Brief Communication

Medical Residents' Viewpoints on Clinical Training Status of Shahid Sadoughi University of Medical Sciences

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Abstract

Clinical training is an important process in residency academic program in different fields. In this cross-sectional descriptive study, we identified the views of clinical residents about clinical training status at Yazd University of Medical Sciences at their second-year of residency or above. We used questionnaire as the instrument for collecting information and select all residents as the sample of study. Data were analyzed using descriptive statistical tests. Clinical training status was assessed to be at an intermediate level by residents, and the areas of evaluation method, resources and facilities, training system, performance, performance of personnel of therapeutic departments, and resident's performance received the highest score, respectively. Areas of evaluation method and facilities were determined as strengths, and areas of the performance of therapeutic department's personnel and residents as the weaknesses of clinical training.

Introduction

Clinical training is a process in which students visit the patient, and gradually achieve substantial experiences to do clinical care and solve patients' problems under instructors' supervision (1-3). Unlike class training, this process occurs in a complicated social environment (4). Among the most important differences between class and clinical training environments are instructors' and students' less control over the current situations, the necessity of constant changing of students'

cognitive, psychomotor, and emotional responses to satisfy patients' changing needs, and the necessity of protecting patients' health and safety (5).

This environment affects students in many ways, including assisting them in developing psychomotor skills, problem solving, clinical competency, communication skills, and critical thinking (6). Windsor suggests that the quality of clinical training is influenced by the

quality of student's preparation for clinical experience, clinical instructors' characteristics, and the amount of time given to the student for learning (7). From Camble's and colleagues' viewpoint, the instructors' training quality and the support students receive from their colleagues are two important factors in clinical learning (8). The study by Rafyee and et al., indicated that from the clinical residents' viewpoint, training during surgery, ability to understand lesson, scientific capability and specific knowledge, and absence of bias and students' humiliation are the most important features of clinical training process (9). Inadequate access to training and welfare facilities, lack of cooperation of medical-health team, and distribution of internship in clinical wards during the course have been referred to as clinical training problems in the study conducted by Dehghani et al. (10). The present study was aimed at determining the viewpoints of clinical residents of Shahid Sadoughi University of Medical Sciences about clinical training status in 2012.

Methods

This cross-sectional descriptive study was performed among all 99 clinical residents of second-year and above in all medical centers of Yazd University of Medical Sciences. Response rate was 95%. Residents' specialties field included pediatrics, internal medicine, occupational medicine, ophthalmology, psychiatry, anesthesiology, radiology, cardiology, general surgery, gynecology, and otolaryngology. Inclusion criteria were studying in second-year and above and willingness to participate in study, and exclusion criteria were withdrawing from the education during the study and completing the questionnaire imperfectly.

Data were collected using self-administrated questionnaire with credible reliability and validity, five demographic questions, and poll items in 6 areas including: area of resources and facilities with 7 items (Cronbach's α=0.81), area of faculty members' performance with 13 items (Cronbach's α=0.8), area of the performance of senior residents with 4 items (Cronbach's α=0.82), area of the performance of therapeutic departments' personnel with 2 items (Cronbach's α=0.8), area of the performance of training system with 6 items (Cronbach's α=0.85), and area of evaluation method with 3 items(Cronbach's α=0.79). Responses were based on Likert scale including five options from strongly agree to strongly disagree. It should be noted that respondents were informed about the way of performing the study, confidentiality of information, and the purpose of this study as well; and all agreed to participate in the study. Data were analyzed by SPSS-18 software using descriptive statistical tests.

Results

The mean age of participants was 31.81±3.6 years. 55 individuals were females (58.5%). Of these, 70 (74.5%) were married, 50 (53.2%) native residents, 72 (76.6) second-year residents, 19 (20.2%) third-year residents, and 3 (93.2%) fourth-year residents. The area of evaluation method was selected by participants as the favored item by attaining 9.41±3.02 scores (Table 1). There was a statistically significant and direct association among all areas of under study except the area of facilities and the performance of therapeutic departments' personnel.

Discussion

The area of residents' evaluation method was selected as the most appropriate item in assessing the clinical training status. Evaluation was regarded as an important part of training process (11), which achieved a higher score in the present study. The present findings differ from the results of the study conducted by Anbari and et al., (3) and Hadizadeh and et al. (12), and it is nearly similar to the results of Adhami's study and et al. in which evaluation area was selected as the third important area (1).

The second selected area by participants was resources and facilities in which the existence of teaching aids, adequate training environment, and full medical equipment for clinical training were considered as the strengths of clinical training status, differing from the findings of Hadizadeh and et al. (12), Dehghani and et al. (10), Zamanzadeh and et al. (13), and Omidvar and et al. (14) in which facilities area was ranked the last.

The third selected area was training system in which clarification of residents' duties was assessed as the strength of this area, and lack of attention to residents' views in training planning and the increase of stress in residents due to training activities were assessed as the weaknesses of the area. It is suggested that in training planning more attention be paid to residents' stress reduction.

The fourth selected area was the area of faculty members' performance that was different from the results of Omidvar and colleagues (14), in which instructors' performance was classified in the second place in training problems, and Hadizadeh and colleagues (12), in which the instructors' performance was put in the first place of students' selection. Our findings were similar to the findings of Fasihiharandi's study and colleagues (15) regarding the quality of clinical training from medical students' viewpoint in the area of training management.

Table 1: The Mean Score of Each Item in Priority Order

Scope	Item	Mean±SD	Scope Mean±SD	Priority
Evaluation Method	Evaluation conforming to the materials under training in the ward.	2.94±1.16	9.41±3.02	1
	Awareness of evaluation method at the end of the course while entering to the ward.	2.92±1.12		
	Clinical evaluation on the basis of practical skills and less attention to theoretical memorized materials.	2.71±1.14		
Resources and Facilities	The existence of teaching aids.	3.25±1.14	21.64±5.33	2
	The existence of adequate training environment.	3.20±1.24		
	The existence of necessary medical equipment for clinical training.	3.14±1.10		
	Adequacy of number and variety of hospitalized patients based on the aims of training programs.	3.03±0.98		
	The existence of sufficient facilities for teaching in clinical skills center.	2.88±1.02		
	Proportion of residents' number with facilities and training environment.	2.54±1.32		
	The existence of sufficient welfare facilities (suitable environment to relax and change the clothes) in the ward.	2.28±1.15		
Training System	Specificity of residents' assigned duties.	3.55±0.95	18.1±5.16	3
	Residents' awareness of training aims and programs.	2.98±1.12		
	Coordination between practical and theoretical courses.	2.86±1.03		
	Superiority of practical skills training over theoretical materials.	2.85±1.08		
	Paying attention to residents' views in training planning.	2.85±1.17		
	Training activities to avoid increasing residents' stress.	2.87±1.17		
Professors' Performance	Reaction to medical errors made by residents.	3.88±0.78	35.8±10.101	4
	Teaching professional ethic and relationship with patient.	3.54±1.06		
	Training medical care and health instructions after discharge.	3.43±9.95		
	Training the correct and timely application of Para Clinic and interpreting its results.	3.40±1.06		
	Rationality and seriousness in dealing with errors made by residents.	3.37±1.09		
	Teaching skill of writing medical records and instructions.	3.28±1.03		
	Supporting student in scientific skills.	3.23±1.14		
	Focusing more on patients' symptoms and signs than describing the disease.	3.19±0.97		
	Training of indication criteria for patient's admission and discharge.	3.10±1.05		
	Spending enough time to train students.	3.06±1.12		
	Attendance in the ward at scheduled time.	3.03±1.38		
	Strengthening the spirit of research in residents.	2.88±1.18		
	Using facilities (skill lab) for respective training.	2.75±1.13		
Performance of Treatment Ward Personnel	Cooperation of ward personnel with residents in training.	3.27±0.96	5.45±1.95	5
	Respecting residents by personnel.	3.26±1.11		
Personnel's Performance	Respecting student.	3.79±0.91	9.98±2.84	6
	Supporting student to do scientific activities.	3.45±0.99		
	Observing the hierarchy between residents.	3.45±1.18		
	Training in the absence of clinical professors.	3.29±0.94		

Conclusion

Our findings indicated that the areas of evaluation method and facilities were identified as the strengths and the areas of personnel's performance of medical departments and residents as the weaknesses of clinical training in Yazd University of Medical Sciences.

Acknowledgments

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