

Obstructive sleep apnea and associated factors among individuals above the age of 50 years in Northern Province, Sri Lanka.

Powsiga U¹, Sheron VA¹, Kaneshamoorthy S¹, Surenthirakumaran R¹, Kumarendran B¹, Guruparan M², Lip GYH³, Thomas GN⁴, Nirantharakumar K⁴, Gooden TE⁴, Haniffa R⁵, Beane A⁵, Kodippily C⁵, Kumaran S¹

¹Faculty of Medicine, University of Jaffna, ²Teaching Hospital Jaffna, ³University of Liverpool and Liverpool Heart & Chest Hospital Liverpool, ⁴University of Birmingham, ⁵Mahidol Oxford Tropical Medicine Research Unit, Colombo

Introduction Obstructive sleep apnea (OSA) is a common condition which leads to major neurocognitive and cardiovascular complications.

Objective We aimed to assess the prevalence and risk factors associated with OSA among the general population aged above 50.

Methods Descriptive cross-sectional household survey was carried out among 9877 permanent Tamil speaking residents above the age of 50 years of age in Northern Province, Sri Lanka. Multi-stage cluster sampling was employed, starting at district level, then the divisional secretariats, followed by grama niladhari divisions as clusters. Each cluster consisted of 20 households. Data were collected between March 2020 and July 2021 using the electronic version of Berlin questionnaire for OSA. Statistical analysis was performed on SPSS (v23). Ethical clearance was obtained from the Ethics Review Committee, Faculty of Medicine, University of Jaffna.

Results Among the 9877 participants, the response rate was 93.7 % (n=9253). Mean age was 65.3 years (SD 8.9) and 61.9% were females. Further, 97.3% were Sri Lankan Tamil and 9.3% were unmarried. Only 33.0% had studied at least up to Ordinary Level. High risk for OSA was presented in 1368 (14.8%) of patients. The prevalence of hypertension, diabetes mellitus, ischemic heart disease, hypothyroidism, bronchial asthma and chronic kidney disease were 32.8%, 23.0%, 9.3%, 6.3%, 7.6% and 4.2%, respectively. Two or more chronic conditions were presented in 28.1%. High risk of OSA was independently associated with age and co morbidities such as hypertension, diabetes mellitus, ischemic heart disease, bronchial asthma, hypothyroidism and chronic kidney disease.

Conclusion In this population survey, a high risk for OSA was present in 14.5%, and associated with age and various co morbidities. Early screening in these high-risk group and identification are possible in primary healthcare setting.

Keywords Obstructive sleep apnea, Northern Province, above 50 years old.