

COST OF TREATMENT OF PATIENTS WITH ISCHEMIC STROKE IN UKRAINE

Lobova I.O., Kotvitska A.A.

The National University of Pharmacy, Kharkiv, Ukraine

socpharm@ukr.net

Today there is an acute problem of patient quality and accessible health care as in the world as in Ukraine. First of all, it is related to the intensive development of science, which is characterized by the appearance of new medical technologies, including new diagnostic methods and therapy, while the economic resources of the health sector remain limited. So, among the major issues that require urgent solutions at all levels of health care systems leading place belongs to the problem of financing the most common nosology and medical technologies. In connection with this special attention is paid the rational use of available health resources recently. One of the tools contributing to the decision-making in health care is pharmacoeconomic analysis, including analysis "cost of illness".

According to the above mentioned, the aim of our study was to conduct economic evaluation of direct medical costs for patients with ischemic stroke.

Cost analysis was performed by using systematic, logical, statistical, pharmacoeconomic ("cost of illness") and normative-cost methods.

The first stage of the analysis of direct costs for treatment of ischemic stroke was to evaluate the cost of the use of laboratory and instrumental methods of diagnosis of the disease. Within the analysis of the cost of hospitalization of patients also were taken into account the cost of specialists' consultations (Figure 1).

In order to calculate the direct medical costs related to hospital health care, we used "The unified clinical protocol of health care for patients with ischemic stroke" No 602, approved by the Ministry of Health of Ukraine dated 03.08.2012, which includes a variety of medical and laboratory diagnostic procedures, their number and frequency of use, and price-list on donation of paid health care services dated 01.03.2012 of the Railways Central Hospital.

The costs of medical procedures were defined by us as follows:

$$Cost_S = \sum Price_S \times P_S \times n_S \quad (1)$$

where $Cost_S$ - the cost of medical procedures, UAH;

$Price_S$ - the price of medical procedures, UAH;

P_S - the frequency of assignment of medical procedures;

n_S - the number of units of medical procedure.

Distribution of the costs for the main therapeutic measures related to in-

hospital treatment of patients with stroke is presented in Figure 1.

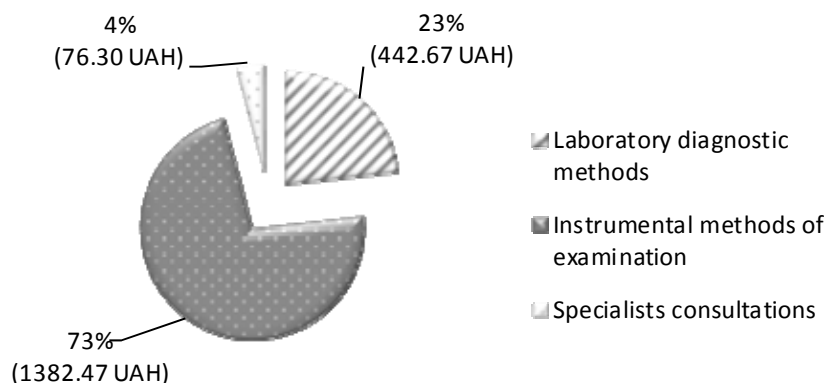


Figure 1. Distribution of the costs for to in-hospital treatment of patients with stroke

The analysis showed that the cost of medical procedures provided to one patient with ischemic stroke, taking into account the multiplicity and frequency of their appointment is 1 901.44 UAH.

According to the methodology of the study, the analysis of the direct costs for treatment of stroke also included drug expenses. Calculating the cost for pharmacotherapy for individual medicines were calculated by using the actual data on their cost of production and form of issue and the multiplicity of admission, course dose and frequency of prescribing obtained by the results of a retrospective analysis of 581 hospital cards, by the formulas:

$$C_{PHT} = \sum Price_M \times P_M \times D_M \tag{2}$$

$$Cost_{PHT} = \frac{C_{PHT}}{581} \tag{3}$$

where C_{PHT} - the cost of pharmacotherapy, UAH;

$Price_M$ - price per unit of drug's active ingredient, UAH;

P_M - the frequency of drug's prescription;

D_M - drug's course dose, mg/ml/Unit;

581 – number of analyzed hospital cards of patients with stroke.

Thus, the results of calculations determined that the cost for a patient's drug treatment was 2 057.56 UAH.

The next stage of the study was the calculation of the direct in-hospital cost per patient with an ischemic stroke, which was carried out by summing up the cost of diagnostic, specialists' consultations and drug costs.

Thus, the results of pharmaco-economic analysis found that in-hospital cost for a patient's with ischemic stroke treatment was 3 959 UAH.