Association of Socio-Demographic and Clinical Factors with the Prevalence of Hypertension in Type 2 Diabetic Patients, attending the Diabetic Centre, Teaching Hospital, Jaffna

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Hypertension is one of the major threats to type 2 Diabetes Mellitus (DM) patients, which may contribute to morbidity, mortality and aggregated diabetic complications. The objective of this study was to evaluate the association of socio-demographic and clinical factors with the prevalence of hypertension among type 2 DM patients, attending the Diabetic Centre, Teaching Hospital, Jaffna. It was a descriptive cross-sectional study involving a systematic random sampling method to select 300 type 2 DM patients using an interviewer-administered questionnaire. Statistical analysis was carried out by multivariable logistic regression analysis. Majority (64.3%) of the patients were females. The males [60.17 ($\pm$ 12.07) years] were older than females [57.69 ($\pm$ 10.86) years]. The BMI of the Females and males were very closer [males 25.39 ($\pm$4.68) & females 25.9 ($\pm$4.36) kg/m2]. The prevalence of hypertension among diabetic patients was 57.3%. Among them, 59.2% and 40.8% were females and males respectively. Among those with hypertension, 57.3% were > 60 years, 75.2% had secondary education and 57.3% had the monthly income $\leq$ LKR24,999. Prevalence of hypertension in males from rural areas (64.1%) was more than in females (53.8%) and the opposite tendency was observed from urban areas. More female patients (45.2%) with DM for > 10 years had hypertension than the males (32.4%) (p=0.063). Among the total hypertensive patients, more females (24.2%) had diabetic complications than males (14.6%) (p=0.076). Further, retinopathy was more prevalent among males (27.8%) than in females (14.7%). According to the multivariable logistic regression analysis, age > 60 years (AOR= 2.211, 95% CI: 1.35– 3.62), having diabetic complications (AOR= 2.917, 95% CI: 1.08 – 7.81) among hypertensive DM patients were the independent predictors. Age > 60 years and having diabetic complications remarkably associated with the development of hypertension. Thus, appropriate intervention should be made to prevent and control hypertension among type 2 DM patients.