Medical student’s motivational beliefs and career choice expectation in Georgia

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ABSTRACT

Georgia traditionally has the highest density of health workers, particularly physicians. Despite this tendency the number of medical students increases year by year. At present in Georgia undergraduate medical education is offered by nine higher educational institutions. What motivates students to study medicine in Georgia and what is their expectation about career choice? In Georgia, the studies addressing these questions are very limited. The objective of the given study is to explore nature of primary motivation for studying medicine and expectations about future careers among medical students in Georgia. The Special questionnaire was developed for this study. The questionnaires were distributed to purposively selected students. In total, 360 questionnaires were distributed. A total of 349 completed questionnaires were returned and only 310 fully completed questionnaires could be used for analysis in the survey. Recent study has provided the insights into students’ primary motivations for studying medicine and their future career preferences in Georgia. This study has found that students in Georgia are more influenced by intrinsic motives and they place priority emphasis on patient care and helping people. The majority of male students more often than female students has chosen surgery as a future specialty and female students have mainly opted cardiology, obstetrics-gynecology, endocrinology, pediatrics, generalist medical practice. This study gives important practice point for development of curriculum and human resources within health policy.

Key words: Undergraduate medical students, motivation to study medicine, intrinsic and extrinsic factors, future career preferences.

INTRODUCTION

At present the population of just 4.49 million inhabitants in Georgia is offered 6-year undergraduate medical education by nine higher educational institutions (NSO, 2012). Seven are based in the capital - Tbilisi, among them four institutions are public and five establishments are private. Each higher educational institution bases its individual curriculum on the framework of National Sectoral Document in Medicine, which was elaborated by expert group and approved by the Ministry of Education and Science. This Document requires: designing outcome based curricula with integration of basics and clinical part of medical education and with enhancement of clinical competencies and research skills.

Accreditation for medical programs is mandatory in Georgia and in 2011-2012 National Center for Educational Quality Enhancement evaluated all nine existing undergraduate programs.

Admission to medical studies is based on Unified National Exam. The Law of Georgia on Higher Education determined introduction of Unified National Admission Exams in the country based on transparency principles. Three exams are obligatory for all applicants. These are: general skills,
Georgian language and foreign language. Medical Schools require additional fourth exam of their choice (biology, math, chemistry or physics). Exams are carried out by National Examination Agency, which is affiliated to the Ministry of Education and Science.

Students have rights to choose higher educational institution and educational program.

According to the official date, in Georgia there were 19404 physicians who served the population of Georgia throughout the country (NCDC, 2012). Georgia traditionally has the highest density of health workers, particularly, physicians. Despite this tendency the number of medical students increases year by year. Currently, the total number of medical students in Georgia is approximately 4000. What motivates students to study medicine in Georgia and why do so many candidates apply to medical university or medical faculties every year? What is their expectation about choice of career? Surveys of medical students in different countries show that both intrinsic and extrinsic motives drive students to become doctors and choose different specialties in medicine, but in Georgia the studies addressing these questions are very limited.

The objective of the presented study is to explore what are the primary motivations to study medicine and expectations about future careers among medical students in Georgia. In addition, the study examines the influence of the demographic characteristics on the motives of studying medicine and students’ career choices. We hypothesized the gender influence on motivation type and choice of future specialty. We expect that main motivation reasons for studying medicine for female students are more intrinsic motivation and for male students – extrinsic. Despite the segregation between male and female medical specialties, we still expect that female students will more often choose care-related specialties and male students will choose surgery-related specialties in most cases.

MATERIALS AND METHODS

Students from all medical schools of Georgia were involved to participate in the study. The study was carried out among the students of all years (from first year to final year students). Students attending classes were invited to participate in the survey during the autumn semester of 2012 at all nine medical schools. During the introductory talk, students in the classroom were informed about the purpose of the study, assured in anonymity of the survey and confidentiality of their responses. Students were asked not to spend too much time on thinking, complete the questionnaire quickly and respond to all the questions honestly and truthfully. All students were informed about the possibility to refuse participation in this study and all students took part in it on voluntary basis.

The questionnaires were distributed to purposively selected students. In total, 360 questionnaires were distributed. A total of 349 completed questionnaires were returned and only 310 fully completed questionnaires could be used for analysis in this survey (the response rate was 86.1%).

The Special questionnaire based on previous studies (Vaglum, 1999; Wierenga, 2000; Crossley, 2002; Nieuwhof, 2004, Pastor, 2009; Kusurkar, 2011) was developed for this study. Questionnaire measuring motivation for entering in medical school (I block) and medical students’ career related values (II block). I block of the questionnaire covers four dimensions: social status/status orientation (5 items), nature of activity/occupation orientation (5 items), patient care/people orientation (4 items) and interest in research/science orientation (3 items). Students were asked to indicate all of the reasons for applying and studying medicine. A five-point Likert answering scale with the ranking from very important to not at all important was used. In the II block of the questionnaire students were asked to indicate their interest in 21 different medical specialties as possible future careers. The questionnaire also contained the questions about demographic characteristics (sex, age, medical families, etc.).

RESULTS

Demographic

In the sample 63.5% of the students were female (n=197) and 36.5% male (n=113). The mean age of the students was 20.76, SD 1.87, Median 20, Mode 20, range 17-26, (min=17, max=26) (20.76 for female students SD 1.86 and 20.71 for male students SD 1.9).

Results of different studies have revealed that 16-28% of the students were from medical families (McManus, 2000, Billings, 2004, Watmough, 2007). In our sample 18.3% of the students reported that one of their parents was a doctor, 8% of the students’ parents were both doctors and 17.3% students had a close family member working as a doctor. All in all, therefore, 43.5% of the students were from medical families. Parents of the majority of medical students (56.5%) were not Medical doctors.

Motivation

The top two dimensions of motivation for studying medicine are: people orientated and occupation orientated motivation. They are followed by status orientated motivation.

The fourth dimension- "science oriented" motivation, in the category of very important motivation, was not important for none of the students. The most important motivation for the students are, interest toward medical activities” (80.8%), responsible work” (65.2%),
independent decision – making” (61.1%), patient care” (85%), caring for well-being of the society” (66.7%), caring for relatives” (81.4%) (Figure 1).

The item from the respect orientation - status of successful person” is very important for students (51.3%).

Only two significant correlations were found between gender and motivations: Caring for well-being of society (F(1)=7.74; p<0.02) and caring for patients (F(1)=6.3;p<0.02).

Significant correlation were found between representatives of non-medical families and motivation, students from non-medical families had the higher interest in medical science than students from medical families (X²=31.5; p<0.02).

The percentage of the students that have chosen surgery was 26.3%, 10.4% of the students chose cardiology and the same number of the students chose obstetrics-gynecology. This was followed by endocrinology, pediatrics, generalist (7-8%).

Future career choice in gender dimension shows that most popular specialties are surgery (73.4% - male students and 26.6% - female students), cardiology (19.4% - male students and 80.6% - female students), obstetrics-gynecology (25.8% - male students and 74.2% - female students), endocrinology (20.8% - male students and 79.2% - female students), pediatrics (8% - male students and 92% - female students), generalist medical practitioners (18.2% - male students and 81.8% - female students) (Figure 2).

A percentage of 7.1% of the students (4.6% of the male students and 8.9% of the female students) have not made the decision about their future career choice yet.

DISCUSSION

The results of the given study have found that Georgian students are more motivated by intrinsic factors (people oriented and activity oriented). Patient Care” is the most important consideration for Georgian students.

Previous studies in different countries (Netherland, UK, Spain, Switzerland, India, Japan, Brazil) have found that the motivation to enter the medical school and preference for a medical specialty is gender-related. The results of different studies reveal that male students are more motivated by external factors, such as status, income and female students – more by intrinsic reasons, such as an altruistic motivation and relationship, care oriented motive (Wierenga, 2000; Pastor, 2009; Greenhalgh, 2004; Verdonk, 2008). Generally, male students more often prefer surgery-related specialties and female students-care-related specialties (Du Moulin, 2000; Gjerberg, 2002; Wilson, 2009).

Other studies have not found correlation between gender, motivation and career choice (Batenburg, 1999; Morrison, 2006; Sobral, 2006).

Results of our study show that, patient care” is the most important reason to study medicine for all students, like students in UK, Spain, Norway. However, caring for patients and well-being of the society appear to be more important for female students than for male ones.

For male students status is more important than for females, what corresponds to previously reported results (Vaglum, 1999; Pastor, 2009).

At the same time for Georgian students science-oriented motivation was not so common, that differs from the motivation of UK students, which more likely pursue medicine for the participation in the research.

Career choice

During the years, according to the official statistics on numbers of the each specialty doctors, the most popular top four specialties in Georgia were: Obstetrics & Gynecology
It should be emphasized that the earlier mentioned specialties were the most popular among students in our study too.

As we expected, the majority of male students prefer the specialty of surgery, and female students cardiology, obstetrics and gynecology, pediatricians etc. Other studies have explored the same trends.

It is very important to understand students’ motivation and career choice in order to guide medical curriculum design committee and Faculty administration for enhancement motivational paradigm in curriculum, and build counseling service for students in accordance with future specialty choice.

This study had some limitations due to the small number of respondents. Therefore, we may consider that the results of the study describe participating student’s career-related values and motivations to enter medical school.

For future research, it would be interesting to explore the changes of students’ motivations in the higher educational institution over time.

**Conclusion**

The recent study has provided the insights into students’ primary motivations for studying medicine and their future career preferences in Georgia. This study has found that students in Georgia are more influenced by intrinsic motives and students place priority emphasis on the patient care/caring for patients and helping people. The majority of male students more often than female students have chosen surgery as a future specialty and female students have mainly opted care-related specialties. This study gives important practice point for curriculum development at the level of Higher Educational Institution and for elaboration human resources policy at the level of the Ministry of Health Care.

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**REFERENCES**


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