

# Assessment of Medical Students' Perception on the Healthcare System

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**Purpose:** Major transformations going through the medical system have a significant impact on medical students, future physicians and their perception is a key factor in the ongoing evolution of the medical practice. We assessed medical students' perceptions on healthcare system, patients care, the ethics of medicine, and the understanding of health policies.

**Material and method:** We studied data from 415 medical students who completed a survey questionnaire during a period of five months. Applied questionnaire was completed individually with single choice questions and privacy was respected. Students had the opportunity to make comments and suggestions to complex issues.

**Results:** In terms of professional orientation, an equal number of students opted for a medical and surgical specialty, while for medical research field there were only 10 responses. 91% of students believe that the medical system in Romania is not effective, while 47% considered the system is partially efficient. The perception on the healthcare system worsens as medical students approach their final years.

**Conclusions:** Students have shown pragmatism regarding the answers that targeted their professional options, the place where they want to practice, their choice of specialty and their perception of the healthcare system. The questionnaire identified major deficiencies in terms of financing of the health system, the ineffective administration of resources, poor management and low wages.

**Keywords:** medical students, healthcare system, perception assessment, survey study

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## Introduction

Resource allocation and inequity in healthcare in Romania is a subject with a great impact on our society in general. In this context, future physicians face multiple personal and professional options following graduation, including the option to continue training in their desired specialty, or the option to practice in a different medical system. Underlying these options are medical, ethical, financial and personal considerations. Each of these issues has an important role in forming the perception on the functioning of the healthcare system and more important in deciding whether to be a part of it or not. While in our medical system ethnic minorities, the uninsured, or other disadvantaged groups receive different treatment, students may choose to work in an environment where these issues do not exist [1].

Very few studies have investigated how medical students perceive disparities in the healthcare system, resource allocation, remuneration, the application of ethical concepts in the medical profession, as elements of the formation and development of future practitioners of the medical profession [1,2].

Previous research conducted in the European Union showed a predominant focus on individual options, associated with a more conservative attitude regarding the medical profession that is constantly adapting over the years of medical training [2]. Still, the mechanisms through which experience affects the perception of school, the structural deficiencies of the health system or whether if they are

perceive differently by health experts or the general population, are not known.

Understanding the perception of the healthcare system is important in the development of educational programs related to addressing the patients' awareness of public health policies, and provides guidance on how students relate to the entire system, which may indirectly affect the treatment of patients. Medical students and the school system can benefit from the evaluation of perception on the healthcare system [3], as this perception may be different from that of the general public [4]. Our aim is to increase awareness on the importance of the perception of future doctors on the medical system and the alternative elements underlying medical migration, aiming to foster a holistic approach for training future doctors.

## Material and method

A comprehensive questionnaire was developed, which included questions regarding personal data, professional options after graduation and the criteria of selecting these options, evaluation of the healthcare system and ethical considerations of the doctor-patient relationship. The questionnaire was applied for five months, between November 2011 and March 2012, completion was anonymous, individual, carried out on a single computer, without the possibility to edit the answers after completion. A total of 415 students responded to the questionnaire, the majority (21%) being in the 4<sup>th</sup> year of study. The responders came from several university centers, such as Iași, Cluj, Bucharest or Timișoara. Students had the possibility to answer freely to questions regarding their perception of the medical system, and

Table I. The students' speciality options after graduation

Speciality option	Year 1–2	Year 3–4	Year 5–6	Total
Research	4	2	4	10
Clinical Medicine	23	55	70	148
Surgery	84	31	32	147
Laboratory	3	2	3	8
Not decided	43	27	14	84

to make suggestions regarding ethical issues and system efficiency. Personal data regarded the year of study, gender, marital status, religion and place of residence. The response rate was 96%.

To evaluate the perception of medical students on the ethical aspects of the doctor-patient relationship, one of the defining elements of healthcare, we included questions about the approach to medical ethics. We also included questions regarding the importance of remuneration and the role of professional evolution of future physicians. The data obtained were correlated with the environment of origin of respondents, their options for a medical or surgical specialty, and religion.

## Results

The medical students' options regarding their choice of profession varied greatly over the course of their years of study. The evaluation was performed on groups of 2 years, and results are presented in Table I. Thus, the number of students who wish to work in research or laboratory medicine is very small, while the medical and surgical specialties are chosen by an almost identical number of students. We consider it very interesting that medical specialties are chosen by more students as they advance in their years of study, the number increasing three times compared to the early years. Meanwhile, surgical specialties are mentioned by 57% of the students in the early years of study, this value decreasing to 21% in the 5<sup>th</sup> and 6<sup>th</sup> year of study.

To evaluate the profile of respondents and their perception of the medical system, we analyzed the responses on the quality of training in the medical profession. 60% of the respondents believed that the received education dur-

Table II. The students' perception of the medical system

Perception	Year 1–2	Year 3–4	Year 5–6	Total
Very good	6	12	8	26
Good	54	87	86	227
Neutral	34	31	59	124
Poor	13	17	1	31
Very poor	2	4	4	10

ing the training years is good and very good, which can be a real hope for the future development of the medical education system. 29% believed that the quality of training is average and the remaining 11% described the system as poor (Table II).

Regarding the decision to practice the medical profession abroad, the most important factors influencing this decision are the level of equipment of the working environment and the level of remuneration of the medical personnel. The results show that for most of the students the ability to help people in a proper environment is an essential factor when choosing their place of work. Diverse pathology was mentioned by 85 students (Figure 1).

When asked "Where do you want to practice after graduation?", 56% responded they wish to leave the country to practice abroad, the majority in the European Union and a 12 students in non-EU countries. It is worth mentioning that only 6 students responded that they would like to practice in rural areas (Figure 2).

Another topic addressed was the perception of the students of the Romanian healthcare system. A very small number of responses indicated that there are no problems, while a large number of responses referred to staff salaries, ineffective allocation of resources and management, chronic underfunding of the system and unequal access to medical services. Insufficient staff, inadequate infrastructure, inconsistent healthcare reforms, corruption and bureaucracy in the system were also among the answers (Figure 3).

With all the highlighted deficiencies, 69% of the respondents believe the system is at least partially effective, 25% believe this system can not be effective in any way, while 6% of the students consider that the system's efficiency is at the highest standard.

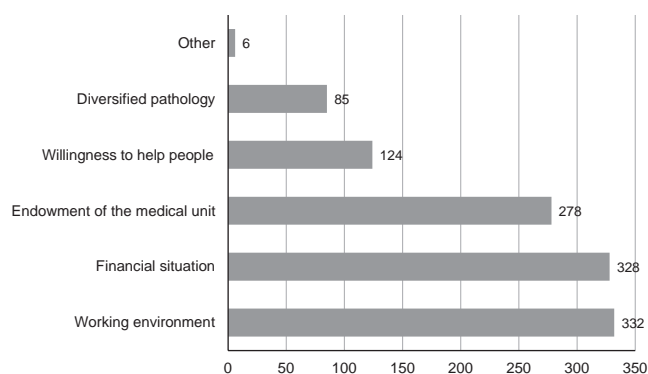


Fig. 1. Factors that influence destination after graduation

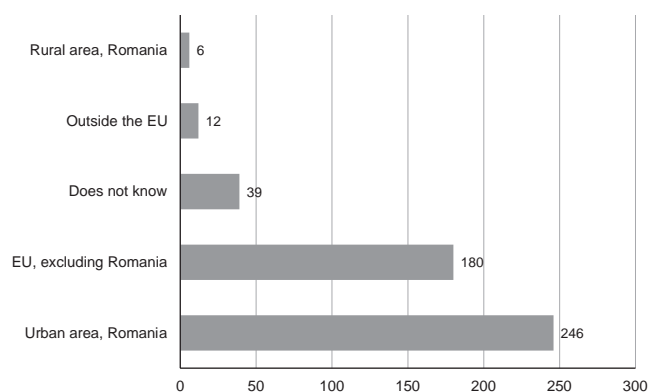


Fig. 2. Place of medical practice after graduation

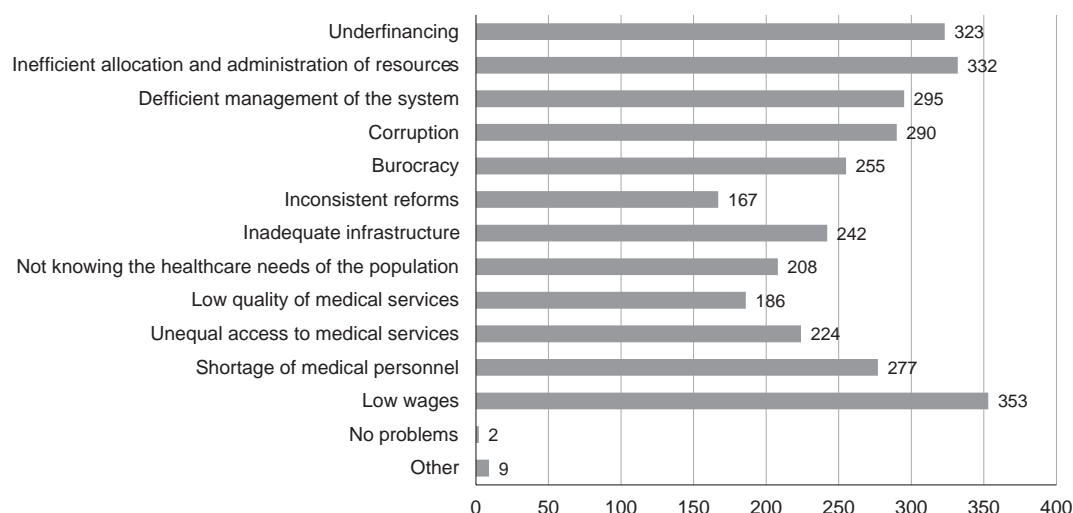


Fig. 3. Evaluation of health system problems in Romania

## Discussions

Maheux and Beland have studied the implementation of health policy issues, health system financing, organization and management of resources in schools of medicine, observing a positive impact on the medical act and its socio-economic implications. They assumed that increasing the students awareness of health economics concepts will increase individual responsibility and, consecutively, the efficiency of resource utilization [5,6].

The change in the students' choice of specialty is expressed in a decreasing preference for surgical specialties towards their final years, and an increasing preference towards medical specialties.

The lack of consistency regarding investments in the medical system causes students to express their desire to work in a properly equipped environment. Thus, although they are aware of the quality of the Romanian medical education, many of the respondents wish to practice medicine abroad, and the option to work in poorly equipped rural areas, with a lack of special pathology, is not even considered by respondents.

All aspects of system deficiencies have been expressed by the students and they are in good agreement with data from the literature [7], noting deficiencies in resource allocation and management of the healthcare system, underfunding of the system and deficiencies regarding salaries.

Our study is a work in progress and presents certain elements that can be improved, so that answers such as "I do not know," can still be items of interest. The questionnaire response rate was better than those in published studies [8,9]. We consider the database can be enlarged and extended to all medical training centers.

## Conclusions

In conclusion, our study suggests that there are differences among medical students regarding how they perceive the Romanian medical system, both in terms of comparison

with the general population and between different years of study. Although most students perceive differences and deficiencies in the healthcare system, they are aware of the quality of medical education and the existing positive aspects of the system. Also, due to deficiencies in the system and personal considerations, along with the perception of the entire system, a large number of students are tempted to practice abroad after graduation. This is true even though the medical education system is considered adequate and the system is known to suffer from a lack of personnel.

In the future, several measures such as ensuring a diversity of choice, social responsibility, introducing concepts of public health policies, improving the efficiency of resource allocation in the healthcare system and encouraging the dialogue between students and decision makers will increase the quality of training the future doctors, encouraging them to practice the medical profession in an environment adapted to actual needs, with a direct impact on the health of the population and the quality of medical care.

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