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ABSTRACT

Obstructive Sleep Apnea in Bethlehem Diabetic Patients.

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Background: Obstructive sleep apnea is a common disease; it can happen to children and adults; sleep specialists have dealt with this disease as a simple closure of the upper airway that was treated mainly by Tracheostomy surgery. After 1981, specialists wanted to introduce other effective, easier, and more compliant methods to treat this disease.

The continuous positive airway pressure (CPAP) device fulfilled this intention by supplying a constant air pressure to prevent the airway from collapsing. This method became the gold standard for treating OSA. Obstructive sleep apnea-hypopnea is a sleep disorder that includes cessation in airflow in the presence of breathing effort, characterized by recurrent episodes of upper airway collapse leading to hypoxia during sleep, so the brain wakes the body to restart breathing.

Apnea occurs 1-2 times per minute every night in patients with severe OSA. The estimated prevalence has been 4% for men and 2% for women. This disease is strongly related to serious co-morbidities including cardiovascular diseases, metabolic disorders and sleepiness-related accidents. Untreated OSA can lead to a 15-fold increase in traffic accidents so treating OSA can save lives.

Objective: The Purpose of this study was to evaluate the awareness of obstructive sleep apnea in Palestinian Diabetes patients.



Method: A cross-sectional study used convenience sampling to collect data from 80 diabetic patients in the Bethlehem area. The questionnaire consisted of two parts; the validated Berlin questionnaire for Sleep Apnea was part 1 and sociodemographic factors and disease status in part 2. Based on Berlin Questionnaire, DM patients were divided into high or low risk of having sleep apnea. The second part investigated these people's knowledge/awareness about the disease and the Device used for treatment.

Results: Our sample consists of 80 Palestinian diabetic patients in the Bethlehem district, it includes 39 men and 41 women; their age ranged from 35 to 95 years in which the major percentage was taken from 41 to 65 years. The data indicates that 52 of the patients (65%) have a high risk of developing obstructive sleep apnea (OSA), and the other 28 patients (35%) have a low risk of developing the disease. It appears that 2.5 % already suffers from OSA. The core of our study is to test awareness and knowledge in Bethlehem; results indicate that 70% of patients have no clue what OSA is, while only 30% of the sample heard about this disease.

Conclusion: Our study confirmed our main concern; the level of awareness of the condition called obstructive sleep apnea was quite low even though 65% of the diabetic patients tested are at high risk. This may be attributed to a lack of sleep specialists nor centers in the West Bank to diagnose or treat these patients.

Keywords: Obstructive sleep apnea, CPAP, hypoxia, diabetic patient, cross-sectional study, Berlin Questionnaire.