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Oczekiwania i motywacje związane ze zdobyciem zawodu lekarza oraz plany zawodowe studentów VI roku Wydziału Lekarskiego PAM w Szczecinie (część II) Expectations and motives related to achieving the medical doctor profession and career plans of 6<sup>th</sup> year students of the Medical Faculty, Pomeranian Medical University (PMU) in Szczecin (part II)

### Streszczenie

**Wprowadzenie.** Koniec studiów jest okresem refleksji, oceny odbytych studiów i krystalizacji planów zawodowych. Celem pracy było poznanie oczekiwań i motywacji związanych ze zdobyciem zawodu lekarza oraz planów zawodowych studentów VI roku Wydziału Lekarskiego PAM.

**Material i metoda.** Badaniu z użyciem anonimowej ankiety poddano grupę 113 spośród 119 studentów VI roku Wydziału Lekarskiego PAM w roku akademickim 2004/2005.

najważniejszą Wyniki. 53,1% respondentów jako motywację do studiowania medycyny wskazało "chęć niesienia w przyszłości pomocy innym", zaś 42,5% podało "zainteresowanie przedmiotami i problematyką medyczną". Najczęściej wskazywane najważniejsze oczekiwanie związane ze zdobyciem zawodu lekarza to "możliwość wykonywania ważnej społecznie i ciekawej pracy" (52,2% respondentów), następnie "pewność znalezienia miejsca pracy" (18,6%) oraz "możliwość dalszego rozwoju kariery zawodowej" (17,7%). Biorac pod uwagę specjalizację w przyszłości, to blisko ½ respondentów nie dokonała jeszcze wyboru, zaś spośród zadeklarowanych specjalizacji najczęściej wymieniana była interna (22,1% respondentów), ginekologia i położnictwo (9,7% respondentów) oraz medycyna rodzinna (8,0%). Najbardziej preferowanym miejscem przyszłej pracy był szpital (61% respondentów). 47% respondentów było nastawionych na prace i rozwój zawodowy w Polsce.

Wnioski. Najważniejsze motywacje studentów VI roku PAM do studiów lekarskich są motywacjami wewnętrznymi związanymi z chęcią niesienia pomocy innym oraz zainteresowaniem problematyką medyczną. Oczekiwania studentów VI roku PAM związane ze zdobyciem zawodu lekarza są w dużej mierze zgodne z ich motywacjami do studiów lekarskich. 3. Praca w szpitalu jest postrzegana przez studentów VI roku PAM jako znacznie bardziej atrakcyjna w stosunku do pracy w podstawowej opiece zdrowotnej.

**Słowa kluczowe:** studenci medycyny, motywacje do studiowania, oczekiwania związane z zawodem lekarza, miejsce pracy, specjalizacja.

### **Abstract**

**Introduction.** The end of university studies is with a period of reflection, evaluation of studies and crystallization of career plans. The aim of this study was to get to know expectations and motivations related to achieving the medical doctor profession and to career plans of the graduates of the Medical Faculty of PMU.

**Material and methods.** The group of 113 out of total 119 students of the 6th year, the Faculty of Medicine of PMU in the academic year 2004/2005 were asked to complete anonymously a questionnaire during the academic year 2004/2005.

Results. The most important motivation to study medicine was pointed out by 53.1% of the respondents as "the urge of helping others", whereas for 42.5% -"the interest in medical subjects and problems" was predominant. Among the most often mentioned (and most important) expectations related to becoming a medical doctor were "possibility to perform a socially important and interesting job" (52.2% of respondents), followed by "certainty of finding a job" (18.6%) and "possibility of further career development" (17.7%). Taking into account their future specialization (post-graduate courses), almost 1/4 of the respondents have not decided yet. Those who made their decision, most frequently declared specialization in internal diseases (22.1%), gynecology and obstetrics (9.7%) and family medicine (8.0%). The most preferred place for a future career was hospital (61% of respondents). Forty seven percent (47 %) of the respondents plan to work and pursue their professional career in Poland.

Conclusions. The crucial reasons of the 6th year students of PMU to study medicine were their internal motivation to help others and their interest in medical subjects. The expectations of the 6th year students of PMU connected with obtaining the profession of a physician correspond with their motivations to study medicine. Working in hospital is perceived by the 6th year students of PMU to be far more attractive than working in primary healthcare.

**Key words:** medical students, reasons for studying, expectations connected with becoming a medical doctor, workplace, specialization.

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Zdr Publ 2010;120(2)

### INTRODUCTION

The end of the studies is the key moment in the future career. It is the time of natural reflection concerning the past and the future of the graduates. It is the period of making summaries and evaluations. This time is also good for reflection about your own motivations and expectations related to obtaining the profession of a medical doctor and to career plans of the graduates. For most of them it is a difficult moment - the moment of making decision concerning their future career.

### **AIM**

The aim of this study was to get to know expectations and motives related to becoming a medical doctor and to career plans of the 6th year students of the Medical Faculty of the Pomeranian Medical University (PMU).

### MATERIAL AND METHODS

The group of 113 out of all 119 students of the 6th year, the Faculty of Medicine of PMU in Szczecin, who, in spring of 2005, were just about to graduate, were interviewed with an anonymous questionnaire. The questionnaire consisted of 23 questions, nine of which were open-questions, in two of them the respondents were asked to rank selected answers according to their preferences and the other twelve questions were single-choice questions.

### RESULTS

One hundred and thirteen out of 119 the 6th year students of the Faculty of Medicine of PMU in the academic year 2004/2005 replied to the questionnaire, which makes the response rate 95%.

The respondent group consisted of 72 women (63.7%) and 41 men (36.3%). The data concerning the age and prior studying experience of the respondents are presented in the first part of the study entitled: "The Opinions of the 6th Year Students of the Faculty of Medicine in the Process of their Education at Pomeranian Medical University (PMU), Szczecin" (Zdr Publ 2009;119(3):303-307).

The most numerous group of the respondents – 45 (39.8%) - come from small towns (10,000-100,000 inhabitants), 30 respondents (26.5%) come from big cities (over 200,000 inhabitants), 22 respondents (19.4%) come from cities of 100,000-200,000 inhabitants and 16 respondents (14.1%) come from little towns and villages (under 10,000 inhabitants).

Most students had parents with higher education. One seventh of the parents had higher medical education including the profession of a doctor, a dentist, a pharmacist or a medical analyst. Fifteen (13.3%) respondents pointed to their father's higher medical education and 17 (15%) respondents pointed to their mother's higher medical education.

The question: "Was the choice of studies your own independent decision?" was positively answered by 98 (86.7%) respondents. The other 15 (13.3%) respondents mentioned other people as those who influenced their decision of choosing the faculty. In 13 (11.5%) cases these were their parents.

### The motivation of students to study medicine

The answer to the question about the motivation of students to study medicine consisted of 5 short statements to rank, starting from the most important to the least important ones. The students could choose 2 or more statements as equally important and add their own motivations ranking them according to their importance.

The most frequently pointed reason to study medicine was "a wish to help others" - 60 (53.1%) respondents mentioned it as the most important one. Forty eight (42.5%) respondents pointed to "the interest in medical subjects and problems". It was the second most frequently mentioned reason. Other reasons like "a wish to have a lucrative profession", "a wish to obtain a profession with high social prestige" or "a wish to continue family traditions" were mentioned rarely – 5, 3 and 1 respondent respectively. Three respondents pointed to other reasons of studying medicine. One student pointed to the personal impact of doctors he had met in his childhood. Two others mentioned lack of precise interests and/or "better" ideas for studies. The data concerning this issue are shown in Table 1.

TABLE 1. Declared the most important motivation to study medicine (a respondent could choose more than one answer).

The most important motivation to study medicine	Respondents (n=113)	
	n	%
A wish to help others	60	53.1
An interest in medical subjects and problems	48	42.5
A wish to obtain a well-paid profession	5	4.4
A wish to obtain a profession with high social prestige	3	2.7
A wish to continue family traditions	1	0.9
Other reasons	3	2.7

# Students' expectations related to becoming a medical doctor

The answer to the question about the expectations related to becoming a physician consisted of 5 short statements to rank, starting from the most important to the least important ones. The students could choose 2 or more statements as equally important and add their own expectations ranking them according to their importance.

The expectations of the respondents appeared to correspond with their motivations to study medicine. Definitely, the most important expectation was "possibility to perform an interesting and socially important job" - mentioned by 59 (52.2%) respondents. "Confidence in finding a job" was the second most often mentioned expectation -21 (18.6%) respondents. This answer was

followed by "possibility of furthering a career" – 20 (17.7%) respondents. Other motivations, such as "obtaining a high social status and prestige" or "ability to obtain

a high salary" were mentioned rarely, respectively by 5 (4.4%) and 4 (3.5%) respondents. Nine respondents pointed to other important expectations like possibility of helping people, making a career or getting a lot of satisfaction from work. The data concerning this issue are illustrated in Table 2.

TABLE 2. Declared the most important expectations related to obtaining a doctor's profession (a respondent could choose more than one answer).

The most important expectations related to becoming a medical doctor	Respondents (n=113)	
	n	%
Possibility to perform an interesting and socially important job	59	52.2
Confidence in finding a job	21	18.6
Possibility of further development of professional career	20	17.7
Obtaining a high social position and prestige	5	4.4
Ability to obtain a high salary	4	3.5
Other expectations	9	8.0

## Professional plans of the students

Taking into consideration the country of their future work most respondents – 53 (47%) – pointed to Poland. Two other groups of students – 30 (26.5%) respondents each - mentioned EU countries or "were not determined". It is worth mentioning that some students determined to work abroad were not very enthusiastic about this. The most common comments were "I would like to work in Poland but...", "the salary.....". The precise results with regard to gender are shown in Table 3.

Taking into account future working-place, the most popular place was hospital – declared by 69 (61%) respondents. This group consisted of 42 (58%) women and 27 (65%) men. They would like to work only as hospital doctors. Thirteen (11.5%) respondents are going to work both in hospital and in other places. Eight (7.1%) respondents choose out-patient clinic and the same number of students choose a surgery. Two (1.8%) students would like to work in hospice whereas 13 (11.5%) respondents have not decided yet.

The next question concerned their future specialization. Most respondents pointed to internal medicine -25 (22.1%). The second mostly preferred specialization was gynecology and obstetrics -11 (9.7%) respondents. Family medicine was the third -9 (8%) respondents. Almost  $\frac{1}{4}$  of the respondents were not sure about their future specialization.

 $TABLE\ 3.\ Preferred\ country\ of\ work\ in\ regard\ to\ gender.$ 

The complete results are illustrated in Table 4.

TABLE 4. The most often chosen specializations in regard to gender.

Prefered specialization	Female (n=72)	Male (n=41)	Total (n=113)	
	n (%)	n (%)	n (%)	
Internal medicine	15 (20.8)	10 (24.4)	25 (22.1)	
Gynecology and obstetrics	8 (11.1)	3 (7.3)	11 (9.7)	
Family medicine	7 (9.7)	2 (4.9)	9 (8.0)	
Surgery	2 (2.8)	5 (12.2)	7 (6.2)	
Psychiatrics	6 (8.3)	1 (2.4)	7 (6.2)	
Paediatrics	5 (6.9)	1 (2.4)	6 (5.3)	
Anaesthesia	4 (5.6)	1 (2.4)	5 (4.4)	
Neurology	3 (4.2)	2 (4.9)	5 (4.4)	
Others specializations:				
Emergency medicine	-	1	1	
Radiology	1	1	2	
Allergology	-	1	1	
Orthopedics	-	2	2	
Psycho-geriatrics	-	1	1	
Ophtalmology	1	-	1	
Neurosurgery	-	1	1	
Dermatology	2	-	2	
Total	4 (5.6)	7 (17.1)	11 (9.7)	
Don't know	18 (25.0)	9 (22.0)	27 (23.9)	

Almost half of the respondents – 56 (49.6%) – declared taking up scientific research connected with their future specialization. Further 54 (47.8%) respondents weren't interested in scientific research, whereas 3 (2.6%) respondents had no precise opinion about it.

## DISCUSSION

In discussion about the motivation to study medicine the work conducted by Leoniuk [1] seems to be significant. The research concerned the students of the 2nd and 4th year Medical, Dental and Pharmaceutical Faculties at Medical University of Gdańsk (MUG). For comparison we took into consideration the opinions expressed by the students of Medical Faculty. The motivations of students in the quoted research fall into 3 major groups: traditional motivations (a stable and safe job, a family tradition), motivations concerning self-development (interest in medical subjects, predisposition) and career motivations (obtaining a well-paid job, prestige, making career abroad). The students of Medical Faculty in Gdańsk chose mostly self-

Country -	Female (n=72)		Male (n=41)		Total (n=113)	
	n	%	n	%	n	%
Poland	39	54.2	14	34.1	53	47.0
Other country	15	20.8	15	36.6	30	26.5
Still don't know	18	25.0	12	29.3	30	26.5

Zdr Publ 2010;120(2)

development as a motivating factor – 48% respondents. The second most popular motivation was altruistic – helping other people (45% respondents). These two motivations were the most popular also in our study, but in reverse order. The most popular motivations of the students the 6th year of PMU was altruism (helping other people – 53.1% respondents). The second most popular motivation was "interest in medical subjects" – 42.5% of the students. Leoniuk stated that the altruistic motivation can be put over all other categories because it concerns neither career nor traditionalism or self-development [1]. It is very optimistic that this motivation was chosen as the most important by more than half of the 6th year students of PMU.

On the other hand, the motivations concerning career (a well-paid job, a prestigious job) were mentioned rarely (only by 5 (4.4%) and 3 (2.7%) students of the 6th year of PMU). These results are partly similar to those obtained from the 2nd and 4th year medical students of MUG. For 4% of them a well-paid job was very important, but 26% declared that obtaining a prestigious job is most important [1].

The expectations of the PMU 6th year students related to achieving the profession of a medical doctor appeared to be convergent to their motivations to study medicine, for the most often mentioned expectation was "possibility to perform a socially important and interesting job" (52.2% of respondents). This result is similar to the one obtained at MUG, assuming that "possibility to perform a socially important and interesting job" includes "urge of helping others" and "satisfaction from work", respectively pointed by 34% and 21% of the students in Gdansk [1].

The second most often mentioned expectation of the 6th year students of PMU was "certainty of finding a job" which shows their care about future. This expectation is connected with the third most often mentioned expectation - "possibility of further career development" and may be compared with the one, mentioned by the students in Gdańsk - "obtaining an interesting and developing job" [1]. In both research studies it was mentioned as the most important factor by approximately 17% of the respondents. It is worth adding that the research conducted in spring 2004 among students beginning their studies at PMU showed very similar results. The most important expectations enumerated by the 1st year students of PMU were: 'ability to perform socially important and interesting work" (75%), 'confidence in finding a job' (26.8%) and 'ability to develop a professional career' (19.8%) [2].

The specialization mentioned by PMU 6th year students most often was internal medicine (22.1%). Similar but a little lower result was obtained among the 6th year students of Medical Faculty in Gdańsk, were this specialization was mentioned by 14% of the graduates in the academic year 1998/1999 and 19% of the graduates in the academic year 1999/2000 [3]. The same specialization was also very popular among the students of the Caribbean St. Lucia University (an average value of an index of attractiveness x=1.2, SD = 0.46). The most important factors when choosing this specialization were the possibility of diagnosing and curing diseases and having interpersonal relations with patients [4].

The 3rd position of family medicine in the ranking, mentioned by 9 (8%) respondents: 7 women (9.7%) and 2 men (4.9%) is optimistic. For comparison, 7% and 13% of the 6th year students of Medical Faculty in Gdańsk declared this specialization, in the academic years 1998/1999 and 1999/2000 respectively, and it was the second most popular, following internal medicine [3]. Unfortunately, the popularity of family medicine as specialization is still too low. The reason of that may be the negative perception of family medicine by students. Majority of pre-graduate courses take place in hospitals [5].

Hospital was indicated as the most desired workplace 61% of the respondents mentioned it as the exclusive work-place. According to the employees of Psychological Outpatient Unit at Medical University in Łódź their choice is associated with a better opportunity of career development and of higher income whereas work at primary healthcare is perceived as less prestigious and giving fewer possibilities of becoming an expert in any medical field [6]. Other research studies of this team show that primary healthcare is more attractive for women, which comes from their natural predispositions to show empathy and create deeper relations with patients [7]. Similarly, greater interest of women-students in family medicine was also noted in a research study among American students [8]. Although in our research women declared this specialization almost twice as often as men (9.7% and 4.9% respectively), we cannot confirm this is the rule because of a small number of respondents in the control groups.

The dwelling place (of the respondents) seems to influence the choice of specialization in family medicine. Among the students declaring the willingness of becoming family doctors there was nobody coming from a big city (over 200,000 inhabitants), although they constituted 26.5% of all respondents. Other research studies conducted in Poland and in the USA show similar tendencies [9,10].

It sounds optimistic that the most numerous group of the respondents (47%) declared the willingness to work in Poland. The respondents opting for working abroad or those who were not decided (both groups constituted 26.5% of all students) were not sure of finding a good work-place in the country. We believe that improvement of conditions in national healthcare will convince them to remain in Poland.

### **CONCLUSIONS**

- 1. The crucial reasons of the 6th year students of PMU to study medicine were their internal motivation to help others and their interest in medical subjects,
- 2. The expectations of the 6th year students of PMU connected with obtaining the profession of a medical doctor correspond with their motivations for studying medicine,
- 3. Work in hospital is perceived by the 6th year students of PMU to be far more attractive than work in primary healthcare.

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