Educational Performance of Faculty Members from the Students and Faculty Members’ Point of View in Golestan University of Medical Sciences

Roghieh Golsha¹, Amene Sadat Sheykholeslami²*, Tahereh Charnaei³, Zohre Safarnezhad³
1. Infectious Diseases Research Center, Golestan University of Medical Sciences, Gorgan, Iran; orcid id: 0000-0001-8943-4849
2. Faculty of Medicine, Golestan University of Medical Sciences, Gorgan, Iran; orcid id: 0000-0002-1513-2386
3. Faculty of Medicine, Golestan University of Medical Sciences, Gorgan, Iran.

ABSTRACT

Background and objectives: Educational appraisal plays a pivotal role in determining and promoting the educational quality and ensuring its continuous improvement. The performance of faculty members, characterized as the major building blocks of universities, makes significant contribution to the output of an educational system. Thus, the current study sets out to compare the results of the faculty members’ self-assessment and the students’ assessment of their educational performance in Golestan University of Medical Sciences, Iran.

Methods: This cross-sectional, descriptive-analytical study was performed in academic years 2011-14 on faculty members and students at school of medicine in Golestan University of Medical Sciences, Iran. Data were collected using two questionnaires. Mean scores of educational performance were compared using the Mann-Whitney test. The Kappa and ICC agreement coefficient were used to assess the agreement between the professors and the students’ views. All statistical analyses were performed in SPSS 18 at significance of 0.05.

Results: Overall, 191 completed questionnaires related to 49 professors were collected. In addition, 109 self-assessment questionnaires were collected from 48 faculty members. Of 191 professors, 34.6% were women, 65.4% were men, and 78.8% were assistant professors. In addition, the mean work experience was 12.3 ± 6.88 years. By comparing the highest and lowest self-assessment scores of the professors, of 191 professors, 31 (16.23%) assessed themselves with the highest score, which determined their strengths in explicit expression and full explanation of the content of the course, the perfect use of class time for educational activities, proper communication with colleagues, and responsibility for carrying out organizational tasks. Moreover, 25 (13.08%) of the professors assessed themselves with the lowest score mainly due to lack of research activities. A partially significant convergence was observed between the students and the faculty members’ assessment scores.

Conclusion: The convergence between the students’ ideas and that of the faculty members questions the practical value of evaluation programs and highlights the necessity to deliver the resulting outcome to the faculty members.

Keywords: Assessment; Student; Faculty member; Educational performance

*Correspondence: Amene Sadat Sheykholeslami, Tel: Tel: +989112772696, Email: sheykholeslami@goums.ac.ir

Received: 13 Jul 2019 Revised: 11 Aug 2020 Published: 24 Feb 2020
INTRODUCTION

Education is one of the most important tasks of a university and its faculty members. Promoting quality of education improves the academic level of the university. Assessment of faculty members is one of the processes that could help improve the quality of education (1). Educational effectiveness can be assessed using various models including assessment of authorities and colleagues, students and self-assessment (2,3). Faculty self-assessment is a process in which faculty members evaluate their own competence, knowledge, performance, beliefs and personal development (4). Faculty evaluation by students is also a common method of faculty assessment in universities that helps authorities in decision making regarding improvement of educational effectiveness (5-7).

Aultman believes that assessment of professors by students is a valuable resource for feedback on teaching quality and professional development (8).

Assessment in Iran has recently become very common and universities have assessed their academic staff using various methods, including questionnaires (15). Previous studies in Iran reported that features including the ability to understand concepts of curriculum, attention to learning and understanding taught materials (16) have been addressed as factors that could affect how students assess professors. In other studies, factors such as the teacher-student relationships, transfer of concepts, organization and management of classroom, teaching and assessment quality, communication skills and professional skills have been identified as factors affecting faculty assessment (17). Students’ academic performance components, gender and degree course, type of lesson, professors’ gender, teaching ability, academic degree, teaching experience, time of presentation and marital status might affect how students assess academic staff (18).

A previous study reported a significant difference between the viewpoint of professors and students about the factors affecting the students’ assessment of professors (19). In a study in the Arak University of Medical Sciences (Iran), the students graded professors between 15.03 and 16.45 over the course of six years (20).

Several studies have examined various aspects of faculty assessment by students and faculty self-assessment (21-24). However, only few studies have examined the viewpoints of both students and faculty members simultaneously (25).

In a study on members of faculty of medicine at Mazandaran University of Medical Sciences, the results of academic staff self-assessment and faculty assessment by students differed significantly (26). They believed that feedback on the results of these assessments would not change the quality of teaching.

Comparing the results of faculty self-assessment and student’s assessment about the performance of professors can clarify strengths and weaknesses of the education system and help improve quality of education. In this study, we compare the results of self-assessment of professors and students’ assessment of the faculty members of the Golestan University of Medical Sciences, Iran.

MATERIALS AND METHODS:

This was a cross-sectional study with a descriptive-analytic approach that was conducted during the academic years 2011–14. Study population included all medical students and members of faculty of medicine at Golestan University of Medical Sciences. The purpose of the educational performance is to evaluate the teacher's assessment in the areas of educational management, academic ability, speaking skills, counseling and ethics. The performance of academic staff during academic years 2011-14 from the students and their own point of view was assessed using two questionnaires. The first questionnaire consisting of 15 questions on scientific, behavioral and teaching abilities of the faculty members was scored by students based on a 4-point Likert scale (from rarely to
always) at the end of clinical courses. The second questionnaire consisted of 15 questions that were scored using a 5-point Likert scale (very few/ few/ moderate/ much/ very much). This questionnaire was completed annually. A copy of the results of these questionnaires are kept in the archives of the Center of Studies. The content of these questionnaires was constant throughout the study period.

The students’ questionnaire was distributed and collected from 5 Azar, Taleghani and Deziani hospitals. The other questionnaire was distributed individually, confidentially and collected one week later.

Descriptive statistical methods were used to describe the data. To test the normality of data, the Shapiro-Wilk test was used. The Mann–Whitney U test was used to compare the mean score of professors based on gender. The Kappa and ICC agreement coefficient were used to examine the agreement between results of professors’ self-assessment and the students’ views about them. All statistical analyses were performed in SPSS-18 at significance level of 0.05.

**RESULTS**

Overall, 191 completed questionnaires related to 49 professors were collected. In addition, 109 self-assessment questionnaires

### Table 1. The scores obtained from the two questionnaires regarding performance of faculty members during 2011-14.

| Academic year | Number of collected questionnaires | Lowest score | Highest score | Mean±standard deviation | First quartet | Second quartet | Third quartet |
|---------------|-----------------------------------|--------------|---------------|-------------------------|--------------|---------------|--------------|
| From the view of students | | | | | | | |
| 2011-12       | 26                                | 69.43        | 98.07         | 85.99±8.84              | 79.41        | 87.61         | 93.35        |
| 2012-13       | 79                                | 62.41        | 99.62         | 87.53±8.26              | 84.59        | 89.57         | 93.43        |
| 2013-14       | 86                                | 61.33        | 99.33         | 89.43±7.58              | 85.54        | 91.75         | 94.37        |
| Total         | 191                               | 61.33        | 99.62         | 88.18±8.09              | 84.59        | 90.5          | 93.95        |
| Professors’ self-assessment | | | | | | | |
| 2011-12       | 40                                | 60           | 100           | 88.23±11.15             | 77.67        | 92            | 96.27        |
| 2012-13       | 30                                | 70.77        | 100           | 90.23±8.53              | 83.88        | 93.33         | 96.33        |
| 2013-14       | 39                                | 60           | 100           | 88.26±10.06             | 82.67        | 92            | 96           |
| Total         | 109                               | 60           | 100           | 88.43±10.07             | 80           | 92            | 96           |

### Table 2. Comparison of the mean scores of self-assessment and students’ assessment based on the gender of the professors

| Academic year of 2011-12 | Academic year of 2012-13 | Academic year of 2013-14 |
|--------------------------|--------------------------|--------------------------|
| From the view of the students | | |
| Female | 90.47±8.32 | 90.89±6.83 | 89.89±4.8 |
| Male | 83.63±8.39 | 85.68±8.45 | 89.2±8.69 |
| Total | 85.99±8.84 | 87.53±8.26 | 89.43±7.58 |

P-value 0.034

| Self-assessment | | |
|-----------------|--------------------------|--------------------------|
| Female | 91.18±8.52 | 93.95±6.10 | 91.54±6.44 |
| Male | 85.38±11.99 | 87.39±9.18 | 84.38±11.28 |
| Total | 87.39±11.05 | 90.23±8.53 | 87.12±10.23 |

P-value 0.157

| Mean assessment score | | |
|-----------------------|--------------------------|--------------------------|
| 0.034 | 0.002 | 0.59 |
| 0.157 | 0.039 | 0.025 |
were collected from 48 faculty members. There were 44 faculty members in common between the two assessment systems. Table 1 presents the scores obtained from the two questionnaires regarding performance of difference between the mean scores of male and female professors from the students’ point of view in 2011-2013, as well as between the mean scores of self-assessment of male and female professors in 2012-2014

Table 3. Kappa agreement coefficient and the significance between self-assessment and assessment scores from students’ viewpoints divided by the three years

|                        | Kappa agreement coefficient | P-value |
|------------------------|----------------------------|---------|
| Academic year 2011-12  | 0.276                      | 0.025   |
| Academic year 2012-13  | 0.073                      | 0.516   |
| Academic year 2013-14  | 0.063                      | 0.493   |
| Total                  | 0.126                      | 0.045   |

Table 4. Percentage of agreement between faculty members and students

|                                | Self-assessment of professors | Total |
|--------------------------------|-------------------------------|-------|
|                                | First quartet | Second quartet | Third quartet | Fourth quartet |
| Students’ assessment           |                 |                |               |               |
| First quartet                  | 7.8%            | 1.3%           | 3.9%          | 2.6%          | 15.6%         |
| Second quartet                 | 14.3%           | 10.4%          | 6.5%          | 6.5%          | 37.7%         |
| Third quartet                  | 3.9%            | 1.3%           | 10.4%         | 3.9%          | 19.5%         |
| Fourth quartet                 | 3.8%            | 11.7%          | 6.5%          | 5.2%          | 27.2%         |
| Total                          | 29.8%           | 24.7%          | 27.3%         | 18.2%         | 100%          |

faculty members during 2011-14.

Of 191 professors, 34.6% were women, 65.4% were men, and 78.8% were assistant professors. In addition, the mean work experience was 12.3 ± 6.88 years.

During the study period, students assessed 24 (12.56%) and 23 (12.04%) professors with the highest and lowest scores, respectively. By comparing the highest and lowest self-assessment scores of the professors, of 191 professors, 31 (16.23%) assessed themselves with the highest score, which determined their strengths in explicit expression and full explanation of the content of the course, the perfect use of class time for educational activities, proper communication with colleagues, and responsibility for carrying out organizational tasks. Moreover, 25 (13.08%) of the professors assessed themselves with the lowest score mainly due to lack of research activities.

According to the results of the Mann-Whitney test, there was a significant (Table 2).

There was a very small agreement between students and professors regarding their performance. As shown in table 3, the degree of adaptation between students and professors decreased significantly over time.

In the three years, 33.8% of the professors agreed with the students on the academic, behavioral, and teaching performance. In this regard, 41.5% of the professors had lower scores than students and 24.7% of the professors had higher assessment scores than students (Table 4).

DISCUSSION

Certain features are important for the assessment system. Among these factors, the competence and desirability of the professors are important and must be quantitatively measured. In our study, the majority (85.1%) of students scored professors’ competence moderate to high, which is in line with the results of Allaei et al. (27) and Haji Aghajani
(28) but inconsistent with findings of Shakournia et al. (29).

In other studies, the lowest score to professors was attributed to the use of teaching aids (27), while in the present study, almost 90% of the students were satisfied with the use of teaching aids. By examining the assessment scores of the professors from the point of view of the students, 85% of the students identified the teachers’ strengths in communication skills and professional competence.

The agreement between the students’ views and the professors’ decreased gradually, which is similar to findings of the study by Allaei et al. (27).

The lack of access to the assessment information due to the confidentiality of the assessment forms was a limitation of our study, which was eliminated by negotiating with the authorities.

CONCLUSION
Our results indicate the importance of assessment studies and feedback to professors. Such approaches help educational managers improve educational skills. In addition, the majority of students believe that the annual assessment of academic staff does not affect the teaching quality.

ACKNOWLEDGEMENTS
This article is based on results from a research project approved by the Infectious Disease Research Center of Golestan University of Medical Sciences (project no. 17230593072019). The authors would like to thank the Center for the Development of Medical Education for cooperation and Dr. Behnampour for his valuable comments.

DECLARATIONS
Funding
This study was supported by the Golestan University of Medical Sciences, Iran.

Ethics approvals and consent to participate
The work was approved by the Ethics Committee of the Golestan University of Medical Sciences.

Conflict of interest
The authors declare that there is no conflict of interest regarding the publication of this article.

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