Prevalence and Its Associated Determinants of Diabetic Peripheral Neuropathy (DPN) in Individuals Having Type-2 Diabetes Mellitus in Rural South India.

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Abstract

BACKGROUND: Diabetic peripheral neuropathy (DPN) is a well-known microvascular complication of type 2 diabetes mellitus attributed to chronic hyperglycemia and is defined as the presence of peripheral nerve dysfunction after exclusion of other causes. METHODOLOGY: This was a multicentric facility-based cross-sectional study with the objectives to assess the sociodemographic and economic status of the participants, to estimate the prevalence of the DPN using the screening methods, and to see the association with other factors. A predesigned semi-structured questionnaire, Semmes-Weinstein 10-g monofilament test, ankle reflexes, and vibration perception threshold test was used for the data collection and blood sugars levels were taken from the recent laboratory report. RESULTS: Among 336, 202 (60.1%) were male and 134 (39.9%) were female. The prevalence of the DPN was 39.3% among them 28.9% in males and 10.4% in females, respectively. The other determinants of the participants, 264 (78.6%) had the Glycated hemoglobin (HbA1c) >7, 205 (61%) had a burning foot sensation, 124 (36.9%) of them were had numbness of the foot, almost 50% of them had pricking sensation in the foot and more than one-third (130) of them had callosity over foot. CONCLUSIONS: The study showed the severity of DPN was significantly associated with age, sex, duration of diabetes, HbA1c value, hypertension, and body mass index.

KEYWORDS: Complications; diabetes type-2; peripheral neuropathy; prevalence

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