ANALYSIS OF THE PHARMACEUTICAL SUPPLY OF PATIENTS WITH DIABETES IN MOROCCO

Mzhirid Siham, Iurchenko G.M.

National University of Pharmacy, Kharkiv, Ukraine

economica@nuph.edu.ua

Type 2 diabetes mellitus (DM) is not only a medical but also a social problem. Its prevalence among the adult population aged 20-79 in the European Union increased from 7.6% in 2003 to 9.6% in 2011, and in Morocco the number of patients with diabetes is steadily increasing (over the past 5 years - by 26%). Complications of diabetes pose a great danger, which significantly increase mortality, disability and reduce the quality of life of patients. Economically and clinically sound choice of diabetes treatment regimens is of great importance in modern conditions. The study of the cost and effectiveness of pharmacotherapy of type 2 diabetes is an important component of pharmacoeconomic analysis, which is the basis for choosing the least expensive and most effective pharmacotherapy regimens. According to researchers, pharmacoeconomic analysis is a necessary link in the development of treatment standards and the creation of a national form of medicines.

The aim of the work was to analysis of the pharmaceutical supply of patients with diabetes in Morocco.

Pharmacoeconomics (PHE) is a branch of knowledge in the field of health economics that studies the clinical and economic benefits of drugs and drug therapy regimens. It follows from the definition that, ideally, diagnostic and therapeutic interventions, the use of medicines (drugs) should be ranked according to their cost-effectiveness and resources should be directed to those activities that bring the most benefits at the lowest cost. However, the implementation of this idea in practice is a difficult task.

Today in the world practice the following basic methods of the clinical and economic (pharmacoeconomic) analysis are used:

• analysis of the "cost of the disease";

• cost minimization analysis;

• cost-effectiveness analysis;

• cost-benefit analysis;

• cost-benefit analysis;

• Modeling.

As a result of frequency analysis, it was found that the following pharmacotherapy regimens were most often used among the patients included in the study: in 43.1% of cases metformin + glimepiride (scheme 3), in 16% - metformin + gliclazide (scheme 2), in 15.5 % - cases of metformin monotherapy (scheme 1).

Patients on 1 treatment regimen were significantly younger, had the highest BMI, the lowest BPM on admission, the shortest duration of type 2 diabetes, the lowest GPI at discharge, and a significantly lower mean reduction in BPI during treatment and the lowest more effective patients. Patients in groups 1 and 3 differed significantly from each other in all analyzed indicators, while patients in groups 2 and 3 had significant differences in the number of effective patients and did not differ significantly in all other analyzed indicators.

The calculation of the incremental factor for pharmacotherapy regimens 2 and 3, taking into account the minimum values of PSLS, showed the cost-effective advantages of pharmacotherapy regimen 2 (metformin + gliclazide) compared to pharmacotherapy regimen 3 (metformin + glimepiride).

The analysis found that in Morocco, the cost of treatment for metformin monotherapy ranged from $ 6 to $ 21, for the metformin + gliclazide combination from $ 6.5 to $ 16, and for the metformin + glimepiride combination from $ 4 to $ 7.5.