



ORIGINAL ARTICLE

Role of supervisor as clinical teacher – residents’ perspectives of postgraduate medical institute.

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ABSTRACT... Objective: To determine residents’ perceptions of supervisors as clinical teachers. **Study Design:** Cross-sectional study. **Setting:** Three Public Sector Teaching Hospitals in Peshawar. **Period:** August 2019 to May 2020. **Material & Methods:** For assessing the perceptions of residents in the three public sector teaching hospitals located in Peshawar, a structured questionnaire was used. (N=163) residents were taken as a sample. The response rate was 100% from the three teaching hospitals. For analyzing data SPSS version 22 was used and $P < 0.05$ was considered as significant. **Results:** Out of the whole sample (N=163), 63.8 % residents were from medical and allied health specialties, and 36.2 % were from surgical and allied health specialties with Mean \pm SD = 1.36 ± 0.836 . The findings of this study revealed that the vast majority of trainees were found strongly agreed with the questionnaire responses about their supervisor’s role as a clinical teacher. Regarding the supervisor’s role as a clinical teacher, negative perceptions in minority of trainees were found with few problems. **Conclusion:** In their perceptions of a good clinical teacher, most residents emphasize the teacher’s characteristics. It is important to note that the trainees want to establish a positive relationship with their clinical teacher. Clinically, our residents received high marks from their supervisors.

Key words: Medical Education, Perceptions, Role of Clinical Teacher-Supervisor, Residents, Supervision.

INTRODUCTION

A teacher’s role in society is both important and valuable.¹ The characteristics and overall behaviors of the teacher may influence the outcome of learning in health profession training. According to Duncan, a student’s learning can be maximized if the teacher first motivates the student, and then the student is taught.²

In clinical practice, physicians are essential in teaching residents³ and for the clinical learning environment, the interaction between faculty members and residents is essential. In today’s health-care environment, the health professional’s role does not have to be solely concerned with patient care, but includes administration, research leadership, and clinical supervision. Despite the fact that clinical supervision is a term, which is commonly used in health and social care

professions, its definition may vary.

When residents are trained in clinical practice, clinical teaching is essential. Clinical teaching is acknowledged as an important aspect of postgraduate education.^{4,5} Clinical teachers can improve the learning potential of the workplace by acting as a role models and providing support.⁶ There is a substantial literature on good clinical teaching that ranges from essays to empirical studies.⁷ The nature of supervision and the quality of communication between the student and supervisor have a significant impact on a post-graduate student’s education.¹ Clinical supervision is required at every stage of the learning process.⁸ Effective clinical supervisors give their residents: opportunities to carry out procedures; responsibilities for patient care; involvement in patient care; opportunities to

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review patients; direction and constructive feedback.

Good clinical skills alone are insufficient for a physician to effectively teach. In postgraduate medical education, clinical supervisors play a vital role. However, it is likely that it is the least researched, discussed, and developed aspect of clinical education.⁹ Over the last few decades, there have been significant changes in medical education. A significant change in medical education is the changing role of the medical teacher. The teacher is now a facilitator. The learning environment has shifted from teacher-centered to student-centered. The supervisory role is complex and professional, requiring much more than good will and spare time.

Feedback from students on clinical teaching has the potential to improve teacher effectiveness while also reflecting on current teaching to improve the teaching program. There has been no published data from Pakistan on the improvement of the role of supervisor as a teacher, and from the Khyber Pakhtunkhwa (KP) province it is almost nonexistent. The purpose of this research was to focus on residents' perceptions of their supervisor's role as a clinical teacher in order to improve the existing supervisory program that is tailored to and for students' needs. Students' perspectives on clinical teaching attributes can contribute to knowledge about teaching and learning in clinical education, as well as represent consumer input that can improve teaching quality.

MATERIAL & METHODS

From August 2019 to May 2020, a cross-sectional study was conducted at three public sector teaching hospitals in Peshawar. The census method of sampling was used, in which a list of fourth-year, postgraduate residents was compiled and data was extracted from the records. The records include the data from examination, admissions, and personal files of the students. All fourth year FCPS trainees of three public sector teaching Hospitals Peshawar were included in our study, and those were excluded who migrated from other Institutes. The instrument used for this study is adapted from Makoto et al.¹⁰ The questionnaire

was distributed to 163 postgraduate trainees who met the study's inclusion criteria. Participants were given 15-30 minutes to complete self-administered questionnaires.

Khyber Medical University's ethical review board provided approval (DIR/KMU-EB/RS/000238). Admission and examination records were obtained from the admission and examination section. All responses were kept anonymous and private. For accuracy the data was compared to various records and at various stages the quality control checks were performed, including ensuring data validity during data collection, pre-data collection field testing of the questionnaire, and cleaning data after data collection. Permission was also obtained from the relevant departments for data collection. At all stages, the confidentiality of data collection and analysis of all subject information was maintained.

Data was analyzed using Statistical Package for Social Sciences (SPSS) Version 22. Frequencies, Percentages of categorical variables were calculated. Mean \pm Standard Deviation was calculated for individual responses.

RESULTS

The study had a total of 163 participants. About 63.8% residents were medicine and allied, and 36.2% were from surgical and allied. The questionnaire was distributed to 163 residents from three hospitals, which completed it. Response rate was 100%.

Results in Table-I showed that out of the whole sample, 58.9% residents were agreed about showing their enthusiasm for teaching and accessibility. Regarding encouraging residents to call him or her at any time for any reason, the majority of the residents 40.5% were strongly agreed. More than 50% residents were strongly agreed upon displaying reasoning process. About 40.5% respondents were agreed for providing sufficient support. About stimulation of residents' interest in learning the 42.3% teachers were found agreed. Table-I showing complete analysis of student perception regarding clinical teacher.

Characteristics	Responses						M ± SD
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree		
Showed enthusiasm for teaching	N	3	8	24	96	32	3.90 ± 0.836
	%	1.8 %	4.9 %	14.7 %	58.9 %	19.6 %	
Is accessible	N	3	3	15	96	46	4.10 ± 0.779
	%	1.8 %	1.8 %	9.2 %	58.9 %	28.2 %	
Encourages residents to call him or her at any time for any reason	N	2	9	38	48	66	4.02 ± 0.987
	%	1.2 %	5.5 %	23.3 %	29.4 %	40.5 %	
Displays reasoning processes	N	4	3	20	52	84	4.28 ± 0.926
	%	2.5 %	1.8 %	12.3 %	31.9 %	51.5 %	
Provides sufficient support	N	4	6	22	66	65	4.12 ± 0.945
	%	2.5 %	3.7 %	13.5 %	40.5 %	39.9 %	
Stimulates residents' interest in learning and/or subject	N	3	9	34	69	48	3.92 ± 0.943
	%	1.8 %	5.5 %	20.9 %	42.3 %	29.4 %	
Treats residents with respect	N	4	12	48	49	50	3.79 ± 1.039
	%	2.5 %	7.4 %	29.4 %	30.1 %	30.7 %	
Actively involves residents in patient care	N	1	11	37	60	54	3.95 ± 0.942
	%	0.6 %	6.7 %	22.7 %	36.8 %	33.1 %	
Sets clear roles for residents	N	4	24	26	50	59	3.83 ± 1.145
	%	2.5 %	14.7 %	16.0 %	30.7 %	36.2 %	
Stimulates residents to think critically when solving a problem	N	3	17	29	52	62	3.94 ± 1.070
	%	1.8 %	10.4 %	17.8 %	31.9 %	38.0 %	
Is a good role model for relationships with medical staff	N	6	14	21	61	61	3.96 ± 1.088
	%	3.7 %	8.6 %	12.9 %	37.4 %	37.4 %	
Is a good role model for doctor-patient relationships	N	5	15	21	59	63	3.98 ± 1.080
	%	3.1 %	9.2 %	12.9 %	36.2 %	38.7 %	
Is a good clinical supervisor at all times	N	3	17	19	70	54	3.95 ± 1.017
	%	1.8 %	10.4 %	11.7 %	42.9 %	33.1 %	
Gives residents opportunities to practice	N	5	14	34	69	41	3.78 ± 1.018
	%	3.1 %	8.6 %	20.9 %	42.3 %	25.2 %	
Does not pretend to know all things	N	3	12	32	63	53	3.93 ± 0.991
	%	1.8 %	7.4 %	19.6 %	38.7 %	32.5 %	
Demonstrates the importance of safety	N	2	12	35	67	47	3.89 ± 0.949
	%	1.2 %	7.4 %	21.5 %	41.1 %	28.8 %	
Thinks speculatively about areas of uncertainty with residents.	N	6	13	36	62	46	3.79 ± 1.057
	%	3.7 %	8.0 %	22.1 %	38.0 %	28.2 %	
Explains clearly which aspects are important and why	N	4	8	32	66	53	3.96 ± 0.971
	%	2.5 %	4.9 %	19.6 %	40.5 %	32.5 %	
Gives concrete indications about what should be improved.	N	5	8	37	55	58	3.94 ± 1.029
	%	3.1 %	4.9 %	22.7 %	33.7 %	35.6 %	
Contributes additional clinical information or advice about	N	1	18	37	57	50	3.84 ± 1.006
	%	0.6 %	11.0 %	22.7 %	35.0 %	30.7 %	
Encourages residents to consider psychosocial problems	N	6	23	31	56	47	3.71 ± 1.138
	%	3.7 %	14.1 %	19.0 %	34.4 %	28.8 %	
Teaches residents how to conduct clinical research	N	9	22	36	47	49	3.64 ± 1.200
	%	5.5 %	13.5 %	22.1 %	28.8 %	30.1 %	
Discusses clear training goals with residents during rotations	N	2	25	32	60	44	3.73 ± 1.060
	%	1.2 %	15.3 %	19.6 %	36.8 %	27.0 %	
Shows social common sense	N	3	14	20	82	44	3.92 ± 0.949
	%	1.8 %	8.6 %	12.3 %	50.3 %	27.0 %	
I would like to work with this teacher again	N	5	11	17	56	74	4.12 ± 1.047
	%	3.1 %	6.7 %	10.4 %	34.4 %	45.4 %	

Table-I. Mean scores of student's perception about clinical teaching

DISCUSSION

This study was conducted to assess postgraduate trainees' perceptions of their supervisor's role as a clinical teacher in their respective institutions. For the responders (residents) of the current study a questionnaire of 25 questions was developed.

Residents suggested that effective teacher should be enthusiastic and passionate about teaching and it influences their motivation.⁹ In our study teacher enthusiasm was responded as agreed by 58.9%. For a consultation, easy accessibility of their teacher was the desire of residents and this was also supported by our study (58.9%) agreed that their teacher is accessible. Many trainee 40.5% were agreed that for any reason and at any time their supervisor encourages them to call him or her and this findings are also supported by Ellard et al.¹¹ 42.3% trainees of this study were agreed to the theme that their supervisor stimulates their interest in learning. According to research on the dimensions of college teaching, stimulating students' interest in the course material is the most powerful predictor of overall teacher ratings and the fourth most powerful predictor of student achievement.¹²

In our study, a total of 30.7% trainees strongly agreed that their clinical teacher treats residents with respect. While in contrast to our findings, two studies^{13,14} 19% and 21% of residents thought that as clinicians, it is important for a quality educator to respect their autonomy and independence. According to the residents, a good teacher vigorously assures their involvement in patient care, and Such participation improved their motivation. While according to our study's findings 36.8% trainees agreed that their clinical teacher actively involves them in the care of patients. The literature on critical thinking is extensive. If clinical instructors want to encourage students' critical thinking, they must demonstrate creative and critical thinking skills, as well as encourage students to be excited about the new way of scrutinizing issues and asking questions. These findings were supported by our study, 38% trainee agree that their supervisor stimulate them to think critically.

About giving opportunities to practice many procedures individually, 42.3% residents of this study were agreed that their supervisor gives them. Good supervisors necessarily share many of the same characteristics as good advisors and teachers. They are genuine, empathic, flexible, and open. They value their supervisees as individuals and as developing professionals, and are sensitive to individual differences (e.g. race, gender, and ethnicity) of supervisees.¹⁵ Residents said that competent instructors gave them opportunity to improve.⁹ According to one study, a clinical instructor must explain clearly essential aspects of clinical components and treatment options techniques to their students.¹⁶ Similar results were found in this study that 40.5% of the trainees were agreed to the theme that "their supervisor explains clearly which aspects are important and why they are important for them". The teacher encourages students to express their views on differential diagnosis and monitoring rather than providing their own conclusions and plans. The instructor must establish a secure learning atmosphere so that students feel comfortable enough to make a commitment - even if it is incorrect.¹⁷

Outpatient settings are one place where trainees may learn this, track the patient's progress over time, and get involved in the psychosocial components of patient care.¹⁸ While similar response of 34.4% trainees in our study's results was noted about the theme that "their clinical teacher encourages them to consider psychological problems of patients". In a study while defining the clinical teacher's role, it was mentioned that a clinical teacher stimulates development of his trainees; both in patient care and in research activities. This findings were supported by our study as well. Results of our study showed that 45.4% trainees were strongly agreed with this theme that I would like to work with this teacher again. Similarly in a study it was found that there was a strong correlation between the instrument's summary score and the resident's desire to collaborate with the attending physician once again.¹⁹

CONCLUSION




Our study conclude that majority of our residents in their opinions of a good clinical teacher, they stress teacher traits, like shows enthusiasm for teaching; is accessible; display reasoning processes; and shows social common sense. It is important to note that the trainees want to develop a good relationship between their clinical teacher and themselves. They also want their clinical teacher should improve his/her teaching abilities and they are also willing to learn more new roles of their clinical supervisor. But they are facing cultural and situational difficulties, lack of resources, lack of institutional support, and resistance to change at the institutional level which may limit the implementation of new roles and responsibilities of their clinical teacher. There are also a generation gap between their clinical teacher and them due to some cultural and customs of the region.

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REFERENCES

- Harden R, Crosby J. **AMEE Education Guide No. 20. The good teacher is more than a lecturer – the twelve roles of the teacher.** Med Teacher. 2008; 22:334-47.
- Spencer J. **ABC of learning and teaching in medicine: Learning and teaching in the clinical environment.** Br Med J. 2003; 326:591-4.
- Patrina HY Caldwell, Wendy Oldmeadow, Cheryl A Jones. **Supervisory needs of research doctoral students in a university teaching hospital setting.** J Paediatr Child Health. 2012; 48:907-12.
- Kisiel JB, Bundrick JB, Beckman TJ. **Resident physicians' perspectives on effective outpatient teaching: A qualitative study.** Adv Health Sci Educ Theory Pract. 2010; 15:357-68.
- Roff S, McAleer S, Skinner A. **Development and validation of an instrument to measure the postgraduate clinical learning and teaching educational environment for hospital-based junior doctors in the UK.** Med Teach. 2005; 27:326-31.
- Kikukawa M, Stalmeijer RE, Emura S, Roff S, Scherpbier AJJA. **An instrument for evaluating clinical teaching in Japan: content validity and cultural sensitivity.** BMC Med Educ. 2014; 14:179.
- Sutkin G, Wagner E, Harris I, Schiffer R. **What makes a good clinical teacher in medicine? A review of the literature.** Acad Med. 2008; 83:452-66.
- Kilminster SM, Jolly BC. **Effective supervision in clinical practice settings.** Med Educ. 2000; 34:827-40.
- Kikukawa M, Nabeta H, Ono M, Emura S, Oda Y, Koizumi S, et al. **The characteristics of a good clinical teacher as perceived by resident physicians in Japan: A qualitative study.** BMC Med Educ. 2013; 13:100.
- Kikukawa M, Stalmeijer RE, Emura S, Roff S, Scherpbier AJJA. **An instrument for evaluating clinical teaching in Japan: Content validity and cultural sensitivity.** BMC Medical Education. 2014; 14(1):179. 10.1186/1472-6920-14-179.
- Ellard DR, Shemdoe A, Mazuguni F, Mbaruku G, Davies D, Kihaila P, et al. **A qualitative process evaluation of training for non-physician clinicians/associate clinicians (NPCs/ACs) in emergency maternal, neonatal care and clinical leadership, impact on clinical services improvements in rural Tanzania: The ETATMBA project.** BMJ Open 2016;6:e009000
- Feldman KA. **Identifying exemplary teachers and teaching: Evidence from student ratings.** In: Perry RP, Smart JC, editors. The scholarship of teaching and learning in higher education: An evidence-based perspective. Dordrecht: The Netherlands: Springer; 2007.
- Buchel TL, Edwards FD. **Characteristics of effective clinical teachers.** Fam Med. 2005; 37:30-5
- Kiat CS. **Attributes of an effective family medicine clinical teacher: A survey on residents' and family medicine faculty's perceptions.** Singapore Fam Phys. 2014; 14:7 2-7.
- Borders LD. **The good supervisor.** ERIC Digest. 1994; 18:1-2.
- Clinical teaching.** UQ tutors. University of Queensland, Australia; 2017.
- Ramani S, Leinster S. **AMEE Guide no. 34: Teaching in the clinical environment.** Med Teach. 2008; 30:347-64
- McGee SR, Irby DM. **Teaching in the outpatient clinic.** Practical tips. J Gene Intern Med. 1997; 12(Suppl 2):S34-40.
- Smith CA, Varkey AB, Evans AT, Reilly BM. **Evaluating the performance of inpatient attending physicians: A new instrument for today's teaching hospitals.** J Gen Intern Med. 2004; 19:766-71.

AUTHORSHIP AND CONTRIBUTION DECLARATION

No.	Author(s) Full Name	Contribution to the paper	Author(s) Signature
1	Mahnaz Raees	Conceived, designed, data analysis, manuscript editing.	
2	Brekhna Jamil	Review, final approval of manuscript.	
3	Suleman Khan	Manuscript writing, data analysis.	
4	Muhammad Shahzad Khan	Data analysis.	