TRENDS IN PREVALENCE OF OBESITY AND MEDICAL COSTS IN ASTHMA PATIENTS IN THE UNITED STATES

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OBJECTIVES: To investigate trends in the prevalence of obesity and annual medical costs in normal and obese patients with asthma from 2001–2006. METHODS: This cross-sectional analysis utilized data from the 2001–2006 Medical Expenditure Panel Surveys. Self report of a diagnosis of asthma or ICD-9-CM code: 493, with exclusion of patients with pregnancy, malignancy, kidney dialysis, immunodeficiency, age <18 or ≥75 years old, or body-mass-index(BMI) of ≥18.3, identified 10,402 asthma patients. Patients with BMI’s of ≥30 and ≥18.5 to ≤25 were classified as obese and normal, respectively. Medical costs included all treatment costs, except dental or injury costs, with costs related to the respiratory system being those associated with ICD-9 codes 460–516. Bootstrap method was used to calculate the standard error (SE) of medical costs, while t test was used to compare medical costs. All costs were converted to 2006 U.S. dollars. Data were analyzed using SAS and STATA. RESULTS: Age adjusted prevalence of obesity was 25.9% and 26.4% among the total population, but 35.1% and 35.6% among asthma patients in 2001 and 2006, respectively. While average medical costs in asthma patients with normal BMI maintained a steady level from $221 (SE:$492) in 2001 to $260 (SE:$526) in 2006, those costs increased by 30% from $4442 (SE:$371) in 2001 to $5776 (SE:$401) in 2006 (P = 0.0101) in obese asthma patients. Costs related to the respiratory system in obese asthma patients did not change over time, with increases in medication costs but decreases in inpatient costs. CONCLUSIONS: Even though the prevalence of obesity remained consistent from 2001 to 2006, the average medical cost in asthma patients with obesity increased significantly, suggesting an upward trend in the economic burden of obesity. Effective strategies to prevent or reduce obesity should be introduced as a cost-effective intervention in asthma patients.

RESPIRATORY-RELATED DISORDERS – Patient-Reported Outcomes Studies

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OBJECTIVES: The purpose of this study was to determine if a web-based tool for evaluating the duration and intensity of respiratory-related inpatients is clinically significant and useful. METHODS: The ePRO工具 was tested on a cohort of patients admitted to a general medicine ward at an academic teaching hospital. The tool was tested in two phases: Phase 1, to determine the construct validity, and Phase 2, to determine the clinical significance of the tool. RESULTS: The tool was used by 144 patients who completed the tool within 48 hours of admission. The construct validity was determined by calculating the Cronbach’s α coefficient, which was 0.75. The clinical significance was determined by calculating the minimal important difference (MID) and the minimal detectable difference (MDD). The MID was calculated to be 2.9 points and the MDD was calculated to be 0.5 points. CONCLUSIONS: The ePRO tool was found to be clinically significant and useful for evaluating the duration and intensity of respiratory-related inpatients.

ASSOCIATION BETWEEN COMPLIANCE AND RESPIRATORY-RELATED COSTS FOR PATIENTS WITH COPD TREATED WITH MAINTENANCE THERAPY

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OBJECTIVES: To assess the relationship between costs associated with maintenance therapy for COPD and patient adherence to treatment. METHODS: The study was a retrospective cohort study using electronic health records from a large academic medical center in the United States. The study population included patients with a diagnosis of COPD who were prescribed maintenance therapy and had at least two visits in the 12 months prior to the study. The primary outcome was the total cost of maintenance therapy for COPD, including medication costs and hospitalizations. The secondary outcomes were the number of hospitalizations and the number of emergency department visits. RESULTS: The study included 100 patients with COPD. The average total cost of maintenance therapy was $3,240, with a median of $2,000. The average number of hospitalizations was 0.5, with a median of 0. The average number of emergency department visits was 0.5, with a median of 0. CONCLUSIONS: The study found a significant association between patient adherence to maintenance therapy for COPD and the total cost of maintenance therapy, with a higher level of adherence associated with a lower cost. The study also found a significant association between patient adherence to maintenance therapy for COPD and the number of hospitalizations and emergency department visits, with a higher level of adherence associated with a lower number of hospitalizations and emergency department visits.

ADJUSTING THE NICOTINE DOSE: THE KEY TO A SUCCESSFUL, “TAILORED” METHOD OF QUITTING SMOKING

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In a recent report, AFFSAPS (the French Health Products Safety Agency) discussed to what extent the dose selected constitutes an important success factor. OBJECTIVES: Assess the impact of quitting smoking in subjects receiving treatment by nicotine patches, combined in some cases (and others not, depending on the practitioners’ approach) with nicotine pastilles to suck. METHODS: Each of the subjects was included after they had expressed, during the spontaneous consultation, their desire to quit smoking. The cohort being pragmatic, no prescription advice was given, directly or indirectly, to the investigating doctors. The doctors were recruited by an independent service provider. RESULTS: A total of 215 subjects were recruited by 67 general practitioners. Two analysis groups were organised, the first group being treated with a transdermal device or skin patch (n = 93) and the second with a transdermal device combined with pastilles (n = 122). After 6 months, the rate of abstinence in the “Patch + Pastille” group was 62.1% versus 39.7% in the “Patch only” group, the difference observed being significant (p = 0.008). CONCLUSIONS: This cohort, carried out in real conditions, highlights – in subjects wishing to quit – the relevance of adjusting the dose with the help of pastilles. Therefore, it would appear that, for subjects quitting smoking, combining pastilles with a transdermal nicotine substitute is indispensable. The role of the health professional initiating the quitting programme is therefore of prime importance.

ABSTRACTS

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