for the quantitative study using systematic random sampling technique and analysed using SPSS version 25. The qualitative component performed 4 FGDs and 3 KIIs. Results of sociodemographic variables showed respondents aged 35 - 44 as highest in number (37.3%). Of this number, 83.7% were females, 76.8% married, and 3.7% earned USD1,110.00 monthly. Whereas majority of the participants (65.8 %) were within class 1 obesity, only 38% considered themselves obese. Diabesity occurrence was found to be 12.6% (i.e.  $BMI \ge 30$  to 45.2kg/m2 vs FBS  $\geq$  7.0 - 14.8mmo/l), with 38% of them being previously undiagnosed. About 48.4 % of the respondents ate two meals only per day; with 90.5% eating between meals. Snacking was predominant, mostly pastries (67.9%), with 58.9% taking cola drinks alongside. Sixty-one percent participated in one form of exercise or the other, with walking/trekking as the most common; 34.4 % had no regular exercise schedule. Only about 39.5% of the participants spent less than an hour on devices like phone, television, and laptops. Additionally, previously known and newly diagnosed hypertensive patients were 27.9% and 7.2%, respectively. Qualitative assessment with KII and FGDs showed eating unhealthy diets and lack of exercise as major factors responsible for diabesity. The bivariate analysis revealed significant association between diabesity with marital status and hypertension (p = 0.007 and p = 0.005, respectively). Also, positive association with diabesity were eating snacking (p = 0.017) and number of times a respondent snacks per day (p = 0.035). Overall, the study has revealed the occurrence of diabesity in Calabar at 12.6 % of the study population, with 38 % of them previously undiagnosed; it identified unhealthy diets and lack of exercise as causative factors as well as hypertension as snacking associatory indicators of diabesity.

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 ${\bf Keywords}:$  diabesity, obesity, diabetes, unhealthy diet

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