

P03-396

THE CONTRIBUTION OF INDIVIDUAL AND COMBINED COMMON NON-COMMUNICABLE DISEASES TO POOR SLEEP QUALITY: THE JAPANESE CIVIL SERVANTS STUDY

M. Sekine, T. Tatsuse

University of Toyama, Toyama, Japan

Introduction: Some of common non-communicable diseases deteriorate sleep quality, which worsens the disease itself. This study aims to evaluate

(1) whether common non-communicable diseases are associated with poor sleep quality and (2) whether the combination of such diseases increase the possibility of poor sleep quality.

Methods: The subjects were civil servants in local government in Japan. A questionnaire survey was conducted in January 2003. Altogether 4272 subjects responded (response rate: 79.2%). Subjects were asked about whether they were diagnosed as having common non-communicable diseases (i.e. heart disease, cerebrovascular disease, hypertension, hyperlipidemia, diabetes, bronchial asthma, gastroduodenal ulcer, mental disorders, and low back pain). Overweight was evaluated by using BMI. Poor sleep quality was evaluated using Pittsburgh Sleep Quality Index (PSQI).

Results: The age- and sex-adjusted odds ratio (OR) for poor sleep quality was higher among patients with heart disease, cerebrovascular disease, hypertension, hyperlipidemia, diabetes, bronchial asthma, gastroduodenal ulcer, mental disorders, low back pain, and obesity but the associations were not necessarily significant. However, the combination of such common non-communicable diseases significantly increased the possibility of poor sleep quality, with a dose-response relationship.

Conclusion: Although individual common non-communicable diseases may not necessarily cause poor sleep quality, the combination of these may increase the prevalence of poor sleep quality. Clinician should think that patients may have poor sleep quality if they have several non-communicable diseases.