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Postgraduate Medical Education System in Romania

Liana Dehelean^{a,b,*}, Ion Papava^{a,b}, Elena-Daniela Stefan^b, Mihaela-Oana Manea^b,
Anca Livia Popescu^{b,c}, Adina Barbulescu^d

^aNeuroscience Department-Psychiatry Timisoara University of Medicine and Pharmacy, 2 Eftimie Murgu Street, Timisoara 300041, Romania

^bTimisoara Psychiatric Clinic, 21 I Vacarescu Street, Timisoara 300182, Romania

^cTirgu Mures University of Medicine and Pharmacy, 38 Gh Marinescu Street, Tirgu Mures 540139, Romania

^dWest University of Timisoara, 16 J.H. Pestalozzi Street, Timisoara 300115, Romania

Abstract

After the enlargement of European Community, the access to work in different European Union countries became easier. An increasing number of postgraduate trainees (residents) chose to leave their country for better financial conditions, working facilities, and research opportunities. The aim is to identify those factors that describe important characteristics of the Romanian postgraduate medical training from the residents' perspective. The study was conducted in two samples of Romanian trainees: psychiatric and non-psychiatric residents from university hospitals. Residents were asked to fill in a questionnaire regarding their satisfaction about the postgraduate medical training. Also, they were asked to express preferences about their future medical perspectives there are no significant differences between psychiatric and non-psychiatric trainees. Most residents rate an average financial situation. Although their satisfaction regarding hospital practice is moderate, they rate a good relationship with the attending physicians. Because the training takes place in university hospitals, residents have access to conferences, lectures and case presentation. Very few have access to PhD opportunities, to sponsored pharmacologic studies, or to psychotherapy. The majority of the trainees would prefer to remain in their country, close to their families. Residents rate the medical training system as satisfying, but because of limited working opportunities after finishing residency, they consider living the country.

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* Liana Dehelean. Tel.: +4-072-362-6328; fax: +4-025-629-4134.

E-mail address: lianadeh@umft.ro

1. Introduction

In order to improve and integrate national health care systems a special focus should be placed on medical undergraduate and postgraduate education (residency). While Romanian universities require anonymous feedbacks from students regarding the quality of the didactic process, this is not true for the postgraduate training system. Residents are evaluated by their coordinators but don't give feedback about their own perceptions or aspirations. The purpose of this study is to identify those factors that describe better the characteristics of the Romanian postgraduate medical training from the residents' perspective. The residency training is not necessarily followed by high levels of professional commitment and quality patient care (Flynn, 1986). In this respect, while good training may or may not influence the quality of medical services, at least the degree of residents' satisfaction with learning and working conditions might influence their decision to remain or leave the country. The basic training of a Romanian medical resident consists in daily hospital and ambulatory work under the supervision of an attending physician, lectures, case presentations, and rotation to other connected medical specialties or other attending physicians. Residents may improve their knowledge by involving in extracurricular medical activities such as: medical conferences, academic research, sponsored pharmacological trials. Additional information is obtained from scientific journals, medical textbooks or internet sites. Residents' perception about the quality of their training, is influenced by: positive or negative learning and work experiences, experience (year of residency), availability of the supervisor, work settings (hospital, ambulatory). Research data (Daugherty, Baldwin, & Rowley, 1998) suggest that residents' satisfaction with the first year of training is the result of a ratio between positive (high) learning and negative (mistreatment by attending physicians or colleagues) work experiences. The first year of residency offers only a moderate satisfaction (Flynn, 1986), while with age, job satisfaction may moderately increase (Nylenna, Gulbrandsen, Forde, & Aasland, 2005). It appears that residents value more the training received by their attending physicians, but increased accountability burden, may give the supervisors less time for teaching (Daugherty et al, 1998). Baldwin found that 21% of the residents have seen patients without adequate supervision at least once a week (Baldwin et al, 2010). By contrast, terminal year residents rely more on their own and others' performance in their evaluation (Bucher & Stelling, 1977). They are more interested in extraprofessional concerns such as family, convenient working hours and job stability. Booth and Smith found low satisfaction levels related with hospital administration among residents (Booth, & Smith, 1990).

2. Method

The present study was conducted by the Neuroscience/Psychiatry Department of Timisoara University of Medicine and Pharmacy with the aim to describe residents' satisfaction with their training. All residents available, working in local university hospitals, from all years of training were asked to fill in a satisfaction questionnaire. Those who accepted were divided into two samples: psychiatric and non-psychiatric residents. Adult psychiatry and child and adolescent psychiatry residents were included in the same sample because they share curricular similarities. Available residents were those who presently work in the local university hospitals. Unavailable residents were those who work abroad, rotated in other Romanian university centers, or were in maternity leave.

The residents were informed about the purpose of the study and the confidentiality of collected data. In order to improve interest in the study, they were asked to fill in a short questionnaire containing basic socio-demographic information (age, sex, medical specialty, and year of residency), closed-ended questions and open-ended questions. The yes/no questions referred to clinical and research education: lectures held by coordinators, case presentations, participation at conferences, doctoral (PhD) opportunities, participation at randomized controlled trials sponsored by pharmaceutical companies, training in psychotherapy, rotation between different attending physicians, and experience within other university centers. The items rated by the residents from 1 (lack of satisfaction), to five (highest satisfaction) referred to the chosen specialty, the attending physician, and the hospital work. Also they were invited to choose among a list of medical specialties which they consider important for their training. Additional personal options or explanations were permitted. To avoid reluctance in offering data about the financial situation, residents were asked to choose what best reflects their subjective perception (good, average, and very good). Other

items refer to intended practice setting (hospital, ambulatory, and university career), or place (home or abroad), the sources of medical information and the optimal duration of training.

3. Results

The study included a number of 45 residents in psychiatry and 53 residents of other specialties. The 45 psychiatry trainees included 9 men (20%) and 36 women (80%), while the sample with residents from other specialties included 11 men (20.75%) and 42 women (79.24%). The majority (80%) of residents who completed the questionnaire were women. Research shows that in non-psychiatric medical specialties women outperform men in both undergraduate and postgraduate exams (Field & Lennox, 1996). In psychiatry there is no difference between genders in respect of exam performance (Tyrer, Leung, Smalls, & Katona, 2002). However, psychiatry demands a more empathic approach to the patient, favoring women who rate better on emotional intelligence scales (Wilson & Eagle, 2006). Brook found that women, for family considerations, prefer those specialties that offer them part-time posts such as psychiatry (Brook, 1981).

The structure of the samples on years of training is presented in Table 1.

Table 1. The structure of the samples according to the years of training

Year of specialty training	Residents in Psychiatry		Residents in other specialties	
	No	%	No	%
First year	14	31.11	26	49.06
Second year	11	24.44	10	18.87
Third year	7	15.56	9	16.98
Fourth year	7	15.56	2	3.77
Fifth year	6	13.33	5	9.43
Sixth year	0	0	1	1.89

The non-psychiatric residents came from a wide range of medical and surgical specialties such as: neonatology (2.04%), plastic surgery (5.10%), intensive care (1.02%), neurosurgery (4.08%), vascular surgery (4.08%), pneumology (1.02%), endocrinology (1.02%), oncology (1.02%), neurology (2.04%), cardiology (2.04%), pediatric surgery (3.06%), gastroenterology (5.10%), general medicine (3.06%), nephrology (2.04%), internal medicine (9.18%), pathology (1.02%), pediatric medicine (5.10%), gynecology (1.02%), and otolaryngology (1.02%).

Most psychiatric residents (71.11%) considered psychiatric emergencies to be most useful connected training (Table 2), while most residents in other specialties (73.58%) considered that medical emergencies is the most useful training for them (Table 3).

The differences between psychiatric and non-psychiatric residents' financial status are not statistically significant ($\chi^2 = 3.95$, $p = 0.266$), but most trainees from both samples rated their financial situation to be "average" (Table 4).

Table 2. Number and proportion of psychiatric residents who indicated their preferences for useful connected trainings or specialties

Connected trainings or specialty	No of subjects	%
Child psychiatry	22	48,89
Forensic psychiatry	28	62,22
Liaison psychiatry	22	48,89
Community psychiatry	24	53,33
Psychiatric emergencies	32	71,11
Gerontopsychiatry (Elderly psychiatry)	17	37,78
Psychotherapy	27	60,00
Neurology	33	73,33
Legal medicine	22	48,89

Internal medicine	19	42,22
Endocrinology	15	33,33

Table 3. Number and proportion of non-psychiatric residents who indicated their preferences for useful connected trainings or specialties

Connected trainings (specialties)	No of subjects	%
Internal medicine	33	62,26
Endocrinology	16	30,19
Diabetes	22	41,51
Surgery	26	49,06
Otolaryngology	10	18,87
Ophthalmology	11	20,75
Forensic medicine	9	16,98
Medical emergencies	39	73,58
Surgical emergencies	23	43,40
Psychiatry	22	41,51
Neurology	24	45,28
Traumatology	21	39,62
Intensive care	5	9,43

Table 4. Sample distribution according to residents' perception of their financial situation

Financial situation	Residents in Psychiatry		Residents in other specialties	
	No	%	No	%
Not good	4	8.89	10	18.87
Average	40	88.89	40	75.47
Very good	1	2.22	3	5.66

Table 5 shows the residents' satisfaction with: lectures held by their coordinators (l), invitations to participate at conferences (c), invitations to participate in sponsored pharmacological studies (ph), case presentations (cp), rotations (r), and inclusion in PhD programs (PhD). Most of the residents are satisfied and very satisfied with the lectures held by their coordinators. There are more residents not satisfied with the lectures in the non-psychiatric group than in the psychiatry residents' group (54.72% versus 22.22%). In fact, more than 50% of the residents from other specialties than psychiatry are not satisfied with the lectures. The differences between groups are statistically significant ($\chi^2 = 10.72$, $p = 0.001$), indicating that there are significantly more residents in psychiatry satisfied with the lectures than residents in other specialties. More than 80% of residents are satisfied with the invitations to participate in scientific events. There are no significant differences between groups. The situation is different when it comes to participation in studies sponsored by pharmaceutical companies. More than 75% of residents in both groups have expressed the lack of satisfaction with participation in pharmacological studies. There are no significant differences between groups, and more than three quarters of the residents from all specialties are not involved in pharmacological studies. All residents in psychiatry are satisfied with their participation in case presentations. By comparison, there is a small fraction of residents in other specialties (3.77%) that are not satisfied, but the difference is not statistically significant. More than 60% of residents from all specialties are satisfied with rotations. Though most (over 85%) of investigated residents are not enlisted in a PhD program, the number of residents from other specialties than psychiatry that are enlisted is larger. The difference is not statistically significant. There is a significant correlation between the level of satisfaction expressed by residents from both groups in regard with the lectures and their years of training (Pearson $R = -0.55$, $p < 0.05$): the level of satisfaction decreases with the

increasing of the years of training, Also, the satisfaction with the rotation among different supervising doctors decreases with the increase of training (Pearson $R = -0.50$, $p < 0.05$).

Table 6 presents data about residents' satisfaction with the chosen specialty, the attending physician, and the hospital work. Regarding residents' satisfaction with their specialty, the differences between the subjects from the two samples are not statistically significant ($\chi^2 = 1.77$, $p = 0.78$). The average level of satisfaction of subjects in the psychiatric trainees group is 3.91 (std.dev.=0.76) and the average level of satisfaction of subjects in the other sample is 3.92 (std.dev.=0.87). The difference between averages is not statistically significant ($t = -0.06$, $p = 0.951$), both groups having a similar satisfaction level with their specialty. In both samples the levels of satisfaction with the attending physicians are similar, with a slight (non-significant) increase in the number of psychiatric trainees being very satisfied with the supervision they are receiving. In both samples over 70% of the residents are satisfied and very satisfied with the supervision of the attending doctors. In both groups most residents are displaying a medium level of satisfaction with their activity in the hospital.

Table 5. Sample distribution according to satisfaction with lectures, conferences, pharmacological studies, case presentations, rotations, and PhD

Satisfied with the lectures (l) / conferences (c) / pharmacological studies (ph) / case presentations (cp) / rotations (r) / PhD program (PhD)	Residents in Psychiatry		Residents in other specialties	
	No	%	No	%
Yes (l)	35	77.78	24	45.28
No (l)	10	22.22	29	54.72
Yes (c)	38	84.44	43	81.13
No (c)	7	15.56	10	18.86
Yes (ph)	6	13.33	13	24.53
No (ph)	39	86.67	40	75.47
Yes (cp)	45	100.00	51	96.22
No (cp)	0	0.00	2	3.77
Yes (r)	31	68.89	35	66.04
No (r)	14	31.11	18	33.96
No (PhD)	43	95.56	47	88.67
Yes (PhD)	2	4.44	6	11.32

Table 6. Sample distribution according to satisfaction with specialty, supervising physician and hospital activity

Satisfaction with the specialty (s) / attending physician (p) / hospital activity (h)	Residents in Psychiatry		Residents in other specialties	
	No	%	No	%
Level 1 (s)	0	0.0	1	1.89
Level 2 (s)	1	2.22	2	3.77
Level 3 (s)	12	25.67	10	18.87
Level 4 (s)	22	48.89	27	50.94
Level 5 (s)	10	22.22	13	24.53
Level 1 (p)	1	2.22	0	0.00
Level 2 (p)	0	0.00	2	3.77
Level 3 (p)	8	17.78	9	16.98
Level 4 (p)	15	33.33	19	35.85
Level 5 (p)	21	46.67	22	41.51
Level 1 (h)	1	2.22	1	1.89
Level 2 (h)	7	15.56	7	13.21
Level 3 (h)	21	46.67	22	41.51
Level 4 (h)	12	26.67	15	28.30
Level 5 (h)	4	8.89	8	15.09

A small number of residents in both groups rotated for short periods in other university centers (8.89% from the psychiatric group and 13.1% from other specialties). Regarding the sources of information used, all residents have mentioned the supervisors and specialty books, and almost all mentioned the Internet. When asked about their opinion regarding the proper duration of residency training, a large number of psychiatric trainees (44.44%) mentioned 4 years and an equally large number (44.44%) 5 years. Most residents from the other specialties (49.6%) also mentioned a 5 year training period. After finishing residency, 27 psychiatry residents (60%) prefer a medical practice (hospital or ambulatory care) and the rest a mix of academic and medical career. From the residents of other specialties 12 subjects (22.64%) have indicated a strictly medical career (hospital or ambulatory care) and the others a mix of academic and medical career. The differences between proportions are statistically significant ($p=0.0003$), indicating that more psychiatry residents tend to choose a medical career than residents from other specialties. Regarding the place where they prefer to practice, more than 60% of residents in both groups intend to remain in Romania, 11% are not yet decided and 29% would leave the country after finishing the residency (Table 7). Limited working opportunities, unsatisfactory working or research conditions are motives for living the country. By contrast, physicians who leave United Kingdom but remain in medicine do this for family reasons, personal considerations, or for a higher living standard (Moss, Lambert, Goldacre, & Lee, 2004).

Table 7. Sample distribution according to the intended place of future medical practice

Place of future medical practice	Residents in Psychiatry		Residents in other specialties	
	No	%	No	%
Outside Romania	11	24.44	17	32.07
In Romania	28	62.22	32	60.38
Not decided yet	6	13.33	5	9.43

4. Conclusions and study limitations

There are no major significant differences between psychiatric and non-psychiatric residents. Most trainees rate an average financial situation. Because their training is done in university centers, residents have access to conferences, lectures and case presentations. Although they are satisfied with their supervisors, the satisfaction with hospital practice is moderate. The majority of the trainees would prefer to remain in Romania to be close to their families. This study was conducted in Timisoara University Center, and does not intend to generalize the results for all the country. Learning from senior residents, supervisor's satisfaction and personality issues were not assessed.

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