

# THE ROLE AND IMPORTANCE OF HEALTH ECONOMICS FROM THE STANDPOINT OF HIGH EDUCATION HEALTH INSTITUTIONS

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**ABSTRACT:** The paper describes the role and the importance of the study of health economics, as a young scientific discipline in high education medical institutions. The research results have been presented through a student survey, carried out by High medical school of professional studies in Belgrade, that had recognized the need for the study and research of health economics and included the course into its program.

**Key words:** health economics, subject, efficiency, students

## 1. INTRODUCTION

Health economics is an applied economic discipline that uses general economic knowledge, methods and skills to find answers to the questions on an optimal allocation of scarce resources in connection with health protection while making clinical, investment and business decisions, i.e. public health and political decisions.

The literature implies that health economics is also called economics of health care. As a new scientific discipline, it covers both economic and medical issues. It is based on two basic principles of health policy: on the principle of fairness and the principle of efficiency. It is closely connected with public health, especially with social medicine, social policy and health protection.

The foundations of health economics were laid by William Petty (1623-1687), a doctor and economist. He claimed that „doctors and economists should work together“. The economists that study health and health protection issues are obliged to understand health issues, health policy of a country and the public health organisation. Doctors that study economic issues, on the other hand, are obliged to understand economic logic of rational use of resources and economical approach to problem solving. People want to live in communities and in environment that protects and improves their health and also expect from the authorities to

define necessary practical policies that imply organization and action from the local to international levels.<sup>1</sup>

In the beginning of 1980s, an idea was launched in the World Health Organization of linking the researchers that study health protection economics. The aim was to improve the study of the discipline and ensure the exchange of experiences. Numerous authors were gathered and a study group with the aim of improving the study of economic issues in connection with health was formed. Starting from 1982, there have been many gatherings and a number of publications have been issued that recapitulated the first two decades of the development of the scientific discipline.

In our country, Health economics intended for economists has been studied within the specialist study program at Medical Faculties in Belgrade and Novi Sad. It was also studied in the 1980s within the specialistic studies of Social medicine at the Medical Faculties and doctors studied the program that referred to the implementation of economics in health through this specialization.

High Medical School of Professional Studies in Belgrade has recognized the importance of study of this scientific discipline. It carried out a survey among the students related to the introduction of the subject as obligatory in undergraduate studies. The survey results have shown the positive attitude of students towards acquiring the adequate knowledge of health economics that they can implement in their future professional work.

## 2. THE SUBJECT OF HEALTH ECONOMICS

Starting from the roots of the study of health economics and the need for the profiles of personnel with the adequate knowledge of economy and health, a syllabus of the subject that is studied at this high education institution was made. With the help of consultants from different scientific areas the most adequate syllabus intended for the students of high educational medical institutions was created. The results have shown that for this scientific discipline it is needed to study the following areas: economic characteristics of health, macroeconomic approach to health care, the allocation and mobilisation of resources, health care costs, economic issues of mental illnesses, payment mechanisms in health, distribution of medicines, health projects and programs evaluation, fairness and medical ethics, variations in small areas, measuring health status as well as health system reforms.

***Economic characteristics of health*** justify the separation of the economics of health care into a separate scientific discipline. These refer to the uncertainty of health needs, the dependence of the users and providers of health services' behavior from the specific interpersonal doctor-patient relationship, asymmetric information that appears in the form of insufficient information of insurance company in comparison to the insured in the market of voluntary health insurance. ***Macroeconomic approach*** to health and health care includes the following areas of research:

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economic issues of health system operation, interrelation between economic and health system, interrelation between the population health and economic development, the influence of unemployment on the population health, economic inequalities and health, total spending on health care and its distribution across areas of health care, the choice of priorities in formulating the strategy of health system development, interrelation between health and environment. **Allocation and mobilizing resources** is a wider area of study of health protection economics that encompasses three narrower areas – health services market and private health care, the model of national health care and compulsory health care. **Health care costs** are costs in primary health protection, the costs of the programs of prevention and screening programs, costs of a family and economic cost of time, hospital care economics, hospital economic models and hospital organization, hospital care costs, the issues related to economy and diseconomy of scale, uncompensated care, high technology and costs, cost control.

**Economic problems of mental illnesses** were separated to a special area of research due to the range of specific characteristics important for economic analysis that emerge in connection with these illnesses. A special magazine of international importance („The Journal of Mental Health and Economics...") was launched in 1998. We talk about the economics of mental illnesses, since mental illnesses, taking into the account the characteristics important for economic analysis, differ from other diseases and injuries. **Payment mechanisms in health** that are used in different countries and in different circumstances offer numerous modalities that health care economics pays attention to in its research studies. Different mechanisms of paying doctors, nurses (capitation „per service“, fixed salary), pharmacists, medical and non medical staff are studied. **Distribution of medicines** is an issue that has been gaining the importance recently. The occurrences in pharmaceutical industry have been studied partially in health protection economics as well. The issues that are studied include: the channels of distribution of medicines, the price control of medicines, the measures for cost limitation, such as limitation of the total number of medicines that are given the approval for in a country, positive lists, referral rates, etc. **Health projects and programs evaluation** take into account, beside other criteria, economic criteria: the concept of fairness and economic efficiency, the methods of economic evaluation (minimizing costs, cost-benefit, cost-effectiveness and cost-utility analysis). **Fairness and medical ethics** encompass the issues such as the right to health protection, the concept of fairness in health protection resources use, horizontal fairness, vertical fairness, geographical distribution of resources, intergenerational fairness. **Variations in small areas** in medical service use have been researched in numerous studies. The different use of medical procedures and treatments in different regions may be caused, among other things, by economic factors, for example by payment method. **Measuring health status** presents an interdisciplinary issue. Health care economics in this area has contributed in great extent. The health state indicators and indexes are defined and they are to be used for the selection of priorities when deciding on resource use. Health status measuring is also necessary for the evaluation of used resources efficiency. **Health system reforms** are partially studied within health protection economics as well. Of particular interest are international experiences in implementing various economic solutions to financing health care, the form of payments in health care and the possibilities of their implementation, the relationship of private and public in health care, the degree of decentralization and the like.

### 3. RESEARCH RESULTS

The survey included 220 undergraduate students and 50 students of specialistic studies. The questionnaire included 5 closed-type questions and an open-type note.

### QUESTIONNAIRE

1. Have you acquired, in the process of previous education, before taking these classes, certain knowledge of health economics?

YES

NO

2. Are you aware of the importance of funds for health care operation?

YES

NO

3. Do you have any knowledge about the Republic Fund for Health Insurance?

YES

NO

4. Do you think that information received through health economics classes is important for your education?

YES

NO

5. Are you going to implement the knowledge acquired at practical classes of health economics in your job?

YES

NO

6. Note: What is your opinion about the subject Health economics that you have had?

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*Figure 1.* The questionnaire

The results have shown that 70.7% of undergraduate students replied that in their process of education, before attending these classes, had had no knowledge of health economics;

64.1% of the respondents replied that they were aware of the importance of funding for health operations.

Only 30.9% of the respondents/students replied that they had had some knowledge on the Republican Fund for Health Insurance and 66.3% of them thought that the information received within the study of the subject of health economics was something important in the process of their education.

The students of graduate – specialistic studies replied that in their process of education, before attending these classes, had had no knowledge of health economics (54.4%); that they were aware of the importance of funding for health operations (83.0%); that they had had some knowledge on the Republican Fund for Health Insurance (81.2%) and that they thought that the information received within the study of the subject of health economics was something important in the process of their education (91.8%). There is a note that 26% of students of specialistic studies emphasized the advantage of their undergraduate colleagues that would acquire the knowledge in health economics in the earlier phase of education.

#### **4. CONCLUSION**

Health economics is the inter-connection between medicine and economy based on the principles of fairness and efficiency. The roots of health economics date back to the 17. century. The important development has been recorded during 1980s. High Medical School of Professional Studies in Belgrade has recognized the importance of the study of health economics. The survey carried out among the students of undergraduate and specialistic studies has shown that the majority of students do not have any previous knowledge in the subject and think that the information received within the study of the subject of health economics is something important in the process of their education.

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