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WHAT SYMPTOMS MOTIVATE FAMILY MEDICINE PATIENTS TO PURSUE SLEEP APNEA SCREENING?

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Introduction: Obstructive sleep apnea (OSA) is difficult to identify, and studies suggest that patients are under-referred for screening from primary care. Here we look at what happens when consecutive family medicine patients are offered sleep apnea assessment: What symptoms seem to guide patients to pursue assessment? How many unrecognized cases can we find?
Methods: 295 adults over age 40 (174 women, 121 men) were recruited from two hospital family medicine clinics. None were previously assessed for sleep apnea. All completed questionnaires (Sleep Symptom Checklist (SSC), Sleep Questionnaire). Metabolic syndrome health data were collected from medical charts. All were offered an overnight polysomnography (PSG) study in a sleep laboratory. 171 (58%) completed the PSG study. Non-completers cited lack of interest (40%) and lack of time or desire to sleep away from home (18%). Completers and Non-Completers did not differ in mean age or gender ratio.
Results: Completers had a very high rate of diagnosed OSA: 80%. On self-report, Completers reported greater severity of daytime symptoms (e.g., non-refreshed in the morning, difficulty with concentration) than Non-completers. Metabolic syndrome disease was present in both groups: 59% of Non-completers had at least one of hypertension, hyperlipidemia, diabetes, or obesity and 46% of Completers. The difference was not significant. No significant differences were found between Completers and Non-Completers on severity of insomnia, sleep disorder, or psychological symptoms.
Conclusion: Family medicine patients over age 40 who were willing to complete an overnight PSG study differed in self-reported symptom severity from Non-completers primarily in daytime symptoms. Metabolic syndrome, which is strongly associated with OSA, was at least as frequent in the Non-completers as in Completers. Taken together, these data suggest that (1) Completers may be motivated by their negative daytime experience to pursue sleep testing and that (2) an important percentage of Non-completers likely have OSA.
Support (If Any): CIHR

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CAN INDIVIDUAL QUESTIONS OF EPWORTH SLEEPINESS SCALE PREDICT THE DIAGNOSIS OF OBSTRUCTIVE SLEEP APNEA?: A RETROSPECTIVE STUDY

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Introduction: Sleep disorders that are encountered at the level of primary health care providers may either unrecognized or under-estimated. Several factors like time constraints of clinic visit, lengthy questionnaires, and poor knowledge about sleep disorders limit in referring symptomatic patients to the sleep specialists. Of the many available tools, the Epworth Sleepiness Scale score (ESS) is widely used for assessing patients with daytime sleepiness. So we aim to see if there are any specific questions of ESS have the high probability for the Obstructive sleep apnea (OSA). This may be very helpful in daily clinical practice in primary care setting in evaluating the patients
Methods: A retrospective chart review of patients who attended the Sleep Disorder Clinic at University Hospital at Columbia, Missouri from the year July 2015 to October 2016. The patients screened for daytime sleepiness with ESS and who were subsequently confirmed to have OSA were included in the study. The significance for the individual scores obtained for these patients on 8 questions of ESS were reviewed and analyzed for the high probability in diagnosis OSA using Pearson Chi-Square test.
Results: The study population included 15 males and 15 females with mean ± SD age of 57.41 ± 13.22.There was no significance in individual questions of ESS -1) Sitting and reading (p=0.75) 2) watching T.V (p=0.24) 3) Sitting, inactive in a public place (p=0.33) 4) As a passenger in a car for an hour without a break (p=0.72) 5) Lying down to rest when circumstances permit (p=0.77) 6) Sitting and talking to someone (p=0.41) 7) Sitting quietly after lunch without alcohol (0.33). 8) In a car, while stopped for a few minutes in the traffic (p=0.08).
Conclusion: The score of individual questions have no probability that directs for OSA, however there is a rising trend for the question chance of dozing in a car, while stopped for traffic. A larger sample is needed to identify this specific question of ESS for the high probability of predicting OSA.
Support (If Any): Additional data is being collected to analyze the negative predictive value of individual questions of ESS in ruling out OSA.

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ASSESSMENT OF BERLIN QUESTIONNAIRE AND NECK CIRCUMFERENCE FOR SLEEP DISORDERED BREATHING IN JAPANESE SHIFT-WORKER

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Introduction: The Berlin Questionnaire (BQ) has been used to identify worker at high risk for sleep-disordered breathing (SDB) in a variety of populations. However, there are few data regarding the validity of the BQ in detecting the presence of SDB in Japanese worker. Neck circumference has been suggested to be more predictive of obstructive sleep apnea than general obesity, but the statistical validity of this conclusion has been remained. A study was undertaken to assess SDB by BQ and neck circumference in Japanese shift-worker.
Methods: We studied 161 workers (165 male 49.0 ± 9.1 yrs. and 25 female 51.1 ± 7.7 yrs.) who were measured 3% oxygen desaturation index (3%ODI) using pulse oximetry to assess SDB. Multiple domains of self-reported sleep ware assessed. Body mass index, neck circumference. SDB was defined as moderate (3%ODI≥15) and severe (3%ODI≥30).
Results: The proportion with 3%ODI≥15, 30 was 30.0% and 8.1%. BQ high score(≥2) was 45.4%. Using a BQ score to assess 3%ODI≥15, the sensitivity, specificity and AUC (95%CI) were 0.35, 0.77 and 0.51(0.30–0.72) in male and 1.0, 0.67 and 0.67 in female. Using a BQ score to assess 3%ODI≥30, the sensitivity, specificity and AUC were 0.75, 0.50 and 0.65(0.32–0.99) in male and 1.0, 1.0 and1 in female (only 1 female). Of neck circumference, severe SDB was 42cm(threshold),the sensitivity, specificity and AUC were 0.57, 0.83 and 0.74(0.60–0.89) in male and 40cm, 0.87,1.0 and 0.87 in female. Moderate SDB show 41.5cm(threshold), the sensitivity, specificity and AUC were 0.59, 0.59 and 0.61(0.60–0.89) in male and 37cm, 0.63,0.8and 0.71(0.44–0.98). Using BMI to predict severe SDB, the sensitivity, specificity and AUC were 0.45, 0.59 and 0.58 in male and 0.52, 1.0 and 0.52 in female.
Conclusion: The BQ performed with poor sensitivity and the specificity in SDB, suggesting that the BQ is not ideal in identifying SDB