

Expectations of Emergency Residents and Faculty Members from Each Other: A Turkish Survey

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Abstract

Aim: The objective of the present study was to define the expectations of the residents and faculty members from each other in the process of emergency medicine (EM) residency training.

Materials and Methods: This is a descriptive and cross-sectional study of residents and faculty members who were affiliated with emergency departments throughout Turkey. The study was performed using a questionnaire including 50 questions. The first 9 questions were about demographic information, questions 10–17 were about the program's training characteristics, questions 18–31 were about the faculty's training competence, and questions 32–49 were about the faculty members' personal and social features. Questions 10–49 were Likert scale questions, and the last question (50) was open-ended.

Results: Overall, 93 (24.2%) of the included participants were EM faculty members, whereas 291 (75.8%) were EM residents. There were significant differences between faculty members and residents in almost all questions. The three most common expectations of EM residents were "education/training should be more important than patient care," "increasing practical training hours," and "increasing bedside teaching." On the other hand, the most common expectations of the faculty members were "being more enthusiastic to learn" and "more scientific literature reading."

Conclusion: Our results suggest that faculty members and residents have different expectations. In general, faculty members tended to view the program and themselves better than residents' views.

Keywords: Emergency medicine residency, emergency medicine faculty, graduate medical education

Introduction

Owing to the fact that it is a relatively young discipline as in other countries, efforts for the standardization and improvement of emergency medicine (EM) education have been continuing in Turkey (1-6). Despite having a standard curriculum, the applicability of this standard training program is a matter of debate, owing to the intensity of patient load (6).

To increase the quality of training, it is quite important to define the expectations of EM residents during residency. Although there are continuous efforts to establish EM education/training programs and improve curricula (1-6), there are limited studies on the subject, and the available data are insufficient.

The objective of the present study was to define the expectations of the residents and faculty members for the process of EM residency training and evaluate this training from the view of faculty members and residents.

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Materials and Methods

Study design and setting

This multicenter, descriptive, cross-sectional study of EM residents and faculty members at EM residency programs in Turkey was conducted between October 15, 2015 and January 15, 2016. All of these programs in Turkey are 4-year programs. The study protocol was approved by the institutional review board of Yildirim Beyazit University before the start of the study.

Selection of participants

All residents and faculty members who were affiliated with the EM residency programs of university hospitals or training and research hospitals run by the Ministry of Health in different cities in Turkey during the study period were included. Participation was voluntary. Informed consent was obtained through electronic questionnaires.

Subjects who refused to fill out the questionnaire and those who could not be contacted by e-mail were excluded. Participants who did not respond to all questions were also excluded.

Survey implementation

E-mails of the participants were obtained from the two EM associations in Turkey (Emergency Medicine Physicians Association of Turkey and Emergency Medicine Association of Turkey). Data were collected by an online questionnaire using Google Forms, which is an online survey creation and distribution program (<https://docs.google.com/forms/u/0/>). Anonymous questionnaires were distributed to EM residents and faculty by e-mail. Questionnaires were included in the study if filled during the 3-month study period.

A cover letter about the study and the questionnaire was delivered at the same time to participants via e-mail. E-mail communications were not personalized. With the inclusion of the initial notice, participants were contacted up to five times with reminder notifications to fill out the questionnaire.

The Questionnaire

The survey was piloted by five EM residents and five EM faculty members and revised before distribution. The final questionnaire comprised 50 items. The first 9 questions were about demographic information, questions 10–17 were about the program's training characteristics, questions 18–31 were about the faculty's training competence, and questions 32–49 were about the faculty members' personal and social features. Questions 10–49 were Likert scale questions, and the last question (50) was an open-ended question about the expectations of trainers and residents.

Table 1 shows the questionnaire distributed to the residents and faculty members. Participants rated their answers using a 5-point Likert-type response scale (1, strongly disagree; 2, disagree; 3, undecided; 4, agree; and 5, strongly agree).

Statistical analysis

Statistical analysis was performed using Statistical Package for the Social Science version 15.0 (SPSS Inc.; Chicago, IL, USA). Frequency distributions for categorical variables and descriptive statistics for continuous variables were measured. The Kolmogorov–Smirnov test was used to evaluate whether a parameter has normal distribution. The Mann–Whitney U test was used to compare the median between the independent groups. Independent

Table 1. Program's training characteristics (questions 10–17)

Resident, n=291	Median	Percentages		Trainer, n=93	Median	Percentages		p
		25	75			25	75	
10. Education in our ED is sufficiently good	3.00	2.00	4.00	10. Education in our department is sufficiently good	4.00	3.00	4.00	<0.001
11. The number of faculty members is sufficient in our ED	3.00	2.00	4.00	11. The number of trainers is sufficient in our ED	4.00	2.00	4.00	0.028
12. The physical conditions of our ED are sufficient	2.00	1.00	3.00	12. The physical conditions of our ED are sufficient	3.00	2.00	4.00	<0.001
13. In our ED, education and research are more important than patient care	2.00	1.00	3.00	13. In our ED, education and research are more important than patient care	2.00	2.00	4.00	<0.001
14. There is sufficient case diversity for our education in our ED	4.00	3.00	5.00	14. There is sufficient case diversity for our education in our ED	4.00	4.00	5.00	0.023
15. The theoretical training we receive is adequate	3.00	2.00	4.00	15. The theoretical training we give is adequate	4.00	3.00	5.00	<0.001
16. The practical training we receive is adequate	3.00	2.00	4.00	16. The practical training we give is adequate	4.00	3.00	5.00	<0.001
17. Our article review hours are adequate	3.00	2.00	4.00	17. Our article review hours are adequate	3.00	3.00	4.00	<0.001

ED: emergency department

dichotomous data were evaluated using the chi-square test. The Kruskal–Wallis test and Bonferroni correction were used to compare the median of multiple groups. A p value <0.05 was considered statistically significant.

Results

The questionnaire was emailed to 1180 subjects. These e-mails belonged to 928 EM residents and 252 faculty members. Overall, 402 subjects responded to the survey and were included in the study. The overall response rate was 34%. Of the 402 subjects, 384 (95.5%) responded to all questions and were included in the statistical analysis.

In total, 93 (24.2%) of the total participants were emergency department (ED) faculty members, whereas 291 (75.8%) were ED

residents. Overall, 262 (68.2%) of the participants were men. Of the total participants, 206 (53.6%) were working in university hospitals, and 178 (46.4%) were working in training and research hospitals.

Tables 1-3 summarize the questions and answers. Tables 4 and 5 show the expectations of the residents and faculty members. There were significant differences between the answers of residents and trainers in all categories (program's training characteristics, faculty's training competence, and faculty members' personal and social features).

Discussion

In the present study, we aimed to determine the views and expectations of EM residents and faculty members about their EM residency program and each other. In our study, the faculty's self-

Table 2. Faculty's training competence (questions 18–31)

Resident, n=291	Median	Percentages		Trainer, n=93	Median	Percentages		p
		25	75			25	75	
18. Our faculty has sufficient time for resident education	3.00	2.00	4.00	18. I allow sufficient time for resident education	4.00	3.00	4.00	<0.001
19. Our faculty is enthusiastic about our education	3.00	2.00	4.00	19. I am enthusiastic about resident education	4.00	4.00	5.00	<0.001
20. Our instructor motivates us to train and acquire new skills	3.00	2.00	4.00	20. I motivate residents for training and acquiring new skills	4.00	4.00	5.00	<0.001
21. Our instructor cares about interactive education	3.00	2.00	4.00	21. I care about interactive education	5.00	4.00	5.00	<0.001
22. Our instructor is competent in the use of audio/visual tools	3.00	2.00	4.00	22. I am competent in the use of audio/visual tools	4.00	4.00	5.00	<0.001
23. Our instructor cares about practice	3.00	2.00	4.00	23. I care about practice	4.00	4.00	5.00	<0.001
24. Our instructor teaches interventional skills well	3.00	2.00	4.00	24. I teach interventional skills well	4.00	4.00	5.00	<0.001
25. Our faculty provides patient-centered training	3.00	2.00	4.00	25. I provide patient-centered training	4.00	4.00	4.50	<0.001
26. Our faculty can provide education tailored for each person and level	3.00	2.00	4.00	26. I can provide education tailored for each person and level	4.00	4.00	5.00	<0.001
27. Our faculty provides daily routine training	3.00	2.00	4.00	27. I provide daily routine training	4.00	3.00	4.00	<0.001
28. Our program encourages participation in scientific conferences	4.00	3.00	4.00	28. I encourage residents to participate in scientific conferences	4.00	4.00	5.00	<0.001
29. Our program encourages us to read medical literature	3.00	3.00	4.00	29. I encourage residents to read medical literature	4.00	4.00	5.00	<0.001
30. Our faculty is well prepared for presentations	4.00	3.00	5.00	30. I am well prepared for my presentations	4.00	4.00	5.00	<0.001
31. Our faculty plays an adequate role in the education program	4.00	2.00	4.00	31. I play an adequate role in the education program	4.00	4.00	5.00	<0.001

ED: emergency department

view of competence and the residents' view of faculty performance did not match. The reasons for this discrepancy and its effects on residency training are subjects for future research.

EDs have many opportunities and case diversity for education (7). Moreover, an ED was previously reported to be an ideal environment for bedside teaching, owing to several advantages such as high patient volume, increased acuity of illness, and variety of pathologies (8). Tan et al. (9) reported that approximately three-quarters of the internal branch residents and surgical branch residents are satisfied with the variety of cases. In our study, both residents and faculty

members were satisfied with patient variety but found the patient volume to be high.

The conditions of the work and physical environment are one of the major obstacles in ED resident training. Tan et al. (9) stated that although the residents of the basic medicine departments believe that the physical conditions are good, the residents of the internal and surgical departments state that the physical conditions are insufficient. In our study, it turned out that the ED residents also did not find the physical conditions satisfactory, whereas the EM faculty members found them to be sufficient. We believe that improving

Table 3. Faculty's personal and social features (questions 32–49)

Resident, n=291	Median	Percentages		Trainer, n=93	Median	Percentages		Total median	P
		25	75			25	75		
32. Faculty members follow the rules of professional ethics	4.00	3.00	5.00	32. I follow professional ethics rules	5.00	4.00	5.00	4.00	<0.001
33. Faculty members pay attention to patient rights during training	4.00	4.00	5.00	33. I pay attention to patient rights during training	5.00	4.00	5.00	4.00	<0.001
34. Faculty members take responsibility for problems in our clinic	4.00	2.00	4.00	34. I take responsibility for problems at the clinic	5.00	4.00	5.00	4.00	<0.001
35. Faculty has good leaders	3.00	2.00	4.00	35. I think I am a good leader	4.00	4.00	5.00	4.00	<0.001
36. Faculty provides adaptation and team work among the assistants	3.00	2.00	4.00	36. I provide adaptation and team work among assistants	4.00	4.00	5.00	4.00	<0.001
37. Faculty members train us about our legal responsibilities	4.00	2.00	4.00	37. I train residents about their legal responsibilities	4.00	4.00	5.00	4.00	<0.001
38. Faculty members are always available	4.00	3.00	5.00	38. I am always available	5.00	4.00	5.00	4.00	<0.001
39. Faculty members take care of our personal problems	4.00	2.00	4.00	39. I care about residents' personal problems	4.00	4.00	5.00	4.00	<0.001
40. Faculty members are aware of our social/cultural/economic situation	3.00	2.00	4.00	40. I am aware of the social /cultural/economic situation of residents	4.00	3.00	5.00	4.00	<0.001
41. Faculty members listen to us in every way	4.00	3.00	4.00	41. I listen to my assistants in every way	4.00	4.00	5.00	4.00	<0.001
42. Faculty members treat the assistants equally	3.00	2.00	4.00	42. I treat my residents equally	5.00	4.00	5.00	4.00	<0.001
43. Faculty members spend time outside the ED with us	3.00	2.00	4.00	43. I spend time with my residents outside the ED	4.00	3.00	4.00	3.00	0.013
44. Faculty members are role models for us	3.00	2.00	4.00	44. I am a role model for my residents	4.00	3.00	5.00	3.00	<0.001
45. Faculty members are open to criticism	3.00	2.00	4.00	45. I am open to criticism	4.00	4.00	5.00	4.00	<0.001
46. The foreign language level of the faculty is sufficient	4.00	3.00	4.00	46. My foreign language level is sufficient	4.00	3.00	5.00	4.00	0.005
47. Faculty members reward our achievements	3.00	2.00	4.00	47. I reward the accomplishments of the residents	4.00	4.00	5.00	4.00	<0.001
48. Faculty members punish our failures	4.00	3.00	4.00	48. I punish residents for their failures	3.00	2.00	4.00	3.00	<0.001
49. Faculty members take care of themselves	4.00	3.00	5.00	49. I care for myself	4.00	4.00	5.00	4.00	0.004

ED: emergency department

Table 4. Expectations of the residents from faculty and residency training

Answers/expectations	n (%)
Education/training should be more important than healthcare delivery to higher number of patients	18 (17.1)
Practical training hours should be increased	14 (13.3)
Bedside teaching hours should be increased	14 (33.3)
Weekly working hours should be reduced	10 (9.5)
Physical conditions of department should be improved	9 (8.5)
To see less number of non-urgent patients during training	9 (8.5)
Patient admission procedures to inpatient beds should be accelerated	7 (6.6)
Medical literature review hours should be increased	6 (5.7)
Faculty members should be more active in training	6 (5.7)

Table 5. Expectations of the faculty members from their residents

Answers/expectations	n (%)
Being more enthusiastic and willing to learn	18 (38.2)
To read more medical literature articles	18 (38.2)
Loving emergency medicine and willingly choose this residency	8 (17.0)
Being ethical	7 (14.8)
Being inquisitive	6 (12.7)
Being respectful	6 (12.7)
Being responsible	6 (12.7)
Increasing article review hours	5 (10.6)
Being more socially involved in department activities	3 (6.3)

the working conditions and the physical environment would make a positive contribution to ED resident education.

Under the difficult environments of EDs, dedicating sufficient time for education requires work. The trainers should search for opportunities for education despite the constant intensity of emergency services (10). In the study by Thurgur et al. (11), ED residents were asked about their expectations from the faculty. One of the most popular answers was that sufficient time should be dedicated to training, and these hours need to be better spent. In our study, residents also thought both theoretical and practical training is not sufficient.

Tan et al. (9) found that residents in the basic medical sciences and internal medical sciences stated that "education/training is more front-line than service delivery in their services" whereas residents in the surgical departments answered contrary. In our results, "education/training should be more front-line than patient service delivery" was the most popular expectation of residents. This may be due to the high number of patients being taken care of everyday in EDs in Turkey.

When the EM trainers were asked about their expectations from residents, the two most popular responses were "being enthusiastic and willing to learn" and "literature review and reading." These two answers were compatible with those in previous similar studies (11, 12). In this regard, we believe that ED trainers need to lead their residents. Other popular answers from our participants were "loving emergency medicine and willingly choose this department," "being ethical," and "questioning." Tan et al. (9) found that occupational satisfaction was higher among residents who voluntarily selected their departments to work.

Study limitations

The present study has some limitations. Because our study was conducted only among EM residency programs in Turkey, the results cannot be generalized to other countries where physical conditions, expectations, and working hours might be different. Residents who were most dissatisfied with their education may be more likely to respond than those who were completely satisfied. We did not analyze the distribution of how many responses came from which programs, and this may have resulted in selection bias. The response rates were insufficient. We were unable to match residents and faculty members from the same programs. Thus, we could not analyze if most answers from residents who are dissatisfied were from the same programs.

Conclusion

Our results suggest that faculty members and ED residents have different expectations. In the light of our results, we can conclude that "education/training should be more front-line than service delivery," "increasing practical training hours," and "increasing bedside teaching" are the most common expectations of ED residents. On the other hand, "being more enthusiastic and willing" and "following the literature" are the most common expectations of trainers. We believe that ED educators and administrators should take the results of our study into consideration in order to meet the expectations and improve the quality of ED education.

Ethics Committee Approval: Ethics committee approval was received for this study from the ethics committee of Yildirim Beyazit University Faculty of Medicine (Date: 21.10.2015/Number: 222).

Informed Consent: Informed consent was obtained through electronic questionnaires.

Peer-review: Externally peer-reviewed.

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