Evaluation of the impact of factors determining the choice medical specializations by students of the Medical University in Lublin

Noemi Studzińska, Anita Wdowiak, Michał Stec, Magdalena Stec, dr n. med. Monika Sadowska, dr n. med. Artur Wdowiak

Student Science Research Quality Of Life Department of Applied Psychology Medical University of Lublin, Lublin, Poland

Abstract

Aim
Understanding the factors which influence the choice of specialization in a group of medical students of the Medical University of Lublin.

Methods and group
Demographic scale, Antonovsky’s Sense of Coherence Questionnaire (SOC-29), Rotter Test, Rosenberg Self-Esteem Scale.
In the research there participated 189 first-year students of Medical Departments of the Medical University in Lublin. They were 100 Polish students (65 women and 35 men) and 89 foreigners (43 women and 46 men). The research
was conducted in X-XII 2013. The selected group was representative for the whole population of young people studying at the Medical University in Lublin.

**Results**

Our work shows that factors commonly considered to influence the choice of a doctor's profession do not depend on the student's country of origin. We found significant differences with regard to the sex and origin of the respondents in both groups, but interpretation of these results may lead to wrong conclusions. Literature offers information about the growing number of women choosing the profession of a doctor. Research shows that in recent time the percentage of female students has grown by over 40%.

Men who see their future with surgery, see in it a technical challenge, professional prestige and potential income. In turn, women choosing surgical fields name the following factors influencing the choice: good residency conditions, possibility to work part-time and a chance to quickly become self-dependent.

In Polish conditions gynaecology and obstetrics are in the ministerial priority specialisations list, which definitely increases their attractiveness and may seriously influence the decisions of Polish students expressed in our research. Personality traits have key importance in human life, and they also contribute to a success in the professional field.

**Introduction**

Each year 2400 graduates of medical departments of all medical universities in Poland face the choice of specialisation in which they will pursue their professional career. There are many factory influencing the final decision, and they appear even before an individual undertakes medical education. Young people who choose medical studies give different motives for their decision: the wish to help other people, cognitive curiosity, the wish for a doctor's social status and prestige, as well as vocation, understood as seeking one's own place in the world of another person's illness and death [1]. During their studies, students of medicine creator their professional identity by medical socialisation, focused on gaining new knowledge and skills, interacting with other students, healthcare employees and patients [2]. Significant are also cultural and social values; students' interactions with their families, friends and doctors, the strife to realise oneself influence young adepts of medicine and shape their preferences as to the choice of specialisation [3]. Also significant in this respect are the psychological factors: interests, skills, plans and aspirations, knowledge and experience, motives for actions, attitudes towards reality and the level of social awareness [5]. Another important group of factors are organisational ones, like the healthcare system's demand for a given number of specialists in a particular field of medicine. The task of the Ministry of Health is to ensure health security to citizens, so it constantly controls the appropriate number of specialists required to ensure due healthcare. One of the ways to encourage people to undertake residency in a given field of medicine is creating the list of priority specialisations. Differentiating remuneration is to encourage students to specialise in the fields in which lack of specialists is already a fact.

**Aim**

Understanding the factors which influence the choice of specialization in a group of medical students of the Medical University of Lublin.

**Research method and group**

In the research there participated 189 first-year students of Medical Departments of the Medical University in Lublin. They were 100 Polish students (65 women and 35 men) and 89 foreigners (43 men and 47 women). The group included students who chose medicine as a profession in one of the two choices: surgery or gynaecology and obstetrics. The research was conducted in X-XII 2013.
women and 46 men). The research was conducted in X-XII 2013. The selected group was representative for the whole population of young people studying at the Medical University in Lublin. The research was conducted using a questionnaire consisting of four parts:

1. Demographic data (age, sex, place of origin) and parents’ education; siblings; having a person with medical education in the family; preferred specialisation.
2. Antonovsky’s Sense of Coherence Questionnaire (SOC-29).
3. Rotter Test – that scale defines whether someone has internal or external locus of control.
4. Rosenberg Self-Esteem Scale.

The survey was anonymous.

Data analysis:

Statistical Methods Description

Results

In the group of Polish students there were significantly more women as compared to the English-speaking (foreign) students (65% in the Polish students group, 48% in the English-speaking students group (Fig. 1).

Considering the place of origin, in the English-speaking students group most came from (big) cities (respectively 83%:37%), and among Polish students most came from towns (respectively 40%:12%) or villages (respectively 23%:5%) (Fig. 2).

The fact of having someone with medical education in one’s family seems to have significant impact on choosing the profession of a doctor by the English-speaking students (Fig. 3), most of them also have siblings (Fig. 4). However, no significant relations were found between the level of parents’ education and the choice of professional career in either of the examined groups (Fig. 5 and 6).
Fig. 3

Fig. 4
Significant differences were also found in comparing preferences as to the future specialisation. Polish students choose more often surgical fields (respectively 49%:32%) (Fig. 7).

Similarly, comparing the Rosenberg Self-Esteem Scale results showed that Polish students obtained significantly higher results than the English-speaking students (Fig. 8).

In comparing Rotter test results, no significant relations were found in either group (Fig. 9).

**Discussion**

Our work shows that factors commonly considered to influence the choice of a doctor’s profession do not depend on the student’s country of origin. We found significant differences with regard to the sex and origin of the respondents in both groups, but interpretation of these results may lead to wrong conclusions.
Literature offers information about the growing number of women choosing the profession of a doctor. Research shows that in recent time the percentage of female students has grown by over 40% [13,14]. The Medical University in Lublin is one of two universities educating doctors-to-be in eastern Poland. Polish students who begin their studies come mostly from the Lubelskie and Podkarpackie regions, where there are few localities with more than 100,000 inhabitants. Hence may result the differences regarding the origin of the students of the examined groups. The group of English-speaking students is specific in this respect, a vast majority of these students come from big cities. Choosing medical studies in Poland is usually connected with better economic conditions than in their home country. Besides, administrative differences and differences in population distribution connected with them are also significant.

Research conducted among students of Anglo-Saxon countries, in Turkey and in Japan shows that choice of specialisation is also influenced by demographic factors: age, sex, study results, marital status, having a doctor parent, and the influence of another authority. Our research seems to confirm the data gained in those studies. Considered was also the impact of the behaviour of academic teachers: their enthusiasm and love for what they do, and changing social and economic conditions [6,7,8,9,10,11,12].

Surowica specialisations are dominated by men, with the exception of gynaecology and obstetrics, which are often chosen as target specialisations by women in the Western countries [27]. Men who see their future with surgery, see in it a technical challenge, professional prestige and potential income [28]. In turn, women choosing surgical fields name the following factors influencing the choice: good residency conditions, possibility to work part-time and a chance to quickly become self-dependent [29]. In Polish conditions gynaecology and obstetrics are in the ministerial priority specialisations list, which definitely increases their attractiveness and may seriously influence the decisions of Polish students expressed in our research.

Personality traits have key importance in human life, and they also contribute to a success in the professional field. Much research was done comparing the relations between specialisation choice and personality with medicine students at the first and last years of study. The greatest relation in that scope was found at the beginning of medical education [4].

References

10. Reed VA, Jernstedt GC, Reber ES. Understanding and improving medical student specialty choice:


