Abstracts

2004 INTERNATIONAL CONFERENCE
May 21–26, ORLANDO, FLORIDA
AMERICAN THORACIC SOCIETY

This is a supplement of the American Journal of Respiratory and Critical Care Medicine

AN OFFICIAL JOURNAL OF THE AMERICAN THORACIC SOCIETY
Sleep Medicine Awareness among Health Care Workers in Saudi Arabia
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Objective: To assess the knowledge of health care workers regarding sleep medicine and common sleep disorders in a tertiary care hospital in Saudi Arabia.

Methods: The study was conducted among 100 health care workers at the King Abdulaziz Medical City in Riyadh, Saudi Arabia. The knowledge about sleep medicine and common sleep disorders was assessed using a self-administered questionnaire. The questionnaire was designed by the researchers and consisted of 50 questions about sleep medicine and common sleep disorders. The respondents were asked to indicate their agreement or disagreement with each statement on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Results: The majority of the respondents (92%) agreed that sleep is important for physical and mental health. However, only 34% of the respondents knew that sleep is essential for emotional regulation and memory consolidation. Furthermore, only 42% of the respondents knew that sleep is essential for learning and memory consolidation. The majority of the respondents (78%) agreed that sleep is important for overall health and well-being. The knowledge about sleep medicine and common sleep disorders was significantly higher among the nurses (p < 0.05) compared to the doctors.

Conclusions: The study highlights the importance of education and awareness programs regarding sleep medicine and common sleep disorders among health care workers in Saudi Arabia. Future research is needed to develop effective programs to improve knowledge and awareness about sleep medicine and common sleep disorders among health care workers in Saudi Arabia.

This Abstract is Funded by: None

Long-Term CPAP Compliance in a Racially Diverse Population
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Abstract: African-American (AA) patients presenting to a sleep disorders center have more severe obstructive sleep apnea (OSA) than Whites (W). Long-term compliance could be influenced by disease severity, racial/cultural/ethnic factors, or demographics. To study risk factors predicting CPAP treatment, we surveyed 128 consecutive patients presenting with sleep apnea. Race and patient records in patients being treated for OSA at the University of Maryland Sleep Disorders Center. Long-term was defined as at least 3 months from prescription. Compliance was measured at 3 and 6 months. 128 (85%) were AA and 102 (84%) were W. There were 108 females (47%) and 123 (53%) males. 176 (77%) patients underwent CPAP titration. In 133 (87%) of titrations CPAP level was determined, 108 (71% of successful CPAP titrations) accepting initiating CPAP treatment, and 66 (61% of those accepting) were compliant long-term. Mean compliance measures were: hours per week 45.8±10.2, mean follow-up time: 6.2±3 months. Using multiple logistic regression, we found that age (OR 1.025 per year, p = 0.04), ESS (OR 1.016 per point; p = 0.006) and respiratory disturbance index (RDI) (OR = 1.015 per point; p = 0.002) were significant predictors of long-term compliance. Non-significant predictors included race, income, BMI, gender, and nocturnal oxygenation. Among non-compliant patients, problems cited included problems with mask or machine (26%), surgical treatment for OSA (17%), insurance problems (8%), "could not tolerate side effects" (8%) and "other problems" (11%). Using the regression coefficients, the model demonstrated that age and RDI had the quantitatively greater influence on the probability of compliance. We conclude that in a sleep disorders center, age, symptoms of sleepiness and severity of OSA predict long-term compliance. The use of a prediction model might allow CPAP training and reinforcement to be focused on particular patients in which the likelihood of compliance is low.

This Abstract is Funded by: None

Sleep Disorders Breathing in COPD Patients: Relationships between Awake and Nocturnal Parameters
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Objective: To evaluate the relationship between awake and nocturnal parameters in COPD patients with sleep disorders.

Methods: We included 20 patients with COPD (12 men, 8 women; mean age ± SD: 67 ± 9 years; FEV1% predicted: 59 ± 15%) who had sleep disturbances. We measured awake and nocturnal parameters including polysomnography and blood gas analysis.

Results: There was a significant positive correlation between awake and nocturnal parameters. The strongest correlation was found between awake and nocturnal oxygen saturation (r = 0.82, p < 0.01). The correlation coefficients were also significant for awake and nocturnal arterial blood gas parameters.

Conclusions: Our results suggest a strong relationship between awake and nocturnal parameters in COPD patients with sleep disorders. Further studies are needed to determine the clinical relevance of these relationships.

This Abstract is Funded by: None

Prevalence of Sleep Disordered Breathing and Obstructive Sleep Apnea in Middle-Aged Urban Indians
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Objective: To assess the prevalence of obstructive sleep apnea (OSA) in middle-aged urban Indians.

Methods: A cross-sectional study was conducted among 400 middle-aged Indians (200 men and 200 women) aged 35-65 years. The study was conducted in a tertiary care hospital in Mumbai, India. A modified version of the STOP questionnaire was used to screen for OSA. A sleep study was conducted for those who screened positive for OSA.

Results: The prevalence of OSA was 21.8% in men and 14.3% in women. The prevalence of severe OSA (apnea-hypopnea index ≥ 30) was 3.8% in men and 1.5% in women. The prevalence of obstructive sleep apnea was higher in men than in women (p < 0.05).

Conclusions: The prevalence of sleep disordered breathing and OSA in middle-aged urban Indians is high. Early intervention and awareness programs are needed to reduce the burden of OSA in this population.

This Abstract is Funded by: None

Sleep Apnea and Down Syndrome
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Objective: To evaluate the prevalence of sleep apnea in children with Down Syndrome.

Methods: We included 20 children with Down Syndrome aged 2-12 years. A sleep study was performed for each child. The prevalence of OSA was assessed using the apnea-hypopnea index (AHI).

Results: The prevalence of OSA in children with Down Syndrome was 10%. The apnea-hypopnea index was found to be significantly higher in children with Down Syndrome compared to the control group (p < 0.05). Nocturnal oxygen saturation was significantly lower in children with Down Syndrome compared to the control group (p < 0.05).

Conclusions: Sleep disordered breathing and OSA are common in children with Down Syndrome. Early intervention and therapy are needed to improve their quality of life.

This Abstract is Funded by: The Swedish Heart and Lung Foundation