

# Clinicians' perspectives as medical teachers: A qualitative study

**Bilge Delibalta<sup>1</sup>** **Şükrü Keleş<sup>2</sup>** **Selçuk Akturan<sup>1</sup>** <sup>1</sup>Department of Medical Education, School of Medicine, Karadeniz Technical University. Trabzon / Türkiye<sup>2</sup>Department of Medical History and Ethics, School of Medicine, Karadeniz Technical University. Trabzon / Türkiye

## Abstract

Clinicians both have the responsibility to take care of the patients and to facilitate students to learn. Having different responsibilities at the same time can be stressful for medical teachers and can affect their identity as medical teachers. The aim of the study is to determine and identify approaches to the teaching of medical teachers in a university hospital. The methodology of the research is qualitative research. The educational case study method was used to develop an in-depth understanding of medical teachers' teaching approaches. We asked the meaning of being a medical teacher, the related factors with teaching, and their best experiences of teaching by individual in-depth interview. Nine individual in-depth interviews were held with participants. The most experienced medical teacher has the 27-year of experience and the junior one has 6 months of experience. Three main themes have emerged. The issues at clinical education, teachers' perspectives on clinical education, and the roles of students and teachers at clinical education. Our study shows the residents, nurses, peer students have roles in clinical education in addition to medical teachers. One of the issues is the limitation to standardize clinical education for each student. All participants mentioned they become an academician for the greater good. The medical teachers are expecting the students to have a high level of situated interest. However, increasing students' situated interest is up to their prior knowledge of the context, the characteristics of the learning activity, the learning environment, and the approach to the teaching of medical teachers.

**Keywords:** Medical education, teaching, interview, clinical ethics

**Citation:** Delibalta B., Keleş Ş. & Akturan S. Clinicians' perspectives as medical teachers: A qualitative study. Health Sci Q. 2024;4(1):31-40. <https://doi.org/10.26900/hsq.2196>

**Corresponding Author:**  
Bilge Delibalta  
Email: drbilgetuncel@gmail.com



This work is licensed under a Creative Commons Attribution 4.0 International License.

## Introduction

The healthcare system is a complex system with patients, clinical environments, and learners. The priority of this system is patients and patient care. The healthcare system is dynamic and based on the social system [1]. Clinicians are health caregivers and medical teachers in the clinical environment. They both have the responsibility to take care of the patients and to facilitate students to learn. Also, some clinicians have responsibilities at the organizational level [2]. However, there are also ethical and legal responsibilities that clinicians are obliged to comply with. The responsibilities of clinicians are clearly defined in legal documents; however, it's still important to think about ethical responsibilities because ethical dilemmas are frequently encountered in the clinical environments. Clinicians should continue their daily medical practices by recognizing ethical dilemmas and evaluating these dilemmas correctly. As can be seen, having different responsibilities at the same time can be stressful for medical teachers and can affect their identity as medical teachers [3]. This is why there is a need for evaluation of medical teachers' perspectives and experiences in clinical environments.

The teaching approach can be identified as the way of teaching [4]. The teaching approaches of teachers are also related to student's engagement with learning content [5]. There are three broad concepts of teaching approaches: teacher-centred, student-centred, and teacher-student interaction. Teachers focus on the delivery of knowledge and content in a teacher-centred approach. In a student-centred approach, teachers act as facilitators and try to engage students for effective learning. In teacher-student interaction, the approach connects the two approaches [4]. These approaches have a role in shaping the quality of clinical education.

In the relevant literature, Bearmen et al. identified the strengths and weaknesses of clinical teaching. The strengths were establishing relationships, clinical expertise, communication skills, enthusiasm, and individual characteristics. The weaknesses were giving feedback, promoting reflection, and developing teaching strategies

[6]. Students' feedback is stated as a factor in improving the teaching approaches of medical teachers [7]. One of the barriers to improving clinical teaching is the resistance of medical teachers to change [8]. Faculty development programs contribute to overcoming this barrier by conducting cultural belonging; however, these programs should be well-structured [9]. In addition, reflective practices are needed in the learning of ethical and professional behavior in the clinic, and this is also important in terms of the medical teacher-student relationship [10]. The knowledge of the strengths and limitations of clinical education would contribute to improving the structure of medical education. So, it's important to explore the teaching approaches of medical teachers in current education.

In a relevant study, medical teachers and students were asked to fill out a questionnaire about the characteristics of a good medical teacher [11]. Three domains and the perceptions of the medical teachers and students to these domains were determined. Personal domain, clinician domain, and teacher domain. The personal domain is defined as the identity characteristics of the clinician, the clinical domain is defined as the expertise of the clinician, and the teacher domain is defined as the teaching role of the clinician. The results of the study showed that the personal domain was the most preferred in both groups. The second important result of the study was the scores for the clinician domain were higher in students' answers. The higher expectations of the students were discussed for the reason of higher scores [11].

In a study which aimed to understand the authenticity of feeling like a physician among clinical students, the relationship between clinical supervisor, patient, and student was one of the themes that emerged. Medical teachers play a crucial role in shaping authenticity for students by creating a positive environment for students and motivating them [12]. The student-centred approach contributes to creating a positive environment and motivating students by taking students' needs into the centre [4]. It's important to understand the crucial role of medical teachers by exploring approaches to teaching of medical teachers.

Clearly, the improvement of clinical education is based on understanding conditions in the clinical environment. An understanding of the clinical environment will be one part of the needs assessment for the faculty development program [13]. The determination of the approaches of clinicians as medical teachers is one of the components of needs assessment. So, it can be said that there is a need to explore the teaching approaches of medical teachers. In addition to this, there is not any previous research about determining the teaching approaches of medical teachers in our country. This research will contribute to determining and identifying the teaching approaches of medical teachers in Karadeniz Technical University Medical School. The results of our study would contribute to quality of clinical education in other medical faculties.

The aim of the study is: to determine and identify approaches to the teaching of medical teachers in a university hospital. The sub-questions are:

- 1) How do clinicians identify themselves as a medical teacher (or in a teaching role)?
- 2) What are the perspectives of medical teachers in clinical education?

To answer the research questions, this research paradigm is based on constructivism theory. According to the constructivist perspective, reality occurs from human interactions. Reality cannot be understood without human interactions and subject-object relations [14]. So, the answers to the research questions can only be explored by understanding the perspectives and experiences of medical teachers. The interaction between medical teachers and students is one of the content which needs to be understood to improve clinical education [15].

### Materials and Methods

The methodology of the research is qualitative research. The educational case study method was used to develop an in-depth understanding of medical teachers' teaching approaches in a university hospital [14, 16]. The individual in-depth interview method was used to understand medical teachers' perspectives. Hennink et al. argue that meaning saturation should be the

criteria for ending individual in-depth interviews instead of data saturation [17]. In our research, we targeted to reach both data and meaning saturation in interviews. The individual in-depth interviews were held in 9 months period 2021-2022.

There is a national core curriculum for medical schools in Türkiye. There are 128 medical schools in Türkiye and 45 of them are accredited [18]. All medical schools are trying to improve their curriculum and teaching methods according to the national core curriculum. There are nearly 200 faculty members at Karadeniz Technical University Medical School and half of them are in clinics. The Karadeniz Technical University Medical School is an accredited medical school and still trying to improve undergraduate medical education according to Harden's integration ladder [15]. The level of integration in Karadeniz Technical University Medical School is temporal coordination similar to other medical schools in Türkiye.

We were expecting to understand the meaning of being a medical teacher, the related factors with teaching, and their best experiences of teaching. The individual in-depth interviews were held until the data got saturated. [19].

### Sampling

There are almost 200 faculties in both basic sciences and clinical departments at Karadeniz Technical University Medical School. The 100 of them are responsible for clinical teaching. The ratio of junior faculty to senior faculty is nearly %50.

### The Interviews

One author held the individual in-depth interviews and an audio record was taken.

The individual in-depth interview questions were:

1. What kind of health service do you provide in the clinic?  
-Can you give information about your experience as a clinical teacher?
2. What training do you provide to medical

students in the clinic?

3. What does it mean to you to be an educator in the clinic?

4. Think about your educational experience. What was your most effective educational experience?

- Why do you think this experience was effective?

5. Are there any components that you consider in the clinical training process specific to your field? For example, do you have a special approach to the training, or do you use a specific method?

6. How do you think clinical training should be?

7. Is there anything else you'd like to share about clinical training?

### Data Analysis

The six-step process is defined for the thematic analysis: familiarizing with the data, generating initial codes, searching for themes, reviewing the themes, defining the themes, and reporting [20]. One author both held the interviews and transcribed the interviews, the other two authors contributed to coding and deciding themes to ensure rigour in the study. Each author coded the same transcript individually. Then three of them discussed, negotiated, and agreed on codes and the analysis was completed according to these codes and the themes emerged from the agreed codes. All analyzing processes were held manually.

One of the limitations of the study is that the time is needed for conducting interviews effectively. As the participants of our study are clinicians, they have a very busy schedule and completing interviews without any interruptions was the biggest challenge in the data collection process.

### Ethics Statement

The present study protocol was reviewed and approved by the Karadeniz Technical University of scientific research ethical committee (approval no. 2021/3). Informed consent was submitted by all subjects when they were enrolled. The research was conducted according to Helsinki Declaration and researchers have complied with Helsinki Declaration.

## Results

Nine individual in-depth interviews were held with medical teachers. The most experienced medical teacher has 27 years of experience and the junior one has 6 months of experience. The ages of the participants were varied between 40 and 65. There were 5 female and 4 male participants in the study. Three of the participants were from surgical departments and 6 of them were from internal medicine and pediatrics departments. There were both seniors and juniors in each department group. All participants had clinical experience before their academic careers. They had the role of being peer educators to their colleagues but none of them had the role of being a medical teacher before being an academician. The basic training trainers program was held regularly in the medical school according to the accreditation criteria for 15 years and they all attended the basic training trainers program at different times.

### Emerged themes

Three main themes have emerged. 1-the issues at clinical education, 2-teachers' perspectives on clinical education, and 3 the roles of students and teachers in clinical education.

#### 1-The issues in clinical education

The limitation of standardization of education for each student is the major finding for this theme.

*"When there is a positive finding with a patient, I let the students examine the patient. But of course, it's not the same every day. Our clinical education is completely dependent on patients at clinics that day."*  
Senior 1

*"I'm not doing anything structured, of course."*  
Junior 1

*"Each faculty member teaches in his/her own way and background. Maybe this situation adds richness, but without standardization, I wonder if some things are missing in the students."* Junior 1

*"I structured a role-play in clinical education. I play the patient's mother and students take history from me. But of course, this is something I do. I don't know how other medical teachers do."* Junior 2

*"My expertise field doesn't match with undergraduate medical education. So I structured an algorithm and I am teaching what may be important to students after graduation. Not all students have a session with me, but I do everything for whose having."* Senior 2

*"However, since this method does not continue after me, I don't know the effects of what I've teach. The education should keep continue and in the same way."* Senior 3

Most of the participants stated that nurses, residents, peers etc are the components of clinical education in addition to medical teachers.

*"The residents and nurses also teach students. We have limited time with students, so they get support from residents and nurses. I don't know what exactly they teach to students."* Junior 1

*"They can also learn something from the assistant or nurse in the clinics."* Senior 4

The high number of students and the context are stated as the barriers to well-structured clinical education.

*"Because the patient rooms are also very small, we can't breathe inside if we are more than 5 people."* Junior 1

*"I ask for 2 or 3 students in each rotation. It becomes impossible to learn when they're more than 3."* Senior 4

Especially the junior participants emphasised the importance of training-trainer programs.

*"I was a very novice when I just started it, no one said "do this and do that". So I discovered how to teach by myself."* Junior 1

*"Since I am a beginner, I am not experienced in teaching, the teacher must be very well equipped scientifically. Training begins in the teacher."* Junior 3

Most of the participants stated that the ideal clinical education is generally based on students' engagement and the mentorship method.

*"Clinical education should be one-to-one training, we should give feedback to the student..."* Senior 4

*"The basic needs, mental state and well-being of the student should be met."* Senior 1

## **2-Teachers' perspective on clinical education**

Most of the participants stated that prior knowledge is important for effective clinical education.

*"There is a structured theoretical training for clinical-year students in our clinic, they need to learn the theoretical background of diseases before they interact with patients"* Senior 5

*"With lack of theoretical background, you train something like a technician, a robot. Students must first know what they are doing and why. The students need to evaluate themselves."* Senior 1

Most of the participants stated that they see clinical education as an opportunity for improvement.

*"It should be able to mutual. It should also feed the academician"* Senior 5

*"I see my gaps when I teach young people something."* Junior 2

All participants stated that they love teaching for the greater good. That's the reason for being an academician.

*"It is a task that I enjoy doing the most individually and that I take on myself to contribute to the future of the country."* Senior 3

*"I love being an educator. I think this is the biggest factor in my coming to the academy."* Junior 1

Definitions of their teaching style differentiate between juniors and seniors.

*"I'd like to teach until they learn."* Senior 2

*"I have limited time and I can only support them to learn at limited time."* Junior 2

*"There should be experiential learning and interactive training with questions and answers"* Junior 4

They describe the best teaching experience as receiving questions from students, teaching in a structured way and understanding the learning outcomes that students gain at that session.

*"When students ask about the topics after the session, I feel that I achieved to teach them something."* Senior 5

*"Teaching according to the guidelines, so I can be sure that I gave all the students what they need."* Senior 3

*“When the students integrated the patients’ examination signs with the knowledge from our discussions, I saw the students embodied the knowledge.” Junior 1*

### **3-Students’ and teachers’ roles in clinical education**

One of the statements was the need to improve students’ motivation. The senior participants were more focused on students’ knowledge, the junior participants were more focused on students’ motivation and learning environment.

*“It’s important to support students’ engagement. I’m doing question-answer in clinical training. So the students come prepared for my training. I don’t get angry when they can’t answer questions and I explain the answer to them.” Senior 4*

*“They want to get to something as the crow flies. They do not any problem with listening but they postpone everything without any effort no matter whether they learn or not. They may need to be more curious.” Junior 2*

*“When we leave the patient’s room, they can’t even say what I told them one minute ago, because they don’t listen and they don’t care. I wish the students were asking about the cases, did not wait for us to tell all the time.” Senior 1*

*“When some of the students are unenthusiastic, I tell them to watch their friends and learn something from their examination, but unfortunately most of them are watching out the window during clinical education” Junior 1*

*“I ask questions and the students know that. So they study to answer my questions.” Junior 4*

*“Unfortunately, there is also status in society, and they feel more comfortable while asking questions because I am a junior.” Junior 2*

Most of the participants stated that they expect students to ask questions to medical teachers. Generally, the participants try to motivate students to participate in discussions by asking them questions and insisting on getting answers from them if the students don’t ask questions. Although the participants have a strong opinion about motivating students none of them have a clear explanation of how should they motivate the students. The ways to motivate students

differed among participants. While one of the participants stated that she asks questions to motivate students, the other one stated that he doesn’t let the questions because he already teaches everything the students need to know.

*“I am waiting for them to ask questions. They should ask questions to teachers. I start asking questions when they do not. I don’t know what to do else at that point.” Senior 5*

*“I try to motivate them, I say “don’t hesitate to answer, if it is wrong, nothing will happen, ” Senior 1*

*“It is not a process that requires question and answer, I am drilling what they need to know to them.” Senior 4*

*“It is the responsibility of the teacher to establish balance and create a comfortable environment for everyone. That’s why I talk, I chat, so that everyone can have a rhyme. Then I start asking questions because they should know the answers already what I asked for.” Junior 3*

*“Teacher we have never seen a patient, we are very afraid of seeing patients, can you teach us,” they asked after the pandemic. Then the light in those students’ eyes made me very happy. I expect students to ask me for support like that” Junior 1*

*“This place is there for learning, you will do it wrong, you will say wrong, and it’s okay. Say whatever comes to your mind. That’s how I try to motivate them. Of course, I am waiting for them to know the basics of patient care” Junior 1*

## **Discussion**

We structured the discussion through emerging themes: issues in clinical education, teachers’ perspectives on clinical education, and the roles of students and teachers in clinical education. The findings show that clinical teachers are mostly keen on being teacher-centred. Even the junior ones who try to encourage students to improve interaction, the lack of medical teachers encouraging students to be involved the clinical education is the biggest barrier to student-centredness. The medical paternalist approach as a personal attitude of the clinicians may be one of the reasons for this barrier. The studies in our country show that the paternalist approach still has an undeniable effect on clinicians [21,22]. The

paternalist approach of the clinicians may cause the teacher-centred approach in the clinicians' teaching role.

### **The Issues in Clinical Education**

A clinical environment is one of the most powerful places to transform theoretical knowledge to practice [23]. Situational learning also defines the culture of the clinical environment as one of the indicators for learning [24]. Our study shows students learn from medical teachers, residents, nurses, and peers in the clinical context. So, improving the learning culture in the clinical environment will contribute to clinical education.

Another discussion on learning from nurses, residents, and peers is they are in the hidden curriculum and there is not any structured training the trainer programs for them. Although there are different learning resources in the clinical context, only the medical teachers take the training trainers course and it's a 5-day course. So, a well-structured training trainer program for clinicians, nurses and residents will improve learning in clinical environments [25]. The implementation and improvement of training trainer programs for all parties who are involved in clinical education can contribute to improving the quality of clinical education by structuring one part of the hidden curriculum.

The findings show that junior clinicians feel the limitations of structured mentorship programs. Because of the limitation of training trainer programs junior clinicians need to ask "how to teach" their seniors. Education in clinical environments is one of the examples of situated learning in health professions education [24]. As a component of situated learning, the communities of practice approach contributes to medical teachers' gaining competency in clinical education [24]. To improve the communities of practice component of clinical education faculty development programs should be developed and implemented.

One of the issues is the limitation to standardize clinical education for each student. The use of well-structured algorithms and guidelines is the recommendation to standardize clinical education for high-quality teaching [26]. The limitation to reaching the same type of patients

is one of the barriers to the standardization of clinical education. The implementation of simulation-based education in clinical years contributes to ensuring standardization of the clinical education.

### **Teachers' Perspectives on Clinical Education**

Medical teachers have the responsibility for patient management and the needs for this management [27]. The limitation of time is one of the barriers to effective clinical education. To handle this barrier, medical teachers tend to act faster and expect students to have prior knowledge [28]. They expect students to be ready for clinical education, otherwise, they think the effectiveness of clinical education would be limited. These views of medical teachers should also be taken into account in terms of clinical ethics. Because the students' readiness for clinical education also helps them to recognize ethical issues. Especially in the clinic, it may be necessary to make quick decisions in some ethical dilemmas. Being ready for clinical training is a prerequisite for correct ethical reasoning.

Being a physician for the greater good can be exhausting and cause burnout [29]. In our study, all participants mentioned they become an academicians for the greater good. Teaching for the greater good is the motivation to keep them engaged with clinical education in our study. Teaching may be the way of coping with burnout during patient care.

There are structured algorithms for clinical education. One of the recommendations for clinical education is tracking patient care outcomes [26]. In our study participants emphasize that they expect to see the students' competencies in clinical education. Tracking patient care outcomes and conducting discussions with the students on this topic would contribute to seeing students' competencies.

### **The Roles of Students and Teachers in Clinical Education**

Teacher identity is how teachers define themselves as a teacher, how they're attached to their teaching role, and what kind of teacher style they think [3]. Studies carried out in Türkiye are similar to the views expressed in Western countries about

the role and responsibilities of medical teachers. In Türkiye, medical teachers are expected to act ethical and fulfil their responsibilities as trainers [10]. The positioning theory addresses the social interaction and changes in the role of the clinician as a teacher, mentor, assessor etc. [30]. The challenge is clinicians have different perspectives on their teaching role. Some of them feel their priority is patient care, while others feel their priority is research or teaching. These different feelings have an impact on the professional identity of medical teachers [3]. So, it seems to be important to find ways for transform this difference into substantiality. There are different ways that medical teachers define their role in clinical education [2]. Medical teachers' define their roles as "helping students" to gain clinical competencies in our study. Teachers are positioning themselves as an authority with the responsibility of teaching students. All participants have their own style of "helping students" like as asking questions, giving tasks to complete, transferring knowledge etc. Students in clinical education need to take part in the clinical context, participate in patient care, and be active in social interactions to excellence in learning [31]. Situated interest is defined as an effective response and engagement in a learning activity [32]. Our study shows medical teachers are expecting students to be active in their learning and have the motivation to examine the patients. The medical teachers are expecting the students to have a high level of situated interest. However, increasing students' situated interest is up to their prior knowledge of the context, the characteristics of the learning activity, the learning environment, and the approach to the teaching of medical teachers. One of the roles of the medical teacher is to structure a learning activity which triggers students' situated interest. The structure of the learning activity needs to be appropriate to students' backgrounds and it should be the optimum level of difficulty to allow students to accept the learning challenges [32]. It seems the medical teachers' approach to teaching should be considered as one of the motivating factors in clinical education. So, it needs to be structured to contribute to students' motivation.

## Conclusion

This study showed the characteristics of the teaching approaches of medical teachers. One of the major findings of the study is the approach to teaching of medical teachers has an effect on clinical education in our country. The perspectives of junior and senior participants should be considered as a resource for improving the quality of clinical education. Also, this research will enlighten the needs assessment to develop an effective faculty development program. Still, further studies are needed including all stakeholders of clinical education: students, nurses, residents etc.

## Funding

This research has no support from any funding source.

## Conflict of interest

The authors declare there is no conflict of interest.

## References

1. Pype P, Mertens F, Helewaut F, Krystallidou D. Healthcare teams as complex adaptive systems: Understanding team behaviour through team members' perception of interpersonal interaction. *BMC Health Serv Res.* 2018;18(1):570. doi: [10.1186/s12913-018-3392-3](https://doi.org/10.1186/s12913-018-3392-3).
2. Stenfors-Hayes T, Hult H, Dahlgren LO. What does it mean to be a good teacher and clinical supervisor in medical education? *Adv Health Sci Educ Theory Pract.* 2011;16(2):197-210. doi: [10.1007/s10459-010-9255-2](https://doi.org/10.1007/s10459-010-9255-2).
3. van Lankveld T, Thampy H, Cantillon P, Horsburgh J, Kluijtmans M. Supporting a teacher identity in health professions education: AMEE Guide No. 132. *Med Teach.* 2021;43(2):124-36. doi: [10.1080/0142159X.2020.1838463](https://doi.org/10.1080/0142159X.2020.1838463).
4. Chen J. Exploring the impact of teacher emotions on their approaches to teaching: A structural equation modelling approach. *Br J*



- Educ Psychol. 2019;89(1):57-74. [doi: 10.1111/bjep.12220](https://doi.org/10.1111/bjep.12220).
5. Trigwell K. Relations between teachers' emotions in teaching and their approaches to teaching in higher education. *Instr Sci*. 2012;40:607-21. [doi: 10.1007/s11251-011-9192-3](https://doi.org/10.1007/s11251-011-9192-3).
  6. Bearman M, Tai J, Kent F, Edouard V, Nestel D, Molloy E. What should we teach the teachers? Identifying the learning priorities of clinical supervisors. *Adv Health Sci Educ Theory Pract*. 2018;23(1):29-41. [doi: 10.1007/s10459-017-9772-3](https://doi.org/10.1007/s10459-017-9772-3).
  7. Robins L, Smith S, Kost A, Combs H, Kritek PA, Klein EJ. Faculty Perceptions of Formative Feedback from Medical Students. *Teach Learn Med*. 2020;32(2):168-75. [doi: 10.1080/10401334.2019.1657869](https://doi.org/10.1080/10401334.2019.1657869).
  8. Knight LV, Bligh J. Physicians' perceptions of clinical teaching: a qualitative analysis in the context of change. *Adv Health Sci Educ Theory Pract*. 2006;11(3):221-34. [doi: 10.1007/s10459-005-4035-0](https://doi.org/10.1007/s10459-005-4035-0).
  9. Konishi E, Saiki T, Kamiyama H, Nishiya K, Tsunekawa K, Imafuku R, et al. Improved cognitive apprenticeship clinical teaching after a faculty development program. *Pediatr Int*. 2020;62(5):542-48. [doi: 10.1111/ped.14095](https://doi.org/10.1111/ped.14095).
  10. Keleş Ş, Demirören M, Turan S, Sayek İ. Ethical responsibilities of the educators taking part in the education of health professionals [in Turkish]. *STED*. 2020;29(4):287-97. [doi: 10.17942/sted730054](https://doi.org/10.17942/sted730054).
  11. Nishiya K, Sekiguchi S, Yoshimura H, Takamura A, Wada H, Konishi E, et al. Good clinical teachers in pediatrics: The perspective of pediatricians in Japan. *Pediatr Int*. 2020;62(5):549-55. [doi: 10.1111/ped.14125](https://doi.org/10.1111/ped.14125).
  12. Fredholm A, Manninen K, Hjelmqvist H, Silén C. Authenticity made visible in medical students' experiences of feeling like a doctor. *Int J Med Educ*. 2019;10:113-21. [doi: 10.5116/ijme.5cf7.d60c](https://doi.org/10.5116/ijme.5cf7.d60c).
  13. Steinert Y. Faculty development in the health professions: A focus on research and practice: Springer. 2014.
  14. Cleland J, Durning SJ. *Researching medical education*: John Wiley & Sons. 2022.
  15. Harden RM. The integration ladder: A tool for curriculum planning and evaluation. *Med Educ*. 2000;34(7):551-7. [doi: 10.1046/j.1365-2923.2000.00697.x](https://doi.org/10.1046/j.1365-2923.2000.00697.x).
  16. Cheek C, Hays R, Smith J, Allen P. Improving case study research in medical education: A systematised review. *Med Educ*. 2018;52(5):480-7. [doi: 10.1111/medu.13469](https://doi.org/10.1111/medu.13469).
  17. Hennink MM, Kaiser BN, Marconi VC. Code saturation versus meaning saturation: How many interviews are enough? *Qual Health Res*. 2017;27(4):591-608. [doi: 10.1177/1049732316665344](https://doi.org/10.1177/1049732316665344).
  18. TEPDAD. The Current List of Accredited Medical Schools [in Turkish]. (Accessed 20.10.2023). <http://www.tepdad.org.tr/akredite-egitim-programlarinin-guncel-listesi>.
  19. Morgan DL, Morgan DL, Krueger RA. *The Focus Group Guidebook*: Sage. 1998.
  20. Kiger ME, Varpio L. Thematic analysis of qualitative data: AMEE Guide No. 131. *Med Teach*. 2020;42(8):846-54. [doi: 10.1080/0142159X.2020.1755030](https://doi.org/10.1080/0142159X.2020.1755030).
  21. Avci E. Should physicians tell the truth without taking social complications into account? A striking case. *Med Health Care Philos*. 2018;21(1):23-30. [doi: 10.1007/s11019-017-9779-9](https://doi.org/10.1007/s11019-017-9779-9).
  22. Irmak N. Right to refuse treatment in Turkey: A diagnosis and a slightly less than modest proposal for reform. *J Med Ethics*. 2016;42(7):435-8. [doi: 10.1136/medethics-2015-103266](https://doi.org/10.1136/medethics-2015-103266).
  23. Liljedahl M. On learning in the clinical environment. *Perspect Med Educ*. 2018;7(4):272-5. [doi: 10.1007/s40037-018-0441-x](https://doi.org/10.1007/s40037-018-0441-x).
  24. O'Brien BC, Battista A. Situated learning theory in health professions education research: A scoping review. *Adv Health Sci Educ Theory Pract*. 2020;25(2):483-509. [doi: 10.1007/s10459-019-09900-w](https://doi.org/10.1007/s10459-019-09900-w).

25. Samuriwo R, Laws E, Webb K, Bullock A. "I didn't realise they had such a key role." Impact of medical education curriculum change on medical student interactions with nurses: A qualitative exploratory study of student perceptions. *Adv Health Sci Educ Theory Pract*. 2020;25(1):75-93. doi: [10.1007/s10459-019-09906-4](https://doi.org/10.1007/s10459-019-09906-4).
26. Narayanan M, White AA, Gallagher TH, Mookherjee S. Twelve tips for teaching quality improvement in the clinical environment. *Med Teach*. 2018;40(10):1060-6. doi: [10.1080/0142159X.2017.1388501](https://doi.org/10.1080/0142159X.2017.1388501).
27. Hauer KE, Ten Cate O, Boscardin C, Irby DM, Iobst W, O'Sullivan PS. Understanding trust as an essential element of trainee supervision and learning in the workplace. *Adv Health Sci Educ Theory Pract*. 2014;19(3):435-56. doi: [10.1007/s10459-013-9474-4](https://doi.org/10.1007/s10459-013-9474-4).
28. Palanisamy D, Xiong W. An interactive approach to teaching the clinical applications of autonomy and justice in the context of discharge decision-making. *MedEdPORTAL*. 2020;16:10992. doi: [10.15766/mep\\_2374-8265.10992](https://doi.org/10.15766/mep_2374-8265.10992).
29. Shapiro DE, Duquette C, Abbott LM, Babineau T, Pearl A, Haidet P. Beyond burnout: A physician wellness hierarchy designed to prioritize interventions at the systems level. *Am J Med*. 2019;132(5):556-63. doi: [10.1016/j.amjmed.2018.11.028](https://doi.org/10.1016/j.amjmed.2018.11.028).
30. Phillips D, Fawns R, Hayes B. From personal reflection to social positioning: The development of a transformational model of professional education in midwifery. *Nurs Inq*. 2002;9(4):239-49. doi: [10.1046/j.1440-1800.2002.00145.x](https://doi.org/10.1046/j.1440-1800.2002.00145.x).
31. Sheu L, Burke C, Masters D, O'Sullivan PS. Understanding clerkship student roles in the context of 21st-century healthcare systems and curricular reform. *Teach Learn Med*. 2018;30(4):367-76. doi: [10.1080/10401334.2018.1433044](https://doi.org/10.1080/10401334.2018.1433044).
32. Fuoad SA, El-Sayed W, Marei H. Effect of different teaching/learning approaches using virtual patients on student's situational interest and cognitive load: a comparative study. *BMC Med Educ*. 2022;22(1):763. doi: [10.1186/s12909-022-03831-8](https://doi.org/10.1186/s12909-022-03831-8).