

Evaluation of Faculty Members by Students in Birjand University of Medicine, 2003-2004

Ziaie M, MD¹ ; Mirie M, PhD²; Haji Abadi MR, MSc²; Mehrijoofard H. MSc²

¹ Head of Educational development center, Infectious disease specialist, Birjand University of Medical Sciences

² Faculty member, Birjand University of Medical Sciences

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Abstract

Background and purpose: Evaluation of faculty members is a kind of educational evaluation to determine success of faculty members in reaching the educational goals. Regarding the controversy about the validity of this kind of evaluation, this study was done to examine faculty members and students view point about content and implementation of evaluation of faculty members by students and feedback of the results in the second term of academic year 2003-4 in Birjand University of Medicine.

Methods: All faculty members and students participated in this descriptive study. Their opinions were studied using two questionnaires for students and faculty members separately, whose content validity were confirmed after a survey from specialists and pilot study and reliability of results were studied through calculating Cronbach's alpha coefficient for internal consistency. Data were analyzed through calculating frequencies and K²-test, $\alpha=0.05$.

Results: Of all faculty members, 95% (30 from clinical and 30 from non clinical departments) were aware of having been evaluated by students, 81.7% of them recognize educational development center of the University as the responsible body for evaluation. 91.7% of them received the feedback of the evaluation results. 45% of them agreed that announcement of evaluation results was helpful to improve teaching. 40% believed that questionnaires were responded without dutifulness and carefulness by students.

Conclusion: The aim of teaching evaluation is to improve teaching by faculty members. But it seems that many faculty members do not regard this evaluation tool so valid for measuring their teaching activities. The inappropriateness of most of the questionnaires, unfair judgment of student, and careless selection of the sample of students who answer the questionnaires are major issues for further development.

Key words: EVALUATION, FACULTY MEMBER, STUDENT, MEDICAL UNIVERSITY OF BIRJAND

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Introduction

The aim and main role of higher education is to train specialized human work force needed by society with minimal required competencies to undertake tasks within their professions.

Corresponding author: Dr Masood Ziaie , Infectious disease specialist , Head of Educational development center Birjand University of Medical Sciences Ghaffari St., Birjnd,Iran
Tel:+98-561-444-2271
E.mail: npztaee@yahoo.com

Evaluation is one of the main factors can direct education from a static status to a dynamic and high quality one. (1)

There are two main reasons to conduct educational evaluation. Firstly, the attitude of program participants about the results of evaluation may be uplifting and improve activities; secondly, evaluation helps us to be accountable of the expenses including time, money and facilities (2). The most important reason to conduct faculty members evaluation by students and focusing

to improve this kind of evaluation is to provide faculty members with proper feedback to Improve their teaching methods (3,4). Studies about evaluation of faculty members show that main methods to evaluate faculty members are evaluation by the head of department, their peers, and students and self-evaluation (5).

Student's opinions are asked formally or informally about personal and professional characteristics of faculty members to evaluate them.

Evaluation of faculty members by students is one of the most controversial methods of evaluation. There are contrasting ideas about accuracy of the results of this kind of evaluation. However this method is used for many purposes. According to Torn, Scott and Bird (1976) and Akanel and Smart (1979) using students' opinions to evaluate faculty member is the only tangible information source in faculties and universities all over the world. Mc Kish (1979) believe that this method is useful to improve teaching methods, provide relevant information to judge teaching effectiveness, help students choose professors and academic units and finally force students to give their opinions about faculty members teaching and training (6).

There are several tools to collect students' opinion about faculty members; the commonest and most important one is questionnaire.

This study was done to know faculty members' and students' view about content and implementation of this kind of evaluation and feedback of the results in the second term of academic year 1382-1383 in Medical University of Birjand.

Methods

A descriptive-analytic study was done in the second half of academic year 1382-1383. All faculty members and students of Medical University of Birjand participated in the study using two questionnaires. Questionnaires were developed aligned with research aim for faculty members and students separately. 24 - item questionnaire of faculty members included items for their general characteristics, awareness of

how the evaluation is implemented, their opinion about the evaluation system and teaching by themselves, their opinion about evaluation teams, evaluation process and effects of announcement of evaluation results. 11-item questionnaire of students included items for their general characteristics, their opinion about time of evaluation, how dutifully and honestly they responded to questionnaires, how valuable the results were considered.

Content validity of questionnaires were confirmed after doing a survey form experts and accomplishing preliminary study. Reliability of the results were assessed through calculating Cronbach alpha coefficient for internal consistency. 0.8. Data were gathered and coded. Frequency table used for descriptive statistics and K²-test for inferential statistics. P<0.05 was considered as significance level.

Results

60 out of 75 faculty members and 280 out of 300 students responded to questionnaires. Therefore the response rate was 80% and 93% respectively.

50% of faculty members who responded were from basic sciences departments and 50% from clinical. 95.5% of them were aware of evaluation of faculty members in non clinical units and 91.7% were aware of evaluation of faculty members in clinical stages.

91.7% have received feedback of evaluation's result. 81.7% have received feedback of evaluation's result. 81.7% thought of Educational Development Center of the University as the responsible agent for evaluation. 41.7% believed that results were comprehensible and 41.6% perceived them as partially comprehensible 88.3% believed that the results didn't reflect their academic position of one faculty member among others. 45% perceived this method was not influencing on teaching. 45% of faculty members believed that evaluation had a great impact on teaching, 45% believed that it had a moderate impact and others thought that this kind of evaluation had a slight impact only 28.3% of faculty members agreed with running method

and others believed that it was not suitable and needed to be changed. 71.7% disagreed to continue evaluation using this method. 56.4% believed that changes in implementation of this method needs to be made, and 15.4% of faculty members agreed that faculty member received questionnaires at the proper time 52.5% of questionnaires in non clinical stages were responded before the final exam, 32.5% after the exam an 5% in the last session of related units. 40% of faculty members believed that students responded to questionnaires without dutiful men and careful men. 40% of them believed that questionnaire were responded unfairly by students 30.% emphasized on unfair men of student in responding to questionnaires and 93.3% beveled that an explanatory program about evaluation goals and its implementation was really necessary (Table 1).

Regarding the students' perspective results showed that 26.7% of students were in basic medical sciences stage, 12.5% in physiopathology stage, 30.4% in clerkship, and 30.4% in internship stage. 40% of them believed that questionnaires weren't suitable to evaluate teaching quality. 78.2% of them responded

carefully and dutifully and 9.6% believed that questionnaires were responded without carefulness and dutifulness. 80% of them were not aware of the evaluation center. 82.8% believed that the value of evaluation results were little perceived. 99.3% of students believed that an explanatory program needed to be delivered before distribution of question names among students (Table 2).

Discussion

Faculty members' evaluation is a sort of educational evaluation to determine how successful are faculty member in reaching their educational goals (6). Regarding this fact, evaluation results could be used to reinforce strengths and remove drawbacks. The results could also be used as a basis to make decisions for educational planning and lead to academic improvement of university (7,8).

Considering the above, evaluation systems should be founded on a scientific and accrete basis to use results properly.

A faculty members' view of being evaluated by students view point of faculty members about

Table 1. Faculty members' opinion about content of evaluation, its implementation and feedback of the results

	Very high	High	Moderate	Low	Very low
How comprehensible is the feedback of evaluation results?	5%	41.7%	41.6%	6.7%	5%
How influencing is the evaluation on your teaching?	6.7%	38.3%	45%	6%	4%
How much do the results of evaluation have effects on welfare facility?	1.7%	0%	6.7%	31.6%	60%
Do the results of evaluation influence the rank of medical university?	5%	13.3%	45%	1.7%	35%
How dutiful and careful are students in responding to questionnaires?	3.3%	3.3%	53.4%	18.3%	21.7%
How fair are students in responding to questionnaires?	3.3%	16.7%	50%	18.3%	11.7%
How suitable are items on evaluation questionnaire for evaluating educational activities?	1.7%	18.3%	51.7%	20%	8.3%
Do the results show your academic status comparing to other faculty members?	1.2%	5.5%	5%	55.4%	32.9%

Table 2. Frequency of students' opinion about content of evaluation, its implementation, and feedback of the results

	Very high	High	Moderate	Low	Very low
How suitable are evaluation questionnaires to evaluate teaching?	1.4%	11.4%	47.2%	25%	15%
How much are the value of results perceived?	0.4%	1.01%	15.7%	27.8%	55%
How dutifully and carefully are questionnaires responded?	39.3%	38.9%	12.2%	7.1%	2.5%
Is an explanatory program needed before distributing evaluation questionnaire?	50.7%	48.6%	0.7%	0%	0%

the impact of evaluation in this study confirmed by a study in Medical University of Ahvaz in 1380, which showed that most of faculty members believed feed back of evaluation results to faculty members was useful to improve quality of teaching (7). Another study in the same university in 1378 showed that 72.6% of faculty members agreed with evaluation of faculty members by student (9). However 57.5% of faculty members of Shahid Beheshti University thought that evaluation had a moderate impact on educational process and believed that students' lack of information about teaching process cause their judgment to be inaccurate. Therefore they didn't believe in the results of evaluation (7). A similar study in Iran Medical University showed that in heads of department and faculty members' view point evaluation of faculty members by students had a slight impact (10). Different results of these studies might have been caused by lack of a uniform program to evaluate faculty members in medical universities in Iran.

Faculty members' opinion showed their uncertainty about dutifulness, care fullness and fair judgment of students and they thought that factors like checking of students' presence by faculty member, scores they had given to students and their communication with students influenced their responses.

Faculty members of Iran Medical University believed that evaluation might practically be a

threat to faculty members and leads to the danger of using non proper ways to make students pleased. Faculty members would try to get high scores in evaluation thought making unreal friendship with students, avoid being serious and strict instead of improving quality of teaching (10). However a study in Share-Kord didn't prove that factors like stricture and exerting more control by faculty members, social conflicts and applied assessment methods as confounding factors for teaching in evaluating results.(11) 64% of faculty members of Jahrom Medical University highly agreed with evaluation of faculty members by students and 76% believed that students paid more attention to faculty members' temper, manner and personality than content and methods of teaching in evaluating them.

In this study many faculty members believed that evaluation should be done before the end of terms and announcement of students' scores, tension and boredom intervene the evaluation. However study by Rafiee and Seifi showed that the result of evaluation weren't influenced by time factor (17). Note that importance of the time of evaluation especially in stage that evaluation is done by a few number of students should not be ignored.

In this study only 20% of faculty members believed that questionnaires are suitable for evaluating their activities thoroughly. This might have been caused by lack of awareness of

faculty members about evaluation, and most of them (93.3%) believed that delivering an explanatory program to faculty members about the goals and implementation and impacts of evaluation was needed.

According to Matcuffand Marto evaluation of faculty members by students using questionnaires is a usual work, However the results should be valid and reliable in order to be put into action (13). Kheir knows reliability and validity of results using these questionnaires as the most important features of these questionnaires and believer that questionnaires for evaluating effective teaching must be based on theoretical principles and results of scientific researches to successful (14,15)

Many studies have shown that results of evaluation of faculty members by students will be valid and reliable when well designed multidimensional evaluation methods like March Method are used (16).

Finally, evaluation of faculty members by students could be a valuable indicator for education impact and could be effective in improving education, although this kind of evaluation will be helpful when it is a part of a comprehensive program including other methods of evaluation, besides a systematic program for development of faculty members (18).

B. Students' view of evaluation of faculty members by them. Only 12% of students believed that questionnaire's items were suitable to evaluate faculty members' teaching. Assessing validity of evaluation results using questionnaires in Medical University of Semnan leads to

uncertainly about the results and proposing essential steps to reform questionnaires to improve validity (19). According to Nehring students as recipients of professional services delivered by faculty members are the best resource to identify clinical teaching behaviors of them. Flagler also emphasizes that regarding great impact of clinical professors or students' learning, faculty members' behavior in and administrative position of faculty members could influence evaluation of them by students (23).

Results of this study didn't show any significant relationship between academic grade of students and their attitudes toward impacts of evaluation on teaching by faculty members (Table 3). But there were a significant correlation between responding to questionnaires and ?? and being in mood to respond them (Table 4). Students in lower grades (basic medical sciences stage) responded more carefully.

Little awareness of students about the responsible agent for evaluation and their viewpoint about perceived value of the results shows that the Educational Development Center should hold explanatory sessions for students before evaluation to explain the importance and uses of evaluations' results. As most of the students (99.3%) also emphasized on implementing explanatory program before distributing questionnaires which in turn indicates the importance of holding such a program.

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Table 3. Relationship between academic stage of students and their response to: "How suitable are questionnaire's items to evaluate teaching?"

Response Stage	Low		Mod		High		Sum	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Basic medical science	23	30.7%	37	49.3%	15	20%	75	100%
Physiopathology	19	54.3%	13	37.1%	3	8.6%	35	100%
Clerkship	38	44.7%	38	44.7%	9	10.6%	85	100%
Internship	32	37.6%	44	51.8%	9	10.6%	85	100%
Sum	112	40.0%	132	41.7%	36	12.9%	280	100%

$X^2=9.47$

df=6

P=0:15

Table 4. Relationship between academic stage of students and their response to: “Are the questionnaires responded dutifully and carefully?”

Stage \ Response	Low		Mod		High		Sum	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Basic medical science	35	46.7%	31	41.35	9	12%	75	100%
Physiopathology	8	22.9%	14	40%	13	37.1%	35	100%
Clerkship	32	37.6%	31	36.5%	22	25.9%	85	100%
Internship	35	41.2%	33	38.8%	17	20%	85	100%
Sum	110	39.3%	109	38.9%	61	21.8%	280	100%

$X^2=11.69$ $df=6$ $P=0:05$

Questionnaire No 1 for faculty members

Name:
Surname:
Last degree:

1. you are from
 a basic science department
 a clinical department
 both
2. Are you aware of students evaluation of faculty members' nonclinical teaching?
 Yes No
3. Are you aware of students evaluation of faculty members' clinical teaching?
 Yes No
4. Have you ever received the results of students evaluation of your teaching in ...
 Clinical sciences Yes No
 Basic sciences Yes No
5. If your answer to the previous question was yes, when did you receive the results?
 Months after the end of the course
6. The responsible agent for evaluation in the medical university is:
 Faculty of medicine
 Head of the department
 I don't know
 Educational deputy of the hospital
 Educational development center
7. Were the results of evaluation comprehensible, if you have received any?
 Completely Moderately A little
 Very little

8. Do the results show your academic status among your peers?
 Yes No
9. Do the results show your academic status among other departments?
 Yes No
10. Do the results show your academic status among all faculty members?
 Yes No
11. How influencing are evaluation results on your teaching?
 Very deep Deep Moderate
 Very little
12. Do you agree with evaluation process as it is running now?
 Yes No
13. What changes do you suggest, if your answer to the previous question is no?
 Changes in content of questions
 Changes in implementation of evaluation
 Others
 No changes
14. Do you think how influencing are evaluation results on facilities specified for you?
 Very high High Moderate
 Low Very low
15. Do you think how influencing are evaluation results on rank of university related to scores of its faculty members?
 Very high High Moderate
 No influences
16. Do you know which groups evaluate faculty members?
 Students
 Head of the educational department

Chair of the faculty of medicine
 Chancellor of the university
 Head of the related ward
 Educational deputy of the hospital
 Educational deputy of the university
 Faculty members from all departments

17. Do you know which groups' opinions influence ranking?

Students
 Head of the educational department
 Chair of the faculty of medicine
 Chancellor of the university
 Head of the related ward
 Educational deputy of the hospital
 Educational deputy of the university
 Faculty members from all departments

18. When are the questionnaires distributed among students in non clinical stage?

After delivering half of content
 After delivering 2/3 of content

? In the last session

19. In your opinion is the time right for distribution in ...

Non clinical stage	Yes	No
Clinical stage	Yes	No

20. In your opinion how carefully and dutifully do students answer the questionnaires?

Very high	High	Moderate
Low	Very low	

21. In your opinion how honestly do students answer the questionnaires?

Very high	High	Moderate
Low	Very low	

22. In your opinion is an explanatory program needed for students before distribution of questionnaires among them?

Yes No

23. How suitable are items on evaluation questionnaire of clinical and non clinical teaching to completely evaluate your activities?

Very high	High	Moderate
Low	Very low	

24. In your opinion is an explanatory program needed for faculty members about implementation of evaluation and aims and impacts of it?

Yes No

Questionnaire No2 for students

Dear student, this questionnaire has been developed to study efficiency of evaluation forms of clinical and non clinical teaching. Please answer carefully. It is not necessary to write your names and surnames. Information of this questionnaire will be confidential.

1. Which academic stage are you in as a medical student?

Basic science
 Clerkship
 Physiopathology
 internship

2. In your opinion how suitable are items on evaluation forms to evaluate faculty members teaching?

Very high	High	Moderate
A little	Very little	

3. When do you often receive evaluation form o no clinical teaching?

After passing a half of the course
 After passing 2/3 of the course
 In the last session of the course
 Before the final exam of the course
 After the final exam of the course
 No forms I have received

4. When do you receive evaluation form of clinical teaching?

Around the middle of the course
 At the end of the course
 Before the final exam
 After the final exam
 No form I have received

5. Do you answer the evaluation forms carefully and dutifully?

Yes, I answer spending sufficient attention
 I answer with partial attention
 No need to spend time and attention to answer

6. Do you answer the evaluation forms honestly?

Yes, if it is harmless to me
 No, I'll be fair in answering unless my answers are harmful to me

7. Do you think that fairness may cause problems in your score?

Yes
 No

- It may cause
8. In your opinion how valuable are the results of evaluation considered?
- Very high High Moderate
Low Very low
9. Do you know which one is responsible for evaluation?
- Head of the department
Educational deputy of the hospital
Faculty of medicine
Educational development center
I don't know
10. In your opinion do you need an explanatory program before distribution of questionnaires?
- Yes No
11. How many terms have you received the questionnaires?
- term.

References

1. Hadjyabadi MR, Ghourchaie A. Medical students' attitude of their success rate in clerkship period in Birjand University of Medical Sciences. *J Med Edu*, 2002; (4): 169-172.
2. Doll RC. *Curriculum Improvement: Decision Making and Process*. Boston: Allyn and Bacon, 1992.
3. Marsh HW. *Students' Evaluation of University Teaching*. 13 June, 2001. <http://apps.edu.au/uws/edc/seeq/SETs-HerbMarsh-presentation-2001.pdf> 2005/10/4
- 4- Found N, et al. *Woman in Academe: Two steps forward and One Step Back*. Washington: American Psychological Association, 2000.
- 5- Hoseini AA, Latifian M. Quality of Higher Education. *Humanism and social sciences Quarterly of Shiraz University*, 1989; 1: 35-36.
- 6- Seif AA. Evaluation Methods of Quality of Scientific-Educational Activities of Faculty Members of Universities. *Articles collection of the first seminal on higher education in Iran. Second volume*. Tehran. Allame- Tabatabai-University Publication. 1997
7. Ghaforian Broojerdnia M, Shakormia A, Elhampoor H. Feedback of Announcement of results of faculty members evaluation in Ahvaz University to Improve Quality of Teaching in their own viewpoint. Ahvaz Medical University, Research Deputy, Research No 212.
8. Karimi H, Besharati MR, Harazi MA. Evaluation of faculty members' teaching by students. *Journal of Shahid Sadooghi medical university in Yazd*. 1998 6th year. 4: 78-82.
9. Sharifi M, Joorabchi Z, Alipoor Heidari M. Influences of faculty members on their evaluation by students. *Journal of Ghazvin medical university*. 2002. 22: 81-87.
10. Sarchami R, Salmanzade H. Opinions of faculty member of Iran medical university about impact of evaluation by students on improving teaching. 2005 9th year. 34:67-71.
11. tamizifar B, et al. Is the results of faculty members' evaluation by students correlated with students. Scores in the related unit. *Magazine of Tehran medical faculty, countrywide congers on medical education*. 2000.21.
12. Najafipoor S, Amini M. Study of Opinions of Jahrom medical university about faculty members evaluation by students. *Iranian journal of education in medical sciences*. 2002. 7:23.
13. Hosseini M, Sarchami R. Ghazvin medical university students' viewpoint about priorities of faculty members evaluation. *Journal of Ghazvin medical university*. 2002.22:33-37.
14. Kheir M. Evaluation of effective teaching in higher education focusing on evaluation by students. *Danesh va Pazhoohesh*. 2001.7:93-114.
- 15- Toyoda H, Nakamura K. Reliability of students' evaluations of university teaching: An Analysis of Four-Facet data by a generalized model and structural equation modeling. *Shinrigaku Kenkyu*. 2004, 75(2):106-17.
- 16- Self research center. Students evaluations of teaching effectiveness. 2005. <http://self.uws.edu.au/Research-focus/student-evaluations-of-teaching-htm> 2005/08/01
- 17- Seif AA. *Methods of measurement and educational evaluation*. Tehran. Doran publication. 1999
- 18- Kaufman DM. students' evaluation of faculty teaching. Presented at SFUFA forum. Jul 16.2002.
19. Bigdeli IA. Study of validity of questionnaires for faculty member evaluation by students. *Psychology*. 2000 4(16): 405-416.

20. Salehi Sh. Influences of applying clinical surveillance pattern on teaching quality of professors in Mursury and obstetrics. Faculty of Isfahan medical university. Iranian journal of evaluation in medical sciences. 2000.1:55-61.
21. Ahanchian MR. Influences of Gender on faculty members evaluation by students. Psychology and sciences. Tehran University. 2003. 33(1): 183-199.
22. Iranfar sh, Maseripoor M, Rahimi M. students view point of teaching activities in Kermanshah medical university in 1999.1379. 4th year.3:27-32.
23. Iranfar Sh, Azizif, Valai N. Communication skills of professors in medical university of Kermanshah and its role in evaluation of faculty members by students. 2000 4th year. 2:1-8.