DIRECT COST OF DIFFUSE TOXIC GOITER AND ITS COMPLICATIONS IN UKRAINE

IULIIA VADZIUK
Ivan Horbachevsky Ternopil State Medical University, Ternopil, Ukraine

Introduction

Nowadays thyroid disease found in 50% of the adult population and 80% of the elderly population of Ukraine [1]. Growing prevalence of endocrine system disease (+9.11%) is an important medical and social problem in Ukraine. During the period 2006-2010 there was increase in the proportion of endocrine disease in total disease prevalence of 4.39% in 2006 to 4.43% in 2009 and 4.48% in 2010 (Fig.1). In terms of new cases of disease among endocrine diseases 42.04% is thyroid pathology, according to their prevalence – 45.84% [2]. However there is no information about pharmacoeconomic analysis of this pathology [3].

![Graph showing the share of endocrine diseases in the total disease prevalence in Ukraine.]

- Fig.1. Share of endocrine diseases in the total disease prevalence in Ukraine.

Objectives

To determine the direct cost of health care technologies used for treatment of diffuse toxic goiter in Ukraine.

Methods

We made the retrospective analysis of 52 patients' medical records with DTG that were hospitalized to the endocrinology department of Ternopil University Hospital (Jan-Dec 2012). The method of pharmacoeconomic analysis "cost of illness" was used to estimate the cost of health care for patients with DTG. We have made calculations of costs: the cost of laboratory analysis, the cost of instrumental analysis, the cost of drug treatment, doctor's consultations, costs of patient's stay in hospital. While determining the direct costs of medical services in monetary terms we used the rates for medical services that were in Ternopil University Hospital.

Results

The study found that among the patients there were 11 (21.15%) men and 41 (78.85%) women aged 20 to 65 years (46.88±8.9). All patients have got to the hospital in stage of medication subcompensation. The average duration of stay in hospital for patients was 10.67±2.07 days. The total cost of laboratory tests was EUR 1,555.53. The costs of instrumental methods of patients examination amounted EUR 204.25. The cost of consultations by specialists was EUR 285.97. In determining the amount of direct costs for medicines we found that the cost of drug treatment of the underlying disease is EUR 211.83, the cost of drug therapy of DTG complications is EUR 1,163.64. Total cost of patients stay in hospital was EUR 3,513.45. After calculation of all direct costs we determined that the total cost of DTG per patient is EUR 133.36 per course of treatment.

![Pie chart showing the cost structure of health care provision for patients with diffuse toxic goiter.]

- The total cost of laboratory tests
- The costs of instrumental methods of patients examination
- The cost of consultations by specialists
- The cost of drug therapy of DTG
- The cost of drug therapy of DTG complications
- The cost of patients stay in hospital

- Fig.2. The cost structure of health care provision for patients with diffuse toxic goiter

Conclusion

In the cost structure of health care provision for patients with diffuse toxic goiter the most significant costs were spent for laboratory tests and for patient's stay in hospital. The presence of underlying disease complications significantly increases cost of drugs.

References