

Introduction: The purpose of this study was to determine compliance of patients with the Diagnosis of Insomnia with underlying Obstructive Sleep Apnea.

Methods: A retrospective chart review of patients referred to the sleep clinic with a diagnosis of Insomnia. Patients offered an Insomnia program. The Insomnia program include 4 sessions. #1 Understanding the basics of Restorative sleep; #2 Create a healthy sleep environment; #3 Learn strategies to improve how much and how well you sleep and #4 Calm your body and mind naturally. Study criteria included 96 patients >18 yrs of age referred for a sleep study with the diagnosis of Insomnia. 29 patients completed the Insomnia program. 14 patients scheduled appointments for the portable home testing guidelines⁴, 13 patients did not follow through with home diagnostic testing for Obstructive Sleep Apnea and 2 patients deceased due to other complications. A Type 4 portable home monitoring device utilized for home overnight testing and a APAP unit for the AutoCPAP Titration trial for a period of 7 days in the home. A follow up appointment was scheduled to review CPAP Compliance after 90 days of initiating CPAP therapy.

Results: 6 of 14 patients Negative for Obstructive Sleep Apnea, therefore CPAP Therapy Not Indicated, 6 of 14 patients Positive for Obstructive Sleep Apnea. 2 of 14 patients No Show for appointment for Obstructive Sleep Apnea testing. The AutoCPAP Titration trial offered to 6 patients Positive for Obstructive Sleep Apnea indicated good use of the device during the titration trial phase. Of the 6 patient's positive for Obstructive Sleep Apnea, 3 of 6 patients compliant with CPAP use², 1 of 6 patients noncompliant with CPAP use and 2 of 6 patients lost to followup.

Conclusion: Patients diagnosed with Insomnia, completing an Insomnia Program and scheduling sleep study testing was 30%. Patients testing positive for Obstructive Sleep Apnea with the portable home monitoring device was 21%. 50% of the patients met the National Standards of >4hours each night for 4 nights out of 7 nights for.^{1,2}

Support (If Any):

0427

THE ASSOCIATION BETWEEN DIETARY VITAMIN B2 INTAKE, SLEEP QUALITY, AND DAYTIME ALERTNESS

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Introduction: Vitamin B2 (riboflavin) plays a role in the energy production by converting food into energy (glucose). Also, one of the accompanying effects of vitamin B2 deficiency is fatigue. The aim of the current study was to investigate the association between dietary vitamin B2 intake, sleep quality and duration, and daytime alertness.

Methods: Healthy young Dutch adults completed a Food Frequency Questionnaire (FFQ). The FFQ consisted of 37 questions and 243-food items including grouped food products, and portion sizes and consumption frequency were taken into account when calculating usual average weekly vitamin B2 intake. In addition, a food diary assessed past 24-hour dietary vitamin B2 intake. Subjective sleep quality and daytime alertness were scored on a scale ranging from 0 (very poor) to 10 (excellent). The associations between usual and past 24-h dietary vitamin B2 intake and sleep quality and alertness were investigated by calculated using nonparametric Spearman correlations.

Results: N=202 participants completed the survey [N= 69 males (34.2%) and N= 133 females (65.8%)]. Their mean (SD) age was 20.4 (2.3) years old. Overall, no significant association between vitamin B2 intake and sleep quality was found. In men, usual vitamin B2 intake was significantly correlated with sleep quality ($r = 0.268$, $p < 0.05$). Higher dietary vitamin B2 intake was associated with better sleep

quality. This association was not significant in women. Overall, past 24-h dietary vitamin B2 intake was significantly correlated ($r = 0.187$, $p = 0.008$) with daytime alertness. Higher dietary vitamin B2 intake was associated with higher levels of alertness. In women, past 24-h vitamin B2 intake was significantly correlated with daytime alertness ($r = 0.250$, $p = 0.004$). In men, this association was not significant.

Conclusion: Dietary intake records revealed that vitamin B2 intake is associated with sleep quality and daytime alertness. Further research should investigate these apparent gender differences.

Support (If Any):

0428

INSOMNIA AND STRESS: ASSOCIATIONS WITH MENTAL RESILIENCE AND MOOD

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Introduction: The aim of this study was to investigate the association between insomnia symptoms, psychological health, mental resilience, and stress.

Methods: A survey was held among young Dutch adults, aged 18 to 30 years old. The insomnia subscale of the SLEEP-50 questionnaire was completed. In addition, prior night's bedtime, time of sleep onset, and arising time were recorded. Psychological wellbeing was assessed using the 5-item World Health Organization (WHO-5) Well-Being Index and mental resilience was assessed using the Brief Resilience Scale. Mood was assessed with the short-form Profiles of Mood States (POMS-SF), and the Depression Anxiety Stress scale (DASS) and Eysenck personality questionnaire scales of extraversion and neuroticism were completed. Insomnia scores were associated with sleep and mood and personality outcomes. In addition, mood and personality of those who screen positive for insomnia (score > 19) were compared to those who score negative for insomnia.

Results: N=2489 subjects completed an online survey. Of them, 83.4% were women (N=2075). Insomnia score correlated significantly ($p < 0.0001$) with sleep quality ($r = -0.720$), number of nightly awakenings ($r = 0.489$), and sleep onset latency ($r = 0.552$), but not with total sleep time. The insomnia score correlated significantly with all psychological, mood and health assessments ($p < 0.05$). Those who screened positive for insomnia (i.e. a score > 19) scored significantly lower ($p < 0.0001$) on general health, wellbeing, and mental resilience, extraversion, and the POMS-SF mood scale vigor-activity. They scored significantly higher on the DASS stress, anxiety and depression scales, neuroticism, and the POMS-SF mood scales tension-anxiety, depression, anger-hostility, and fatigue. The observed differences and associations were significantly more pronounced in women when compared to men.

Conclusion: Insomnia is associated with poorer psychological health and mood, reduced mental resilience, and increased levels of stress, anxiety and depressive symptoms.

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0429

EXERCISE TEST RESPONSES IN ADULTS WITH INSOMNIA AND SHORT SLEEP DURATION VERSUS ADULTS WITH GOOD SLEEP

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