

The proportion of undiagnosed diabetic peripheral neuropathy and its associated factors among patients with T2DM attending urban health clinics in Selangor

ABSTRACT

Introduction: Diabetic Peripheral Neuropathy (DPN), the most common complication of Diabetes Mellitus (DM), is often under-diagnosed and inadequately treated. This study identified the proportion of undiagnosed DPN and its associated risk factors among patients with established type 2 DM (T2DM) in community health clinics in the Gombak district. **Methods:** A cross-sectional study was conducted in 2 community health clinics within the Gombak district between September and December 2017. Adults with T2DM were selected via systematic random sampling and screened using the Neuropathy Symptoms Score (NSS). Clinical records of participants' foot examinations were reviewed to identify positive findings of DPN and compared with the NSS. **Results:** The study's sample comprised 425 patients. Most had co-morbidities, including hypertension, dyslipidaemia and pre-existing DM-related complications. About two-thirds of them performed no daily foot inspection and had no proper footwear. The proportion of patients with positive NSS was 49.4%. However, only 0.2% were diagnosed with positive DPN in their clinical foot examination record. **Conclusion:** Although a positive NSS was identified in 1 out of 2 patients with established DM, only 0.2% of patients had DPN on their examination records. Most patients had never done daily foot inspections and lacked proper footwear. A positive NSS was associated with uncontrolled diabetes and lower BMI. Proper screening and examination for patients, especially those with uncontrolled diabetes and low BMI, is crucial in identifying DPN to ensure that these diabetic patients receive better preventative care, especially proper foot care and strict diabetic control, to prevent DPN-related complications.

Keyword: Diabetes; Diabetic polyneuropathy; Neuropathic symptoms score; Malaysia