



▼ UNDERGRADUATE ABSTRACTS

UG -17 : SCREENING FOR AUTONOMIC NEUROPATHY USING VALIDATED NON-INVASIVE SCALE AMONG DIABETES PATIENTS TREATED IN THE SELECTED PRIMARY HEALTH CENTRES OF PUDUCHERRY, INDIA- AN OPERATIONAL RESEARCH

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Introduction: American Diabetes Association guidelines recommend early recognition and treatment of DAN among diabetics to reduce life threatening complications. Hence, a study was carried out among diabetics of selected PHCs in Puducherry using non-invasive, validated symptom based scale called COMPASS-31; a) to determine the proportion with DAN b) to assess the factors associated with DAN.

Methods: A cross-sectional analytical study was conducted in the service area of Kirumampakkam and Thavalakuppam PHCs. Diabetes patients were selected using simple random sampling from the list obtained from PHCs. The investigator visited the diabetes patients at their residence and interviews were conducted after obtaining informed consent. The information on socio-demographic details, morbidity details and behavioural risk factors were elicited using semi-structured interview schedule. The COMPASS-31 questionnaire was used to assess DAN. The individual with score greater than 16 was considered to have DAN. The data was captured using EpiCollect mobile app and analysed using Stata 12.0 software. The proportion of DAN was expressed as percentage. The association

between independent factors and DAN was assessed using multivariate generalized linear models.

Results: In total 303 diabetes patients participated in the study. The mean (SD) age of the study participants was 49.1 (10.5) years and majority (51.5%) were females. Of the total 303 participants, 32 (10.6% (95% CI: 7.3% – 14.6%)) were screened positive for DAN. The number of individuals with diabetes who needs to be screened (NNS) for DAN was 10. The individual level factors like female gender (PR-10.6 (5.2-21.8)), being unemployed (PR-3.0 (1.8-5.0)) and class IV SES (PR-1.3 (1.2-1.3)), duration of disease for more than 10 years (PR-1.3 (1.1-1.5)), having hypertension (PR-2.2 (1.1-4.6)) and having BMI in underweight range (PR-2.8 (1.6-4.8)) and alcohol use (PR-5.0 (4.4-5.7)) were independently associated with screening positive for autonomic neuropathy.

Conclusion: On screening ten diabetes patients, one individual with autonomic neuropathy can be picked up using COMPASS-31 scale. With good yield, DAN can be included in the comprehensive care package provided to diabetes patients in the PHC.