

## **The evaluation of quality of life in patients with Peripheral Neuropathy in Type 2 Diabetes Mellitus in three specialized Diabetes centres in Sri Lanka**

Kariyawasam B.D.<sup>1</sup>, Gunawardana D.K.<sup>1</sup>, Herath P.D.<sup>1</sup>, Salgado S.<sup>1</sup>,  
Ranadeva N.D.K.<sup>1</sup>, Gunarathna I.E.<sup>2</sup>, Kottahachchi D.C.<sup>3\*</sup>

<sup>1</sup>*Department of Biomedical Science, Faculty of Health Science, KIU, Sri Lanka*

<sup>2</sup>*Office of Regional Director of Health Services, Galle, Sri Lanka*

<sup>3</sup>*Department of Physiology, Faculty of Medicine, Ragama, University of Kelaniya, Sri Lanka*

Diabetic Peripheral neuropathy (DPN) is the most common complication associated with diabetes. DPN has serious detrimental effects on the physical, emotional, and social functioning of patients. It may show decreased productivity as a result along with a deleterious effect on the quality of life (QoL). The impact on the QoL of patients with DPN and the reliability of the WHOQOL BREF were determined. The cross-sectional study consisted of 136 patients with type 2 diabetes (T2D). Their neuropathy was determined using the Michigan Neuropathy Screening Instrument (MNSI) and QoL was assessed using the WHOQOL-BREF. The majority of the sample was females (74.3%). The mean age of patients was  $62 \pm 10.31$  years. On average the sample had diabetes for 12 years. 38.2% (52) had an abnormal physical assessment while 21.3% (29) has shown neuropathic symptoms. This difference was significant. The observed Cronbach's alpha coefficient for the WHOQOL-BREF was 0.815 ( $>0.70$ ). The physical domain fared with the least mean score ( $59 \pm 13.15$ ). Overall QoL was strongly associated with psychological, social, and environmental domains ( $p < 0.05$ ), thus stating 50.7% (69) had fair QoL while 26.5% (36) & 22.8% (31) had poor and good QoL respectively. This study provides the extent of the impact on QoL. So the preventive strategies are essential. The WHOQOL-BREF scale exhibited an acceptable degree of internal consistency in the measurement of the QoL of patients with DPN.

**Keywords:** *Quality of life, Peripheral neuropathy, Type 2 Diabetes Mellitus, WHOQOL-BREF, Sri Lanka*

\*Corresponding author: [dulanikottahachchi@gmail.com](mailto:dulanikottahachchi@gmail.com)