

Teacher's effective teaching criteria as viewed by the students of Kerman University of Medical Sciences

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ABSTRACT

Background: The most valuable element in a medical university is its faculty members and one important function of them is teaching, but one major problem in university education is the lack of effective teaching criteria to assess this main function of faculty members.

Purpose : To identify the most important feature of effective teaching from students point of view

Methods: A self-administered questionnaire assessing the effective teaching criteria from the students' point of view was developed. It was filled by the students and the result was analysed with SPSS.

Results: Of all participants 51% were female. The average age was 22.1 ± 2.46 for females and 24.6 ± 4.6 for males. 72% of the population were single, 27% were married and the remaining were divorced "being knowledgeable" with 86.6 percent was the first priority in "knowledge seeking" feature ($P < 0.01$). In "Communication ability" feature, 39.7% of the students mentioned "promoting students participation in discussions" to be the most prominent character. In "Personality" feature, 28.8% of the respondent believed that "fluent explanation" was the most essential character. Students decided that "Teaching method", "communication ability", "knowledge seeking" and "personality" were the required features for effective teaching in the descending order.

Conclusion: Our results showed that students considered "teaching method" as the most essential feature of a professor's effective teaching, but similar studies in other universities of medicine shoed other factors personality. Further study seems reasonable since students as one major component of education will produce better outcomes, personally and professionally, they are satisfied with their teachers.

Key words: EFFECTIVE TEACHING

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Introduction

The most valuable element in a medical university is its faculty members. The responsibilities of a university faculty member can be divided into seven categories: Teaching, research, patient care, management, scientific activities beyond the university borders, personal development and civil activities.

Each faculty member may be more active in one or more of the above mentioned fields according to his/her abilities, capacities, personal interests, different conditions and organizational needs, yet teaching is one of his/her major tasks, the quality of which has an enormous effect on elevating both the students' and the teacher's motivation, innovation, wittiness and effectiveness (1-3).

One major problem in university education is the lack of effective teaching criteria. Effective teaching is a collection of the teacher's

characteristics and functions through which educational goals are met. Undoubtedly learning process is affected by a number of factors; such as student behaviours, willingness to learn, curriculum content, environment and physical resources. However, the researchers have realized that effective teaching is the most important factor in educational development and students' learning. (4-5).

It is more difficult to assess a faculty's teaching activities than his/her research activities as there are no adequate criteria available for the first feature evaluation. The research activities of a faculty member are assessed based on his /her research project(s) and the articles he/she published in established scientific journals. This may explain why in most universities the promotion of the faculty members are heavily based on their research activities. Studies have shown that there has been a dramatic fall in the teaching quality in universities in which research

activities is the main determinant of faculties promotion (4,5) and presumably this is the reason for decreasing quality of teaching and learning in the Iranian universities in the recent years.

Teaching evaluation without having effective teaching criteria, doesn't improve the education quality. It actually does exactly the opposite. There are several methods to develop the required indicator for effective teaching including surveys of the directors, colleagues, teachers and students (7, 8).

The faculty members have mentioned that being informed about the student's view points of effective teaching is of great importance in increasing the teaching quality. They believe that one best means for determining effective teaching criteria is seeking for the students opinions as they are the group directly involved in the learning process (9, 10). Some studies have disclosed that there are disagreements between the teachers and students characteristics of effective teaching. (11,12). For instance, a study has revealed that student consider knowledge seeking as the most essential criterion, whereas teachers consider "communication power" as the most critical feature for effective teaching(11).

The results have shown that the student's concept of effective teaching criteria differs according to their level of education, field of education, main reason for seeking higher education. (13-15). For instance, those who had just entered the university valued communication power much more than the student of higher levels (15). In this study we have assessed the student's opinions while considering their gender, marital status, educational level, educational field, university educational background and goals of higher education.

In Iran some sporadic surveys have been done to identify the effective teaching criteria from the students' point of view, yet these studies rarely addressed the issue by the for category of: knowledge seeking, teaching method, communication ability and personality (16,20). Moreover, in most of the previous studies the alternatives offered in the questioners were not designed according to "ranking scale" and therefore the priorities were not recognized. In this research we review the results of a large number of previous studies in advance and then determined the most important criteria of effective teaching for each behavioural feature separately. (the behavioural features were: knowledge seeking teaching method, communication ability and personality). The students' choices were in ordinal order.

Materials & Methods

In this survey, which was carried out in fall 2001 the students of Kerman Medical University filled a questionnaire on effective teaching criteria. According to previous studies the minimum sample size had to be 320 students (confidence interval = 95%) and to make it even more reliable we increased it to 350. Considering the total number of students studying for different degrees in Kerman Medical University and the different discipline 15% of the students studying for different degrees (AA,BS,MS) were selected randomly and the self-administered questionnaire were filled out by them.

The questionnaire consisted of two sections. The first was designed to determine the student's characteristics (gender, field of education, level of education, main goal of education and university education background); and the second identified main features of effective teaching from the students view points. The second part consisted of four items for knowledge seeking, five in teaching method, five in communication ability and nine in personality (a total of 23 items). The students were asked to rank the items of each feature (to make a ranking scale). After designing the questionnaire by means of valid Iranian and foreign resources, its face validity was assessed by experts. The reliability of the questionnaire was 0.75 for knowledge seeking, 0.82 for teaching method, 0.76 for communication ability and 0.81 for personality feature by means of a retest at 12 day following the initial test. Thirty five students participate in the test.

The data was analyzed using SPSS for chi-square test. To calculate each character's point percent, the character in the lowest rank received zero point and the characters which had gained higher ranks, received 1, 2 ... points, respectively. Then total points allocated to each character and its point percent were calculated (taking the maximum point possible into account).

Results

Of all participants 51% were female. About 14% were between the ages 18 and 20, 59% were 21 to 24 and the others were older. The average age was 22.1 ± 2.46 for females and 24.6 ± 4.6 for males. ($P < 0.01$). 35% of the students had studying in higher education for 1-2 years 44% spent 3-4 years and the rest had been more than for 4 years in higher education.

Of all group 72% were single, 27% were married and the remaining were divorced. 12% of them were students of AA degrees (nursing on health care fields), 37% were studying for BS (health care, nursing, management or paramedical fields) and the rest of them (51%) were studying for MS degree.

The results revealed that the students considered "being knowledgeable", "introducing up-to-date subjects", "teaching experiences" and "research experiences" as the most critical items in the "knowledge seeking" feature. "Introducing up-to-date subjects", "teaching experiences" and "Research experiences" received 16%, 5.2% and 4% respectively (Table 1). To calculate the proportion of each character (out of the maximum point possible), 3 points was given to the character chosen as the first priority and 2 and 1

points was given to the following priorities. As illustrated in the first figure, "being knowledgeable" with 86.6 percent was the first priority in "knowledge seeking" feature ($P < 0.01$).

In the "Teaching method" feature, 39.5% of the students named "Transferring the subject clearly" as the most important character. "Preparing the class for thinking and discussion" with 25.7%, "logical organization of the subjects" with 15.7%, "establishing the relation of the subject with respective job responsibilities" with 11.4% and "exploiting educational facilities" with 7.7% occupied the subsequent steps (table 1). As the second figure shows "Transferring the subject clearly" was the most valued character in the "Teaching method" feature (with 74.5 point percent out of the maximum point possible) ($P < 0.01$).

Table 1: Priorities in effective teaching criteria as viewed by students

Feature	Priority Character	First		Second		Third	
		No.	%	No.	%	No.	%
Knowledge Seeking	Knowledgability	262	74.8	49	14	27	7.7
	Introducing up-to-date subjects	56	16	141	40.3	104	29.7
	Teaching experiences	18	5.2	97	27.7	114	32.6
	Research experiences	14	4	63	18	105	30
	Total	350	100	350	100	350	100
Teaching Method	Transferring the subject clearly	138	39.5	120	34.3	52	14.8
	Preparing the class for thinking	90	25.7	74	21.1	85	24.4
	Exploiting educational	55	15.7	93	26.6	77	22
	Organization of Material	40	11.4	42	12	83	23.7
	Addressing the relations of subjects and occupational task	27	7.7	21	6	53	15.1
	Total	350	100	350	100	350	100
Communication ability	Promoting students participation in discussions	139	39.7	72	20.6	73	20.8
	Friendly relationship with students assessment	92	26.3	76	24.5	83	23.7
	RE-explaining the subjects and problem shooting	71	20.3	77	22	57	16.3
	Easy access to the professor out of the class	32	9.1	79	22.6	91	26
	Justice in assessment	16	4.7	36	10.3	46	13.2
	Total	350	100	350	100	350	100
Personality	Fluent explanation	101	28.8	78	22.3	52	14.9
	Self-confidence	97	27.7	65	18.6	47	13.4
	Respectful tone and manner	68	19.4	58	16.6	63	18
	Punctuality	32	9.1	33	9.4	56	16
	Accepting criticism	20	5.7	28	8	45	12.9
	Joyful and wittiness	13	3.8	36	10.3	35	10
	Interest in teaching	11	3.1	29	8.2	20	5.7
	Observing code of academic conduct	6	1.8	15	4.4	14	4
	Neat and well dressed	2	0.6	8	2.2	18	5.1
Total	350	100	350	100	350	100	

In "communication ability" feature, 39.7% of the students mentioned "promoting students' participation in discussions" to be the most prominent character. "Friendly relationship with students" with 26.3%, "justice in assessment" with 20.2%, "re-explaining the subjects and problem solving" with 9.1% and "easy access to the teacher out of the class" with 4.7% were the other main characters chosen. Figure 3 shows that "promoting students' participation in discussions" (68.4%) was the leading character in the "communication ability" feature ($P<0.01$).

In "personality" feature, 28.8% of the respondent believed that "fluent explanation" was the most essential character. "Self-confidence and determination", "interest in teaching", "respectful tone and manner", "punctuality", "accepting criticism", "neat and well-dressed", "joyfulness" and "observing moral and social norms" collected 27.7%, 19.4%, 9.1%, 5.7%, 3.8%, 3.1%, 1.8% and 0.6%, respectively. The fourth figure demonstrates that "fluent explanation" was the prominent character in this feature with 75 point percent out of the maximum point possible ($P<0.01$).

Students decided that "teaching method", "communication ability", "knowledge seeking" and "personality" were the required features for effective teaching in the descending order. 40% of the students chose "teaching method" as their first priority, 26.8% chose "communication ability", 24.3% voted for "knowledge seeking" and 8.9% for "personality" (table 2). Looking at the fifth figure, one will realize that "teaching method" (with 67.4 point percent out of the maximum point possible) was the leading feature among the others ($P<0.01$).

Data analysis revealed that there was no significant relationship between level of education, main goal of university education, university education background, marital status, age and gender of the students with their view about the features and characters of effective education.

Discussion

This study ended in determining the most important criteria of effective teaching as viewed by the students. In summary, the results showed that students considered "teaching method" as the most essential feature of a professor's effective teaching. The second priority was "communication ability", the third one was "knowledge seeking" and "personality" was the last one. Students of Yazd Medical University had selected "personality" and "communication ability" as their main priority (17) while students of Iran Medical University had chosen "teaching Method" (16). In another survey the most important feature was "knowledge seeking" from the faculty members' viewpoint and "communication ability" from the students' view point (11).

In the "teaching method" feature, the most valued characters were: "transferring the subject clearly", "preparing the class for thinking and discussion" and "logical organization of the subjects". These results were consistent with a number of other studies (18). Educational experts believe that clarifying the lesson plan and having good plans not only facilitates the teaching but also makes the students more enthusiastic about being punctual. Following the subjects, taking active roles in discussion and in summary it improves learning (10-11).

In "communication ability" feature the main characters in the order of priority were "promoting students participation in discussion", "friendly relationship with the students", and "justice in assessment", training courses on different strategies of successful communication and self-directed learning skills (problem based learning) have been very effective in strengthening the faculty members' communication ability (10,15). A research performed in Kermanshah Medical University showed that only 60% of the students

Table 2- Priorities in effective teaching features

Priority Character	First		Second		Third	
	No.	%	No.	%	No.	%
Teaching method	140	40	104	29.7	80	22.9
Communication ability	94	26.8	108	30.9	88	25.1
Knowledge seeking	85	24.3	82	23.4	85	24.3
Personality	31	8.9	56	16	97	27.7
Total	350	100	350	100	350	100

were satisfied with their professors' communication ability (20). Another study revealed that the most prominent characters of the "communication ability" feature were "friendly relationship with the students" and "promoting students participation in discussions". This results is almost the same as ours. (3-5). Some researchers have shown that there is a positive correlation between the teacher's skills and his educational experiences and therefore they believe that this feature is of special significance (10, 15).

In "knowledge seeking" feature, the major characters were "being knowledgeable", "introducing up-to-date subjects" and "teaching experiences in descending order. This is in agreement with some other studies (7). In "personality" feature the most important character was "fluent explanation", followed by "self-confidence and determination" and interest in teaching". Yet students of basic sciences in Iran University mentioned "appropriate tone and manner", "interest in teaching" and observing moral and social norms" as the main characters of this feature (16).

We did not find any relationship between student's characteristics (field of education, level of education, university education background) and different features and characters of effective education. This finding is in contrast with the results of some other surveys (17, 15). For example, a study has shown that the most essential feature of effective education was "personality" as viewed by medical students whereas health – care students believed that it was "communication ability" (17) Another research has claimed that those students who had just entered the university valued "communication ability" more than the other students (15). According to the fact that the professors' characters were not covered distinctly in these studies, some of there differences might be due to differences in questionnaire format, calculation method and data analysis. So more accurate studies with some questioners is a necessity. As a major role of a university in educating and training effective work force, effective teaching criteria should be more valued in teaching methodology workshops held for teachers and also in teacher selection.

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