Research Article

Effective Teaching from Medical Basic Sciences Faculty Members’ Perspective: A qualitative Study

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Abstract: Teaching is one of the most important components of education around the world is very complex and multi-dimensional. So there is no agreement on its nature and effectiveness. Because of the importance and role of teachers in effective teaching, this study aimed to explore the views of faculty members about effective teaching. This qualitative study was done by using the conventional content analysis. In this study members of faculty of sciences at Fasa University of Medical Sciences were selected by purposive sampling and interviewed in a semi-structured and open method. Data saturation was reached after interviews with 9 participants. After data collection, recorded interviews were transcribed and reviewed. Data analysis was performed using conventional content analysis method. First primary codes were extracted and then same codes were categorized in a class together. Then basic classes of similar conceptual and semantic relationship were merged and eventually after frequent review of data, initial codes and classes, main themes were derived. By using of analyses of writings, four major themes which each had several sub-themes emerged. Main themes found in relation to effective teaching include teacher’s competence, openness in communication with students, professional ethics, and predisposing factors. Results of this study show that teacher with academic proficiency, being up to dated and clinically experienced, through openness and flexibility in relation to the learner and utilizing the content in a variety of teaching methods, considering learner’s rights can attract learner’s interest and attention for active learning. Therefore in order to improve the effectiveness of teaching and learning it is recommended to consider these factors in the curriculum.

Keywords: effective teaching, teacher, qualitative study

INTRODUCTION

Teaching is one of the most important components of any professional education around the world [1], and is very complex [2], research on teaching has a long history and many researchers have identified the elements of an effective teaching, but as teaching is dynamic, multi-dimensional and complex [3] there is no agreement on its nature and effectiveness. Training the learners who would be the next generation of society is essential to the future development of the country. Teachers usually are the most important factor in learning.

One of the main tasks of the faculty members is teaching the students. Obviously the quality of the teaching can enhance motivation, vitality, and innovation and student performance [4]. Teacher's role is to provide the necessary context for learning, offer right experience to learner, and planning activities that learners engage intellectually and practically. Effective teaching in university education in dealing with multiple aspects [5]. Parker Palmer argues that good teaching is the result of communication between the teacher and the subject, the learner and the interaction which is established in the class [6]. Teacher who is dominant it the theme but fails to communicate and express it in an understandable way, is like a heart surgeon who knows surgery very well but has not touched a surgical blade [7]. Concerns about the quality of education in universities have led to numerous studies to investigate some features of teaching [8]. Ralph in his study has referred to the five characteristics of effective teaching from students’ prospective. These features include: commitment to learners, knowledge of the topic, organizing and managing the environment, hope to improve, and cooperation with others [9].
Investigations in Iran have shown that the majority of studies in the field of effective teaching have been done using a quantitative approach [10] and that there has been a very limited number of qualitative studies in this field, and that most have focused on studying universal views related to effective teaching, and/or focused on some teaching strategies such as cultural factors effective in teaching [11], model-centered teaching [12], creative teaching [13], the role of human relations in teaching [14], and similar such things. Najafi Kalyani et al. in a qualitative study established that effective teaching from the viewpoint of students involves preparation, dynamism, valuation, the individual characteristics of the teacher, preparation, evaluation, applicability of the content, and access to resources [15]. Mohadesi in his qualitative study demonstrated the differences between the views of students and professors in relation to indicators of effective teaching. In this study, the most important aspect of effective teaching from the viewpoint of students was effective communicational skills and from the viewpoint of professors was the method of teaching. [16]. Based on the studies of Shabani and Roki et al., there is a significant gap between the current quality of teaching and the desired conditions [17]. According to studies, despite the fact that professors are of the most effective factors in education, teaching at a university level is facing a lack of quality, and although many professors extraordinary professional skills, they lack the preparation, education, and techniques required for effective teaching. Many also have little knowledge about teaching models and theories [18], and teaching in universities is not always effective in making the learning of students possible. Therefore, considering that having a correct perception of teaching effects the classroom activities [17], and considering the importance of the role of professors as the most essential factor in teaching and student access to learning, this study aimed to explore the perceptions of professors on effective teachers.

METHODS

The current study took a qualitative approach and analyzed the content of contracts. In this study, in order to obtain information, strategic sampling was carried out. The academic staff of Fasa University of Medical Sciences underwent open and semi-structured interviews. After coordination with participants, interviews were conducted in the faculty office. During the interview, the purpose of the study and its confidentiality were emphasized and informed consent was gained to record the interview. The interview commenced with a simple question regarding the participants' experiences in teaching, and, in line with the overall objective of the study, continued with a fundamental question regarding the "characteristics of effective teaching". The duration of each interview was between 45 to 90 minutes. In order to obtain different participant viewpoints, the participants varied in terms of work experience, gender and marital status. In this study, after interviews with 9 participants, a saturation of information was achieved. Data analysis was performed using conventional content analysis. In order to analyze and assess the data obtained, the interview contents were transcribed and typed. In order to gain deep familiarity with the contents, the interview transcripts were reviewed and studied many times. In order to identify key words and concepts within the interviews, the interview transcripts were reviewed line by line and a code was assigned to each key phrase or word.

Coding was done by using of words from the participants or the concept of the text. These codes in fact are the meaning of crucial terms of the participants' statements.

After examining the similarity of the extracted codes and removing similar codes, 140 different primary codes identified. Then similar primary codes were categorized in a class together and primary classes were formed.

Then primary classes which were similar in terms of conceptual and semantic relationship were merged together and named properly, classes were formed. Repeated revision of data, codes and primary yielded the formation of the main themes.

To increase the credibility and acceptability of data, long term interviews with participants, repeatedly reading of interviews and drowning in data, using of checking method which is returning a number of interviews to participants after coding them to evaluate agreement on the themes and interviews with participants who have teaching experience and different gender, were used.

In this study, in addition to the consent of participants and permission for the recording of the interview, anonymity of the participants at all stages of the research and releasing data was maintained. Participants were allowed to leave the study at any time as well.

FINDINGS:

In this study, views of the teaching faculty were categorized into four major themes: openness in communication with students, lecturer competence, professional ethics and Predisposing factors. These themes are listed below explaining the views of lecturers.

1-Openness in communication with students

Relationship with students and its key role in teaching were considered by participants in the study. The main
class consists of sub-classes of interaction, flexibility, friendly communication and students’ acceptance.

Lectures believe interact with students can create opportunities for their participation and dynamism in training activities and will affect the quality of learning. Some comments by the participants in this concept are:

“...Act in a way in which student could express himself and his comment. In this situation, sometimes they even raise through their personal problems...”

Another participant stated:

“...Sometimes it's just the first day of classes and we start warning them just under these circumstances you can pass my course. We inspire our students that they come to pass a course but classroom should be part of social life so that student can feel comfort in it, trust it and participate in the whole process which is happening...”

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Participants in the study expressed that flexibility in relation to student helps to develop a student-centered learning environment and students will be encouraged to participate in learning.

One participant stated in this regard:

“...Considering boundaries in relation to the students can create gap between us and them and forms a domineering attitude, as if you are looking at them from a higher position...”

Or another participant stated:

“... Being tough and rough, will keep students away from us...”

From participant’s perspective, emotional element in communication with students has a major role. They think in a friendly communicating situation, class would not be rough and will prevent students’ impatience during teaching process. In this case, one participant stating:

“...Students expect lectures to sit with them and not just to come and give a speech but to chat to them at the same students’ level and cheer them when meeting them, listen to students to see what they say and do so that their feeling is involved into the subject and they can interact with it...”

Participants stated that new generation of students have different behavioral characteristics in the field of learning and study that must be understood and accepted. One participant stated in this area:

“...Older lecturers should try to know this generation more. Cope with them, accept them, get along with and accept their spirit...”

Another participant stated:

“...Based on my experience, sometimes students are even considered to be rude! But they don’t mean to bother you, their style is like that...”

Base on above comments, lecturer- students relationship, is fundamental in effective teaching and can be considered as the first duty of the lecturer which will not be only limited to the classroom. Therefore, to have effective teaching it is critical to minimize the relational gap in the teacher-student relationship. Too much rigor and determination would keep students far away from lecturers. Lecturers should establish a friendly and flexible relationship with students and listen to their comments to create an environment for their active participation in the learning process and in future it will help them not to have any problem in communication at work place.

From this point of view, in teaching a positive relationship with students can be taken as an advantage and if is accompanied with constructive interactions can help their academic development.

2-Lecturer competence

This main theme consists of several sub-themes including academic proficiency, skills and expertise in teaching and classroom management.

Participants in this study expressed that scientific proficiency of lecturer is one of the factors which can make teaching content attractive to students. In this context, one participant stated:

“...the first priority of lecturer should be teaching, rather than not being able to hold the classroom without books and slide...”

Participants in this study believe lecturer proficiency can enhance teacher’s responsibility to meet the students’ educational needs. One of the participants in this regard stated:

“...I ask my experiences as a scenario, a question or in a way that students may get involved in it practically which will be remembered by students in her/his bedside situation better...”

Participants acknowledged that the combination of theoretical and practical skills while teaching represents teacher's proficiency and it has
positive impacts on teaching and learning. One of the participants in this regard stated that:
"...We put forth a series of general theories...we make them so complicated.... so you can see that doctor are bewildered if the patient had malaria? Or if the goods have trouble? ...".

In the words of the teachers participating in the study, using appropriate strategies is of essence for teaching, and teachers need to learn how to learn. One of the participants commented in this regard as follows: "... Science is something changing and current. ... In the future, they will go out from the institutes and play their roles. In fact, they must learn how to learn in order to meet their educational needs later..."

Another participant said:
"...Why do we think that we should always push them? A student should take 90% responsibility of his own learning. Injecting everything is not possible...

According to the teacher participants of the study, it is not possible to convey everything; however, it seems possible to use different teaching skills to get the learners involved in learning and learner and apply what they have learned by their own efforts.

The participants highlighted the significant role of teacher in learning and its impact of teaching approach. In their perspectives, class management skills and designing educational activities would provide the conditions for achieving educational goals. Regarding the class management skills, one of the participants mentioned that:

"...It's not always the student 's fault sleeping in class. In 80% of situations, it's my own fault because I couldn’t have made the lesson interesting for her and place everything in its own place ...

Another participant stated that:
"...How much contextualization is pre-prepared for a session? how vibrant and energetic are we? How do we use existing resources? ...

The above statements suggest that teachers should continue to study, develop their academic abilities, and plan their efforts to be up-to-date. The teacher should also have the ability to convey and learn. In other words, they should have acquired the knowledge of learning theories and teaching strategies in order to get students involved in learning and provide them useful learning experiences. Learners usually tend to have experienced teachers with ability. In addition, the teacher must be able to manage and control a class. Teacher's ability in classroom organization and teaching process management leads to their effective teaching.

3-Professional Ethics

Another major category extracted from teachers’ statements was professional ethics. This concept contains two other subcategories (namely being a model and observing the students' rights).

From all participants viewpoints, the teacher is a model for learners and he can transfer experience and professional attitude to students in this way. They claimed that the knowledge, skills and values can be learned through pattern making. One of the participants stated that:
"...It seems to me that students look at me most of the times and say that you are a student at the shrine and preach but where did you put your words in action?...

Participants in the study indicated that the student has the right to be provided for his educational needs. From their perspective, teachers should perform their professional duties for students as well. One of the participants said:
"...I must do observe their right and teach calmly in an understandable manner. I should provide a situation far from any concern and anxiety for class...."

Another participant told us that:
"...In the future, these students are involved in taking care of people health so they have the right to learn the application here. If they don’t learn here, what will we expect them? ...

Another participant also stated that:
"...When the teacher comes late to class or to answer his cellphone, how can he teach his students that classroom time belongs to everyone in order for his students to respect the patient's right tomorrow..."

Given the above, the student s are always taking care of their teacher's behavior and make them their own models and involve them in their own social life and career. Therefore, teachers speeches should be in accordance with their actions and teachers should be a suitable model for their students in their professional relationship with the students. Furthermore, students have the right to be provided with the best education. As a result, teachers should be aware of their professional responsibilities and appropriately adhere to their commitments to students and guarantee the effectiveness of the learning process.

4-Predisposing factors

The results revealed that the majority of participants consider predisposing factors as one of the main factors in teaching. This main themes contains different aspects of training including preparation, motivation, training resources. From their perspective,
preparation helps not only the training content to be provided in a desirable way but also the objectives of the class to be achieved. For example, some participants mentioned the following points:

"...Studying is the same as transplantation. Transplantation may be well but if pre- and post-cares are bad, it will be rejected. It seems to me that our teaching is nice but our students are not any more interested out of the class and they are reluctant. Perhaps, we should sometimes let students have fun and their pockets stuffed with money instead of expecting them to read all times..."

Another participant stated that:

"...Sometimes we should not expect a class of 40 students to be completely our subservient since one of them is hungry, another one is falling in love, other one is out of money, and the other has an ill father..." Considering the teachers preparation, participants also discussed that when:

"...One day I am in mess and I enter the class wearing dirty clothes and shoes, it does have some effects on the students..."

Another participant in the study expressed that:

"...have you ever noticed that when you go to a congress, you teach much better for two weeks in comparison to the times you have continuously taught for 3 months without any entertainment and facilities...."

The participants also claimed that motivated students are involved in a more thorough and precise learning and devote more time to it. In this context, some participants stated that:

"...I think that some works need a little natural tendency to be done. Some medical students tell me they are not interested in medicine rather I like to be a musician or a graphist. We sometimes make our children to study medicine because their cousins did it...."

The participants in this study regarded providing adequate space, facilities, and resources and updating scientific and equipped laboratories necessary for teaching. One of the participants mentions that:

"...Learners get tired of listening and course contents lose their attractiveness. As a result, we should consider variety in lecturing and use attractive slides and models to make the lesson more tangible for them..."

Statements showed that having preparation and motivation and providing appropriate educational resources are among the most important and influential teaching factors. If people are motivated to learn and participate actively in class and be prepared to participate in class, they will enjoy their class and will have a better academic performance.

DISCUSSION

In this research, perspectives of faculty members of department of basic Sciences of Fasa University of Medical Sciences on effective teaching were studied. The findings showed that from the teachers’ viewpoints, openness in communication with students is essential to effective teaching. Health care professions need non-cognitive aspects, such as empathy, communication and professional behavior that is associated with the character and professional practice of a professor [19]. Vygotsky's view of learning cannot be separated from the social context. Knowledge, attitudes and values of the individual are built in interaction with others and the teacher as a facilitator should use teaching strategies that encourage learners to collaborative learning [20]. The results of the study by Schmidt and colleagues, using structural equation modeling indicated that both teacher’s expertise and mastery of the subject, and his ability to express in a way that is appropriate for the students’ comprehension level are required for learners being able to learn. This study showed that in order to encourage a learner to learn, an atmosphere is needed which facilitate the transfer of ideas, and satisfying these conditions needs a combination of personal qualities of teachers, and their ability to communicate informally with students along with an empathic attitude [21]. In another study by Das et al, students and professors also considered being able to communicate clearly and respecting the students’ choice among the essential features of a good teacher in the classroom context 22. Findings of several other studies have also confirmed that from the teachers’ viewpoint the power of communication is among the most important indicators of effective teaching [23, 24]. Students have also emphasized on interpersonal communication of professors as an effective teaching factor [15]. Thus, re-educating teachers on how to communicate with students is paramount, and through taking some measurements, classroom atmosphere and educational interactions should be guided in such a way that encourages an open communication between teachers and students. Educational environment associated with communication and mutual respect reduce stress and promote confidence in students, and this facilitates the learning process, and also provokes their interest to the profession and health care services.

Other findings of this study indicate that having scientific competence and skill is considered the strength of a teacher to teach effectively and reduce the gap between theory and practice. A professor with scientific competence and clinical experience can express content in a way that is understandable to learners. He knows when to intervene, what to present, and how to examine discussion clearly, how to bring example, or to give necessary explanation. According to
Most’ view point the teacher can be effective in this context via having mastery over the subject and being interested in learning students’ life [25]. Studies conducted in this area show the importance of considering the scientific mastery of the teacher in teaching. Kelly et al. in a study investigated various behaviors of the teacher in the classroom that have impact on teaching effectiveness. Based on their findings, interpersonal care, supportive skills, professional competence, and communicative skills of the teacher are among the factors of teaching effectiveness. The study by Finn et al. on the relationship between the validity of teacher’s behavior with educational consequences in a learner indicated that behaviors of competence, diligence, and care, increase learner’s ability to learn [27]. Komos’s study on part time faculty members’ views regarding the effectiveness of teaching demonstrated that the ability of teacher and professional teaching are among important indicators of effective teaching [28].

Capability of teacher in teaching skill, and facilitating active participation of students are among other findings of present study. This finding is consistent with the theory of constructivism. According to constructivism, educational curriculum should be designed in such a way that teacher plays the role of facilitator in the teaching process, and students as active participants are considered to be in the center [29]. In this way, teacher will give learners chance of achieving solutions through relying on their own efforts, and will consider the development of thinking and reasoning processes to be more important than gaining specific knowledge [30]. Furthermore, it is in line with the presuppositions of the theory of adult learning stating that independence and autonomy of learners in learning must be maintained [31]. New generation of students are systematically different from the previous generation. They are different from the students of previous decades with regard to characteristics such as personality, character, self-realization, expectations and values. In addition, due to technological advances in terms of learning, they are less likely to read a book, they want the teacher to treat them with greater flexibility in this regard [19]. Findings of several studies also suggest that teachers should prepare students for active learning through using a variety of teaching methods and allowing students’ participation in the discussion and supporting new ideas [13], provide learners with appropriate development of research, curiosity, autonomy, and learning [32]. The study by Fazeli on the comparison of the academic culture between Britain and Iran indicates that education in Britain is based on maintaining and respecting autonomy; individuality and self-reliance approach of students. Teacher and the educational system are only considered as facilitators, consultants and guidelines. While in Iran, university education lacks all the aforementioned features, and interests and individuality of students play secondary roles in education [33]. These facts in teaching need to be well considered.

Capability and competence of teachers in skills of teaching and making subject matters practical are among other findings of the present study. It is very important how to transfer materials into learners’ mind. Knowing how to transfer content to learners and having mastery of teaching skills play a key role in providing learning opportunities for students [5]. Research findings of the study by Najafi Keliani et al. showed that teaching practical and necessary content result in students showing interest to lessons [15]. So, teachers can participate students in the teaching process through employing a variety of teaching methods.

The most important theoretical significance of this research can be considered as entering moral point of view into the field of teaching. This view not only expands the field of teaching, but also increases the attention which is paid to the ethical dimension in the process of learning. The findings of this study suggest that teachers believe that they should be a good practical model for students in order to inspire them to learn and ultimately to serve the community. Lyon et al showed in a study that students while facing fine model, even when the subject of teaching is not ethics, become motivated to a greater extent, and people who are involved in teaching students act as a role model, and students learn medical ethics from them [34]. Elniki and Cooper identified four behaviors as students’ understanding of the behaviors associated with effective teaching which include mastery of knowledge and skill, decision-making, respect for students and providing good role model (Michelle Elniki). When teacher is a weak model for learners, and does not adhere to what he says, it could lead to improper or even unethical behaviors in learners [35]. The study by Holopaeen et al. in Finland showed that the level of teacher commitment to the role of teaching leads to different abilities in teachers [36]. Relying on American Instructors Association, Imainpoor writes that issues such as commitment to civil laws and customs such as effort and perseverance, taking responsibility, cooperation, conscientiousness, loyalty, honesty and truthfulness, respect for the law, respect for self and others are among the responsibilities of teachers [37]. Base on the findings of the present study teachers have emphasized on the role of contextual factors such as teachers and students preparation, having motivation and accessing equipment and resources needed to teach effectively. Based on studies, having motivation is considered as an important factor in creating an appropriate environment for learning and effective performance at work and profession, in a way that it has a stronger effect than all other factors on learning to the extent that it is said that three affecting factors on
learning include motivation, motivation and motivation [38]. Students with high motivation are more active during the educational course and achieve more successes [39]. Coca and Hin found in their quantitative study that teachers play significant role in motivating students and making them pay attention in the class [40]. Quoting from Kormen and Piker, Talebzadeh writes that using active teaching methods, teachers being interested in teaching, and using educational and laboratory equipment are effective in increasing student learning motivation [41]. Many factors, including the level of commitment of teacher to his work, sufficient preparation for teaching, the degree of institutional support, and providing financial condition can affect teaching [1]. Teachers must be well prepared to teach. Such a preparation includes various areas such as having emotional stability. Sometimes the intensity of emotional instability of teachers reaches the extent so that students cannot ask their questions or concerns about the possibility of being humiliated [1]. In addition to the professional preparation, teachers, to be able to transfer content appropriately, should be equipped with the knowledge of pedagogy, psychology and methodology [1]. Studies show that teaching of teachers has two dimensions; first dimension pinpoints the intellectual ability of teachers to motivate intellectual excitement in class which includes clearness of teaching, teachers’ relationship with students, and knowledge, skills and flexibility of teachers. Second dimension is based on psychology of class [42]. The findings of the study by Yaghoobi indicate that characteristics of teacher, skills and abilities of teacher, motivational factors, and disciplinary features influence the increasing of teaching effectiveness [43].

The limitations of this study may be due to the interruption in the interview as students were visiting professors, or professors responding to phone calls, despite the previous arrangements. The findings of this study indicated professors’ perspective on effective teaching and factors affecting it. Perception of teachers' views regarding effective teaching will help authorities of medical education research development centers to take necessary measures to improve the quality of teaching in universities, planning educational programs, and also providing special evaluation forms for professors.

CONCLUSION

Results of this study suggest that effective teaching not only requires contextual factors such as readiness and motivation of teacher and students, but is affected by teacher competence in subject matter knowledge and application of teaching skills as well as the teacher’s ability in class management. Furthermore, the openness of communication with students and commitment to professional ethical values such as being a role model and respecting the rights of students provide grounds for an effective teaching. Therefore, it is necessary for the above factors to be considered in the teaching process.

REFERENCES

4. Adhami A, Reihani H, Fattahi Z, Nakhaei N, Fasihi Harandy T; Comparison of student assessment of educational performance of the faculty with the teacher's self assessment in Kerman University of Medical Sciences. Strides in Development of Medical Education. 2005.
7. O'Banion T; Teaching & Learning in the Community College: ERIC; 1994.
11. Amin Ms, Jafari Sh, Saeidi Rm, Aminyazdi A; Cultural Factors Affecting Creative Teaching From The Teachers'perspectives Of Nursing And Midwifery Faculty Of Mashhad University Of Medical Sciences.
14. Nasr A, Abedi L; sharifian F; Effect of human communication in effectiveness teaching with
23. Zohour A, Eslaminezhad T; Effective Teaching Criteria As Viewed By Kerman University Of Medical Sciences' students. Payesh. 2002.
33. Fazeli N; A Comparative Study Of Iranian And British Academic Cultures An Anthropological Investigation Into The Inefficiency Of Iranian Academic Education. Iranian Journal Of Anthropology. 2003.
39. Shackibaei D, Montazeri N, Rezaee M, Yari N; Faculty lecturers’ Attitudes Towards some Educational Indices at KUMS (2002). Journal
of Kermanshah University of Medical Sciences. 2004;8(1).


