

What Do Medical Students Want from Their Professional and Private Life?

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Aim. To analyze medical students' wishes regarding their professional and private life and whether their wishes change over the years of medical studies.

Methods. We surveyed 886 of 1,686 students at the Zagreb University School of Medicine during the academic year 2000/2001. The students were asked to complete an anonymous questionnaire with two groups of 5 wishes, one group pertaining to professional and the other to personal life. Students were offered to choose a single, most appealing goal they wanted to achieve in private and professional life.

Results. The predominant categories of professional wishes were for humanism and achievement (36%), knowledge (31%), and altruism (22%). Among personal wishes, 42% of the students wished for intimacy and love and 38% for self-confidence. The frequency of altruistic wishes did not significantly vary over the years of study. Women wished more for self-confidence and made more altruistic wishes, whereas men preferred influence, friendship, and money. Factors, such as the year of studies, average grade, rank at admission test, and residence in a large city did not influence the students' choices.

Conclusion. The wishes of medical students over the six years of studies proved to be remarkably stable and related to personal achievement, knowledge, and altruism.

Key words: education, medical, undergraduate; social values; students, medical

Physicians are continually exposed to the vigilant eye of the public scrutinizing their work. With the rapid progress of science and technology in medicine, modern physicians are required not only to continuously update their knowledge and improve their clinical skills but also to exert humanistic qualities essential to medical practice – devotion and care for the patient. Unfortunately, the modern society has a rising tendency to criticize physicians that they, instead of remaining true to the altruistic and humanistic underpinnings of their profession, become focused on their careers and money. Young people entering the field of medical studies are driven primarily by the wish to help others. However, they also realize that practicing medicine is not only a job, but also a way of life – it is demanding, but it offers material security and a respectable position in society (1).

Some studies have implied that medical students' enthusiasm and humanistic tendencies diminish during their studies, that pessimism, cynicism, and greed take over (2,3), and that medical education turns bright idealists into cold cynics (4). We wanted to determine if the same was true for the students at the Zagreb University School of Medicine. Croatia belongs to the countries in the transition from communist to market-oriented economy, which could have a marked impact on the attitude of medical stu-

dents towards their future profession and the change from altruistic to more money- and power-oriented wishes. Since the modern medicine is becoming increasingly feminized (5-7), we also wanted to see if men and women differed in their wishes.

Subjects and Methods

The survey conducted at the Zagreb University School of Medicine comprised a total of 886 students from all 6 years of the undergraduate medical course. This represented 52.6% of the school's students in the academic year 2000/2001 (total 1,686). There were 572 (64.6%) women and 314 (35.4%) men. The breakdown of the population according to the year of studies is shown in Table 1.

The questionnaire was developed on the basis of the questionnaire used in study investigating medical students' wishes in the UK (8). The questions in that study were open-ended and we adapted them to two structured groups of wishes. The questionnaire was anonymous and divided into three sections. The first section inquired about general data: sex, year of study, year of enrollment, rank at admission test, place where the student had completed the secondary school, and grade average during medical studies. The second (personal wishes) and the third (professional wishes) part were comprised of five wishes (Table 2). Only a single wish could be chosen in both parts.

The statistical analysis was performed with the chi-square test. P value of 0.05 was considered statistically significant. The students were categorized according to their sex, rank at admission test, whether they failed a year or not, and the place where they attended high school.

Table 1. Breakdown of the sample of medical students (n=886) surveyed in 2000/2001 at the Zagreb University School of Medicine according to their sex and year of studies

Year of study	No. of students		Total No. of students	
	men	women	included in the study	enrolled in the school
1	59 (32.8)	121 (67.2)	180	279
2	63 (40.9)	91 (59.1)	154	308
3	46 (33.8)	90 (66.2)	136	282
4	56 (40.3)	83 (59.7)	139	307
5	45 (33.1)	91 (66.9)	136	298
6	45 (31.9)	96 (68.1)	141	212
Total	314 (35.4)	572 (64.6)	886	1,686

Table 2. Questionnaire on wishes in professional and private life

Professional life	
1. Altruism	help those in great need, contribute to eradicating poverty and hunger
2. Humanism/achievement	become a good and respected physician
3. Influence and power	achieve the highest functions (titles, positions) in medicine
4. Knowledge	gain great knowledge within your field, advance the science
5. Glory	discover a cure for an incurable disease
Private life	
1. Friendship	have many friends and spend leisure time with them
2. Intimacy	establish a sincere and lasting relationship, love the people you care about
3. Money	accumulate great wealth
4. Self-confidence	always keep faith in yourself and what you do
5. Leisure time	have a lot of free time for activities outside medicine

Results

With respect to professional life, 36.3% of students wished to become good and respected physicians; 30.6% wished for great knowledge, 22.1% made altruistic wishes, 7.1% craved for glory, whereas only 3.8% wanted to have influence and power (Table 3). In private life, altruistic wishes remained constant over the years of study (Fig. 1A), whereas the wishes for money varied grossly, being highest in the second and fourth years of study (Fig. 1B). Over 40% of the students placed love on the first place ("have a sincere and lasting relationship and love the ones you care for"). Many students also wished for self-confidence (37.6%, mainly women), and fewer wanted friendship (9.5%), leisure (5.8%), and money (5.3%) (Table 3, Figs. 2 and 3).

Over the study years, wishes of male and female students did not greatly differ (Figs. 2 and 3). In the first year of study, men had more humanistic wishes than women but already the next year they wished more for influence and power and less for altruistic goals (Fig. 2). Their wish for money in personal life remained the major difference from the wishes of women over the study years (Figs. 2 and 3) and caused greater oscillations in the choice of this wish for all students over the study years (Fig. 1B). Women

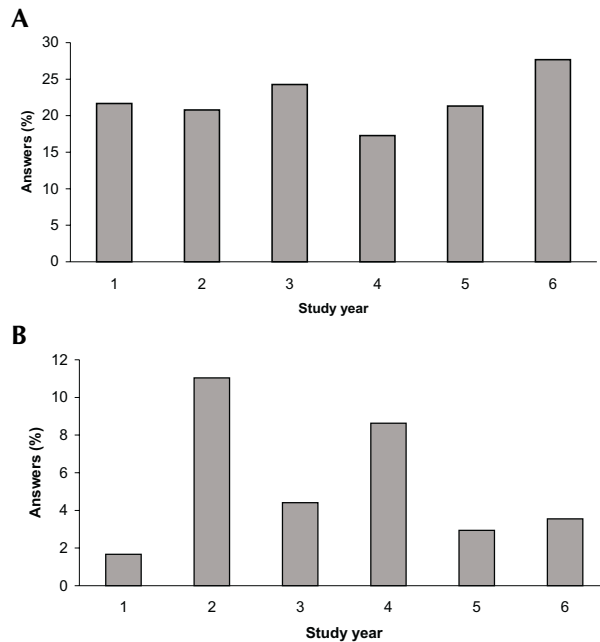


Figure 1. Altruistic (A) and money-related (B) wishes of medical students at different stages of their schooling.

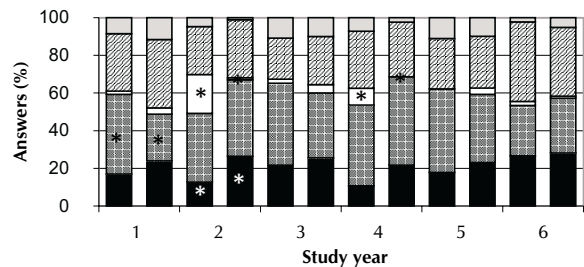


Figure 2. Medical students' wishes related to professional life. Left bar – men, right bar – women. Segments (from bottom to top): black – altruism, dark gray – humanism and achievement, white – influence and power, dashed – knowledge, light gray – glory. Asterisks indicate significant differences ($p < 0.05$) between men and women.

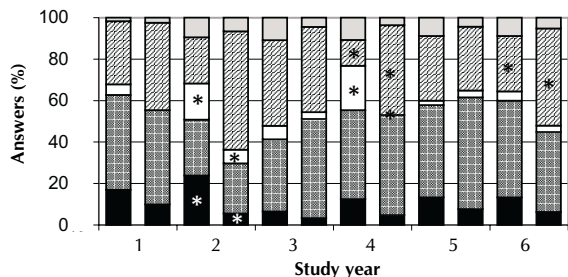


Figure 3. Medical students wishes related to private life. Left bar – men, right bar: women. Segments (from bottom to top): black – friendship, dark gray – intimacy, white – money, dashed – self-confidence, light gray – leisure. Asterisks indicate significant differences ($p < 0.05$) between men and women.

Table 3. The frequency and distribution of medical students' wishes

Students	No. (%) of students choosing the wish ^a					Total
	1	2	3	4	5	
Professional life^b						
Men	54 (17.2)	124 (39.5)	21 (6.7)	92 (29.3)	23 (7.3)	314 (35.4)
Women	142 (12.8)	198 (34.6)	13 (2.3)	179 (31.3)	40 (7.0)	572 (64.6)
Total	196 (22.1)	322 (36.3)	34 (3.8)	271 (30.6)	63 (7.1)	886 (100.0)
Private life^b						
Men	47 (15.0)	125 (39.8)	32 (10.2)	84 (26.8)	26 (8.3)	314 (35.4)
Women	37 (6.5)	246 (43.0)	15 (2.6)	249 (43.5)	25 (4.4)	572 (64.6)
Total	84 (9.5)	371 (41.9)	47 (5.3)	333 (37.6)	51 (5.8)	886 (100.0)

^aWishes are presented in Table 2.^bChi-square test, $p < 0.001$.**Table 4.** Distribution of students' wishes according to the studying success, success on the admission test, and place of origin^a

Student category	No. (%) of students choosing the wish ^b				
	1	2	3	4	5
Professional wishes					
Studying success: ^c					
satisfactory	157 (21.4)	268 (36.6)	28 (3.8)	226 (30.7)	53 (7.2)
not satisfactory	38 (25.0)	54 (35.5)	6 (3.9)	44 (28.9)	10 (6.6)
Success on admission test: ^d					
high	59 (19.3)	111 (36.4)	13 (4.2)	107 (35.1)	15 (4.9)
intermediate	54 (20.2)	112 (41.9)	7 (2.6)	75 (28.1)	19 (7.1)
low	66 (25.0)	82 (31.1)	12 (4.5)	80 (30.3)	24 (9.1)
Place of origin: ^e					
Zagreb	95 (24.2)	127 (32.4)	18 (4.6)	123 (31.4)	29 (7.4)
other	97 (20.3)	192 (40.2)	15 (3.1)	141 (29.5)	33 (6.9)
Personal wishes					
Studying success: ^c					
satisfactory	77 (10.5)	309 (42.2)	38 (5.2)	263 (35.9)	45 (6.1)
not satisfactory	7 (4.6)	61 (40.1)	9 (5.9)	69 (45.4)	6 (3.9)
Success on admission examination:					
high	30 (9.8)	133 (43.6)	17 (5.6)	108 (35.4)	17 (5.6)
intermediate	30 (11.2)	105 (39.3)	15 (5.6)	103 (38.6)	14 (5.2)
low	22 (8.3)	109 (41.3)	14 (5.3)	103 (39.0)	16 (6.1)
Place of origin:					
Zagreb	34 (8.7)	175 (44.6)	24 (6.1)	141 (36.0)	18 (4.6)
other	46 (9.6)	190 (39.7)	23 (4.8)	188 (39.3)	31 (6.5)

^aNumbers do not add up to the total number of surveyed students because some students did not provide complete information.^bWishes are presented in Table 2.^cSuccessful students were considered those who passed all required examinations for the previous academic year and attended classes from the next academic years.

Unsuccessful students were defined as those who failed to fulfil the requirements and had to repeat the whole or a part of the academic year.

^dCategories based on the success on the admission test. High placement represents students ranked 1-80, intermediate 81-160, low 161-240.^eZagreb is the capital of Croatia and the largest city with 800,000 inhabitants. The next largest city is Split with around 200,000 inhabitants.

wished for self-confidence significantly more often than men (Fig. 3).

The rank at admission test, grade average during medical studies, whether they failed a year or not, or the place where they attended a secondary school did not prove to be a predicting factor as far as students' wishes were concerned (Table 4).

Discussion

We found no evidence that medical students become less altruistic and more materialistic over the course of their medical education. A rather high incidence of students' altruistic wishes (averaging at 22%) seemed to remain constant throughout their studies, similar to the findings for UK students (8). Money-oriented wishes were most pronounced among the second- and fourth-year students. This does not support the preconception that the medical studies turn altruistic students into cold cynics (4), but seems to confirm the results of earlier research, which established that the values of empathy, devotion, and

care for patients do not deteriorate significantly during medical school (8,9). Highly altruistic wishes of medical students in Croatia and other countries (8,9) compared with the 8% rate of altruistic wishes in American university students (10) indicate that altruism is perhaps a special characteristic of medical students.

With regard to the duration of medical studies, it is not surprising that most students wish to become, after all the effort invested, good and respected physicians, who will be able to help their patients and be awarded appropriately for their work. The wish for knowledge seems to be the strongest at the beginning and in the final years of the studies, probably because the students realize how much they still have to learn, especially when they are about to implement that knowledge in clinical practice.

The differences between the sexes in our study compare with results of other studies (11-13). In professional life, female students were more likely to make altruistic wishes, whereas male students preferred influence and power (8,10,14,15). In private

life, male students wished more for friendship and money than for other things, whereas female students wished for self-confidence (Table 3) (8). In our study, the proportions of male and female students choosing intimacy and knowledge as their prime wish were roughly equal, but more male students wished for money. The second-year students differed in their wishes from the rest of the surveyed population; they seemed to wish less for intimacy, and more for self-confidence (women) and money (men), probably because of a demanding curriculum of the first year that put them under lot of pressure. Students of the first year wished for leisure and free time less than students of the senior years, perhaps because they were less aware of how much time they would have to invest in their professional education. Although students' rank on the admission test strongly correlates with their later academic success (16-18), this study showed that it has no influence on students' wishes.

The method of structured choices of wishes and their very small number, chosen because of its ease of use, limited the extent of statistical analysis of the data. A more elaborate questionnaire involving scales, free choice, or arrangement of choices, would have allowed us to go deeper into analysis of the students' motivation. We suggest further research that would compare the wishes of medical students with that of students from other university schools.

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