NURSING AND GENERAL MEDICAL STUDENTS' SATISFACTION WITH THEIR MEDICAL TRAINING

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Abstract:

Background: Medical education aims to ensure objective knowledge and fine skills in students. In this respect useful data may come from students' perceived satisfaction with their training.

Purpose of the study: To compare general nursing and medical students' satisfaction with their training.

Methods: Nursing and medical students were asked to rate their satisfaction with the medical training and express preferences regarding their intended future career.

Results: No differences were found between the two samples regarding satisfaction with lectures. Nursing students were more satisfied with the teaching staff and relied exclusively on professor provided information, while medical students attended more optional lectures and case presentations. They were also more involved in research and conference participation. Students' intentions about future practice (hospital / ambulatory) and emigration were similar in both samples.

Conclusions: Less satisfied by the teaching staff, medical students appear to be more involved in their theoretical and practical training. Both nurses (48.6%) and medical students (53.3%) consider leaving the country after graduating.

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Introduction

Nursing medical education in Romania includes a compulsory post high school 3 years of training which may be optionally continued by a university based one. This consists of 4 years of training and provides a higher degree of qualification and additional financial benefits. General medical students after graduating 6 years in a Romanian university have to pass a national theoretical examination in order to choose a medical specialty and to be trained for another 5 years as residents. In a Romanian medical university, education is provided through lectures, optional lectures, case presentations, and hospital based practical training. Optional transfers / exchanges between different university centers are possible but less popular.

Assessing the quality of a higher educational system is a rather difficult undertaking. Students' achievements at local and national assessments provide objective data (Kellaghan & Greaney, 2001). What and how to evaluate in students is a complex task based on a combination of multiple factors (Epstein, 2007). Furthermore, the way the students are evaluated may change their learning strategies (Struyven, et al, 2005) and thus, their achievements. Students' dominant attitudes influence their involvement in active learning (Seymour, 2001). Subjective data come from students' satisfaction with their training. The way the teaching environment is perceived by students is a stronger predictor of learning outcomes at university than prior school achievements (Lizzio et al, 2002). Medical students' satisfaction with education depends on several factors including learning style (Gurpinar et al, 2010), year of training (Cannon et al, 2008), participation in a clinical setting (Reeves et al, 2002), and formal or informal practical training (Mason and Strike, 2009). Literature data describe nursing students' satisfaction with training as being influenced by: year of training (Milton-Willey et al, 2013), student-centered teaching method (Jeffries et al, 2002), type of mentorship (Warne et al, 2010, Omer et al,

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2013), participation in a clinical setting (Reeves et al, 2002, Warne et al, 2010, Papathanasiou et al, 2014), and the presence of concomitant leisure activities (Ramos et al, 2015).

The study aims to compare nursing and medical students' satisfaction with training and their preferences concerning their future career.

Method

Two samples of terminal year students in general medicine from Timisoara University of Medicine and Pharmacy were analyzed. One included nursing students and the other medical students. The study was performed by the Neuroscience/Psychiatric Department of Timisoara University of Medicine and Pharmacy in partnership with the Electronics and Telecommunication Engineering Department of the Polytechnic University of Timisoara. After being informed about the purpose of the study and the confidentiality of the collected data, the participants filled in an anonymous satisfaction questionnaire about their theoretical and practical training. The questionnaire was conceived to include socio-demographic data (gender, age, year and type of training), closed-ended and open ended questions. Opportunity to attend optional lectures, scientific conferences, case presentations, and exchanges between different centers were assessed by yes/no type questions. Satisfaction with lectures, teaching staff, and practical activity in hospitals were rated from 1 (poor satisfaction), to 5 (highest satisfaction). The degree of personal participation in the educational process was assessed by choosing between different sources of professional information (provided by professor, self-research or both). Students' satisfaction with training was confronted with their subjective perception about the financial situation (not good, average, and very good). Future specialty (surgical or non-surgical), country of practice (home or abroad) and setting of practice (hospital, ambulatory or both) were also included in the questionnaire. Open ended questions allowed personal options, comments or clarifications.

Results

The participants in the study were divided in two samples, one consisting of 70 nursing students and the other one of 75 medical students. In both samples, women were predominant (84.2% of nursing and 78.6% of medical students). The mean age was 24.76 years ($SD = 3.12$) in the nurses' sample, and 24.3 years ($SD = 1.47$) in the medical students' sample.

We found no differences between the two samples regarding the quality of lectures, the majority of the students declaring that they are partially satisfied or satisfied by the lectures. Medical nursing students appear to be more satisfied with the teaching staff/professors, ($U = 2037.5$, $Z = -2.59$, $p = 0.009$). By contrast, medical students were more satisfied with their practical activity in hospitals ($U = 1356$, $Z = -5.49$, $p = 0.0001$) as illustrated in Table 1.

Medical students show a significantly higher participation to optional lectures ($U = 1297.5$, $Z = -6.07$, $p = 0.0001$), case presentations ($U = 2012.5$, $Z = -3.64$, $p = 0.0001$), and conferences ($U = 1715$, $Z = -5.41$, $p = 0.0001$). None of the nursing students participated in medical conferences, whereas 34.6% of the medical students attended conferences and/or joined research teams (Table 2). Medical students seem to be more involved in active training, possibly because they have to face a higher responsibility in decision making as future physicians. Maximizing learning is the main reason in students' decision to attend optional lectures (Billings-Gagliardi & Mazor, 2007). A higher-intensity training curriculum seems to be associated with higher satisfaction in students than a lower-intensity curriculum (Patel et al, 2009).

Nursing students are more interested in sharing experiences through transfers / exchanges between different university centers ($U = 1900$, $Z = -4.14$, $p = 0.0001$). This may be explained by the fact that more of them are already employed and have been practicing. Only a few of the medical students have hospital based part time jobs that help them to sustain financially their studies.

We found significant differences between samples ($U = 1890$, $Z = -4.76$, $p = 0.0001$) concerning the source of professional information. The teaching staff represents the only source of information for nursing students, while medical students use additional professional resources such as medical textbooks and the internet (Table 3). This finding may suggest that the Romanian medical system, mainly based on a teacher centered model, has been evolving but this trend is observed in medical and not in nursing students. Text books and internet provide evidence based knowledge and may add variety in curriculum presentation. Alternatively, interaction with the teaching staff may add the professor's values and experience, the latter being a virtual model for students (Harden & Crosby,

2000). An interactive mode of teaching encourages the student to ask questions and helps the professor to receive verbal and non-verbal feedback. Less interaction is accompanied by reduced engagement in training (Schreiber et al., 2010).

Table 1: Sample distribution according to satisfaction with lectures, professors, and hospital activity

Satisfaction with the lectures (l) / professor (p) / hospital activity (h)	Nursing Students		Medical students	
	No	%	No	%
Level 1 (l)	0	0	1	1.3
Level 2 (l)	2	2.8	8	10.7
Level 3 (l)	53	75.7	28	37.3
Level 4 (l)	0	0	27	36.0
Level 5 (l)	15	21.4	11	14.7
Level 1 (p)	0	0	1	1.3
Level 2 (p)	0	0	4	5.3
Level 3 (p)	55	78.6	27	36.0
Level 4 (p)	0	0	29	38.7
Level 5 (p)	15	21.4	14	18.7
Level 1 (h)	0	0	2	2.7
Level 2 (h)	17	24.3	9	12.0
Level 3 (h)	53	75.7	25	33.3
Level 4 (h)	0	0	20	26.7
Level 5 (h)	0	0	19	25.3

Source: Authors

Table 2: Sample distribution according to satisfaction with optional lectures, conferences, case presentations, transfers

Satisfied with optional lectures (ol) / conferences (c) / case presentations (cp) / transfers (t)	Nursing Students		Medical students	
	No	%	No	%
Yes (ol)	15	21.4	54	72.0
No (ol)	55	78.6	21	28.0
Yes (c)	0	0	26	34.7
No (c)	70	100	49	65.3
Yes (cp)	49	70	70	93.3
No (cp)	21	30	5	6.7
Yes (t)	24	34.3	5	6.7
No (t)	46	65.7	70	93.3

Source: Authors

Table 3: Sample distribution according to the source of professional information

Source of professional information	Nursing Students		Medical Students	
	No	%	No	%
Teaching staff	70	100	54	72.6
Teaching staff and self-research	0	0	18	24.7
Self-research (internet, books)	0	0	3	2.7

Source: Authors

After graduating university studies, students may work in a hospital setting, in an ambulatory one or in a combination of both. There were not differences between the two samples regarding the type of the work setting after graduating. Also, we found no differences between nursing and medical students concerning their preferred specialty (surgical versus non-surgical).

Nursing students are significantly more satisfied with their financial situation ($U = 1069$, $Z = -7.18$, $p = 0.0001$) rating it as mostly very good or average (Table 4). This may be explained by the fact that a

part of nursing students are already working as medical nurses during the university years, while few medical students work in hospitals as a part-time job to sustain their studies.

Table 4: Sample distribution according to students' perception of their financial situation					
	Financial situation	Nursing Students		Medical Students	
		No	%	No	%
	Not satisfied	0	0	3	4.0
	Satisfied	19	27.1	67	89.3
	Very satisfied	51	72.9	5	6.7
Source: Authors					

No statistically significant differences were found regarding emigration plans between nursing and medical students, although more medical students intend to practice outside Romania (Table 5).

Table 5: Sample distribution according to the intended place of future practice					
	Place of future medical practice	Nursing Students		Medical students	
		No	%	No	%
	Outside Romania	34	48.6	40	53.3
	In Romania	36	51.4	35	46.7
Source: Authors					

Conclusions

Medical students appear to use self-research, optional lectures, case presentations and conference attendance to improve their professional knowledge and skills. By contrast, nursing students are pleased with a teacher centered education. Since most nursing students are employed in hospitals when they choose to attend university training, they have already a practical experience and perceive student exchanges between university centers useful in their training. Nearly half of the students in both samples intend to leave the country after graduation. Better wages may be the main incentive for nursing students to continue training at a university level and afterwards to practice abroad. In medical students the main reason for emigration might be the underemployment in the Romanian medical system

The present study was conducted in Timisoara University Center, and does not intend to generalize the results for all the country.

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