PRS13

THE COST-EFFECTIVENESS OF VARENICLINE IN SMOKING CESSATION IN DENMARK

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OBJECTIVES: From a Danish perspective to analyse the incremental cost-effectiveness of the pharmacological smoking cessation therapy including counselling using varenicline (Champix®) compared with bupropion SR (Zyban®), nicotine replacement therapy (NRT) or smoking cessation courses (group based counseling). **METHODS:** A Markov model was developed using a hypothetical Danish cohort of smokers who made a single quit attempt (cycle length 1 year). The direct costs of smoking cessation and treatment of smoking-related diseases (COPD, lung cancer, CHD, stroke and asthma exacerbations) were included (2006-prices). Future costs were discounted at 5%. The incremental cost-effectiveness was calculated as costs per quitter and costs per QALYs gained. The evidence for quit rates included head-to-head trials for varenicline versus bupropion, a Cochrane review of NRT (Stead et al., 2008) and a Danish cohort study of smoking cessation courses (Kjaer et al., 2007). The time horizons applied were 20-year and lifetime. **RESULTS:** Modelling results revealed that varenicline resulted in more quitters and fewer cases of smoking-related diseases. In a 20-year time horizon (lifetime) cumulative QALYs gained using varenicline were 1,04 (4237) compared with smoking cessation courses, and up to 2517 (5600) QALYs compared with NRT. The costs per additional quitter using varenicline instead of bupropion were DKK3060 (20-year), whereas varenicline was cost-saving compared with NRT and smoking cessation courses. With a lifetime perspective varenicline was always a cost-saving option in terms of cost per quitter. Resulting in more QALYs and fewer costs varenicline dominated the other alternatives, when lifetime was considered. With a 20-year time horizon, the costs per QALY gained for varenicline versus bupropion were DKK30,272, but varenicline still dominated NRT and smoking cessation courses. **CONCLUSIONS:** This cost-effectiveness analysis confirms that varenicline is a cost-effective strategy for smoking cessation in Denmark. This finding is in accordance with results found in Sweden and The Netherlands.

PRS14

COST OF ALLERGIC RHINITIS IN PEDIATRIC PATIENTS IN MEXICO

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OBJECTIVES: To estimate the direct and indirect costs of allergic rhinitis (AR) in pediatric patients from the perspective of patient's family. **METHODS:** 195 patients (children/adolescents) from a third-level public pediatric hospital that do not belong to social security system were included in this retrospective, cross-sectional cost-of-illness study. Information of demographic characteristics, frequency and severity of illness, consultations, diagnostic tests, out-of-pocket-expenditure for medication, transportation, food and house refurbishment as well as absence from work of caregivers and school absenteeism of patients was collected with a standardized questionnaire. Additionally, the corresponding clinical records were reviewed to confirm the prescribed medications and the sickness evolution. Country level costs were obtained applying recent prevalence estimates of AR. **RESULTS:** The average annual costs per children are €264.96. Assuming that AR prevalence in this age group ranges from 18.5% to 42.1%, the costs of AR in Mexico range from €623.52 to €1,418.92 millions annually. For adolescents the average annual costs per patient are €278.81, assuming AR prevalence goes from 21.3% to 41.3%, the country level costs range from €640.61 to €1242.11 millions annually. For both age groups direct costs are responsible for 97.4% and 98.7% of the expenditures respectively, being medications the main cost driver. Antihistamines represent 38.1% and 33.6% of the medication costs for children and adolescents respectively. House refurbishment was the most relevant cost factor within nonmedical direct costs, however, only 30% of the caregivers mentioned had had this type of expenditure. There was no difference in costs according to illness severity, although the school absenteeism was twofold in children. **CONCLUSIONS:** The economic burden of AR in Mexico is important since 50% of health expenditure comes from out-of-pocket. Nevertheless these results could underestimate the real cost of illness because parents not necessarily accomplish the recommendations of pediatricians related to medications and house refurbishment.

PRS15

ESTIMATING EXCESS COSTS OF POPULATION-BASED CASES WITH MILD COPD—RESULTS FROM THE KORA F3 STUDY

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OBJECTIVES: Chronic obstructive pulmonary disease (COPD) is a common chronic condition that has many systemic effects beyond pulmonary problems alone. Our objective was to calculate direct medical excess costs of COPD. **METHODS:** Data from the population-based KORA survey conducted in the region of Augsburg in 2004/05 were used to calculate excess costs of COPD. Data were available for 200 subjects with and 2984 subjects without COPD. Diagnosis of COPD was based on questions on chronic cough for more than three months a year. Direct medical costs were calculated based on self-reported resource use with regard to physician visits, hospital stays, rehabilitation and drug consumption. To adjust for age differences between participants with and without COPD, controls that matched subjects with COPD in terms of age and sex were randomly sampled from those without COPD. To value utilization, recommended national unit costs were inflated to 2005 price levels. **RESULTS:** Costs were significantly higher in subjects with COPD with regard to total costs, drugs and physician visits ($p < 0.0001$), but not for hospital stays. With these mild cases, no excess costs of rehabilitation were observed. Preliminary analyses showed total direct medical excess costs for COPD of about €900 per year, the largest contribution coming from drug consumption (€600). **CONCLUSIONS:** Total direct medical costs are higher for subjects with COPD, and two thirds of these excess costs are due to the use of medications.

PRS16

THE HOSPITALIZATION COST OF PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) IN THE UNIVERSITY HOSPITAL OF ALEXANDROUPOLIS, GREECE

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INTRODUCTION: Patients with COPD consume considerable health care resources due to their lung disease and frequent comorbidities. **OBJECTIVES:** To estimate the hospitalisation cost of patients suffering from COPD in the department of pneumonology of the university hospital of Alexandroupolis, Greece. **METHODS:** The study sample consisted of all the patients, 142 in