SYSTHETIC REVIEW OF THE DIRECT COSTS RELATED TO OBESITY AND ASSOCIATED DISEASES IN POLAND

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OBJECTIVES: According to WHO data approximately 1.6 billion adults are overweight with at least 400 million being obese (BMI > 30). In Western Europe up to 4% of total expenditures on health care are spent on managing obesity and obesity dependent chronic diseases including diabetes, cardiovascular diseases and cancer. The aim of this systematic review was to find studies on direct cost estimates of obesity and its comorbidities in Poland. METHODS: Search and selection of data was based on a protocol developed before performing the search and compilation of data. Two researchers independently assessed publications according to pre-defined inclusion criteria. The review covered the following databases: MEDLINE, EMBASE and PBL (Polish Medical Bibliography). Last update of the search results have been made on May 10, 2009. RESULTS: In the result of the systematic review only 2 studies were found: Sosenko et al. 2006 and Krzyzaniak et al. 2008. In those studies direct costs of treating obesity and associated diseases have been estimated at between 20 to 30% of the total health care expenditures in Poland. Based on OECD data it gives the amount of 8.15 to 12.2 billion USD according to PPP in 2008. CONCLUSIONS: Economic burden of obesity and its comorbidities in Poland is undoubtedly significant. In 4 European countries with obesity prevalence similar to Poland (Portugal, Norway, Belgium and Sweden), the cost of treating obesity and associated diseases has been estimated at average of 0.32% GDP. If the cost of obesity and its comorbidities in Poland amounted also to 0.32% of GDP, total burden of disease could have been estimated at 1.98 billion USD. We conclude that specific Polish data from the two above mentioned studies can be significantly overestimated and there is an urgent need for further research in order to estimate the true value of these costs.

REIMBURSEMENT OF INNOVATIVE DRUGS IN SLOVAKIA—PHARMACOECOLOGICAL ASPECTS OF USTEKINUMAB IN PSORIASIS

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OBJECTIVES: Although health spending is well below the OECD average when considered as a share of GDP, Slovakian pharmaceutical expenditures accounts 32% of total health care budget. The accessibility and availability of innovative drugs is good. Mandatory HTA (pharmacoeconomy) is incorporated in all relevant legislation, MoH set the official threshold by R = €18,000/QALY and €2 = €26,500/QALY. METHODS: We have analysed the legislation and official reimbursement decisions and commentaries, published by the MoH in 2009. We analysed the applicants documentation including pharmacoeconomic analysis, as a mandatory part of the application. RESULTS: The main drug reimbursement body—Categorisation committee of the MoH and pharmacoeconomic advisory committee evaluated the applicants dossier for the biologic drug ustekinumab (Stelara®, Jannssen Cilag Slovakia) for the treatment of psoriasis. The pharmacoeconomic part of the application fulfilled all legislative aspects. The CEA shows that ustekinumab is more cost effective in cost of therapy responder patients with the impact of conventional care in matched controls without rimonabant treatment during a follow up period of up to 12 months. METHODS: The survey was based on retrospective collection of data through a specified extraction and data management method, Pyrgasys Customized eXtraction Program (CXAP) developed to extract data patient from an Electronic Health Record (EHR) system (Profdisz Journal III). Centers were selected with a wide socio-economic and geographical spread. RESULTS: Body mass index (BMI) was available in 922 patients out of 1477 (62%). Of those patients, 93% were prescribed rimonabant according to the indication and 7% within the reimbursement criteria. In reality, 97% of the total cohort obtained reimbursed use. Patients prescribed rimonabant for at least 6 months showed a mean weight reduction of 6.0 kg after 12 months compared to 0.4 kg in controls. The mean decrease in HbA1c was 0.3% in patients with type-2 diabetes versus 0.0% in controls. More than half of patients and controls (54.4 vs 54.3 %) had a documented psychiatric illness such as anxiety, depressive disorders or sleep disturbances at baseline. There was no increase in the co-prescription of anxiolytics /sedatives /anti-depressant over time comparing rimonabant treated patients with controls. CONCLUSIONS: The majority of patients were prescribed rimonabant according to the given rules for indication and reimbursement. Weight reduction in the total cohort and reduction of HbA1c in patients with type-2 diabetes during the follow up year, were of similar magnitude as reported in various clinical trials. The safety analysis did not signal any increase in adverse events including psychiatric illness in patients treated with rimonabant more than six months.

CORRECTING AN UNDERESTIMATE OF INCREMENTAL COST EFFECTIVENESS RATIO CONSIDERING STATISTICAL ERRORS AND PROBABILITY OF TRUTH

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OBJECTIVES: To clarify how the standard estimate of incremental cost-effectiveness ratio (ICER) theoretically changes, affected by the uncertainty accompanied with statistical errors and probability of truth. METHODS: The decision analysis was performed using: 1) probability of truth, 1 – p, for a null hypothesis (or p for the alternative hypothesis), 2) type I error (α), and 3) type II error (β). The decision tree modeled a patient facing the alternative decisions for treatment: evidence-based (Teb) or conventional (Tc), considering the choices: 1) Teb if no evidence available about a new treatment A, then the patient takes a conventional treatment B, and 2) Teb if positive evidence of a clinical trial available, then take the treatment A, whereas if the evidence is negative, take the treatment B. Given a pair of benefit and cost for the treatments A and B, respectively noted as (Ea, Ca) and (Eb, Cb) at the terminal node, then the operations