Assessment of educational criteria in academic promotion: Perspectives of faculty members of medical sciences universities in Iran

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ABSTRACT

Introduction: One of the important criteria in the promotion of faculty members is in the scope of their educational roles and duties. The purpose of this study was the assessment of reasonability and attainability of educational criteria for scientific rank promotion from the perspective of the faculty members of Medical Sciences Universities in Iran. Materials and Methods: This descriptive study was conducted in 2011 in 13 Universities of Medical Sciences in Iran. Through stratified sampling method, 350 faculty members were recruited. A questionnaire developed by the researchers was used to investigate the reasonability and attainability of educational criteria with scores from 1 to 5. The self-administered questionnaire was distributed and collected at each university. The mean and standard deviation of reasonability and attainability scores were calculated and reported by using the SPSS software version 16. Results: Faculty members considered many criteria of educational activities reasonable and available (with a mean score of more than 3). The highest reasonability and attainability have been obtained by the quantity and quality of teaching with the mean scores (3.93 ± 1.15 and 3.82 ± 1.17) and (3.9 ± 1.22 and 4.13 ± 1.06) out of five, respectively. The mean and standard deviation of total scores of reasonability of educational activities were 50.91 ± 14.22 and its attainability was 60.3 ± 13.72 from the total score of 90. Discussion and Conclusion: The faculty members of the Universities of Medical Sciences in Iran considered the educational criteria of promotion moderately reasonable and achievable. It is recommended to revise these criteria and adapt them according to the mission and special conditions of medical universities. Furthermore, providing feedback of evaluations, running educational researches, and implementing faculty development programs are suggested.

Key words: Academic promotion, criteria, education, faculty member, Iran, universities of medical sciences

INTRODUCTION

Rank promotion of faculty members of the universities of medical sciences in Iran is subject to earn the specific points for each scientific category based on the specified criteria by the Ministry of Health and Medical Education of Iran. It is performed by evaluating the quality and quantity of educational-research and executive activities and more recently, the cultural activities of the faculty members.[1] One of the primary and essential activities of the faculty members is teaching, which includes carrying out some duties such as: Teaching theoretical and practical courses to the students, supervising the thesis in different levels, curriculum planning and revising.
and using appropriate teaching methods. \(^1\) Faculty members expect to have the possibility to achieve a higher academic level by appropriate and effective teaching. \(^2\) For providing the rank promotion in the world’s most prestigious universities, it is essential for the faculty members to provide a report from their scientific background (Curriculum Vita). This includes their performance and a description of their educational activities such as the quantity and quality of teaching in different fields from classrooms to seminars, training and clinical mentoring, leadership and creativity in designing and development of courses, and learning and evaluation tools. This CV also includes, evidences of educational scholarship such as publishing educational articles, the description of professional practices based on clinical performance in terms of extent, size, and quality of the work and its importance, a report of internal and external reviewers of activities, evidences of academic excellence and scientific superiority, and their growth and development plans for their next rank promotion along with a summary of research activities. \(^3\) \(^4\) \(^5\) \(^6\) Promotion is a process for improvement of scientific value of the faculty members and academia. The promotion criteria and expected points in the evaluation of faculty members are necessary to be adjusted according to the facilities, and scientific, human, social and economic resources, as well as physical capacities and the technology of the scientific centers. \(^7\) It has to be mentioned that faculty members should work in respect to their educational role on one hand and try for their scientific promotion on the other hand. Difficulties in performing research and promotion to a higher scientific rank has been mentioned in many studies in western countries. \(^8\) \(^9\) \(^10\) \(^11\) \(^12\) Achieving promotion is not easy and requires effort, completion of tasks, and expectations in line with the multiple roles. Unsuitable criteria for promotion can be problematic. Difficulty or ease, reasonability of the criteria and their sustainability can influence the educational system and cause dynamic and development of educational skills or even the decline of faculty members for promotion. \(^13\) Furthermore, in Iran, faculty promotion is somehow problematic. Since 1985, the medical part of Ministry of Higher Education was integrated with Ministry of Health and hence the faculty members of Medical Universities have to spend much of their time for patient care and management and have limited time for education and research. This is while, in promotion criteria, there is no place for patient care activities and pays only to educational, research, and executive activities. The question is, if the expectations and educational criteria in promotion by law are just and achievable from the viewpoints of faculty members?

The used criteria for promotion in different countries are somewhat different. The American Association of Medical Colleges and education-related groups have identified five categories of activities including, teaching, curriculum planning, counseling, and educational and management leadership and student assessment as the required standards for educators and promotion scientific committees. \(^9\) Educational policy makers develop the regulations considering the mentioned criteria. A study showed that the educational criteria for promotion in Iran compared with developed countries are more limited and even less than neighboring country of Turkey. \(^7\) Clinical faculty members of the United States and Canadian medical schools were concerned about their ability for promotion and the desired criteria of the promotion committees. \(^10\) In another study, the faculty members believed that administrators did not give enough value for teaching activities. The promotion committee decisions reveals that educational scholarship is not emphasized enough. For this reason, some medical schools have tried to consider some criteria for achieving the valuable educational standards, which causes the faculty members feel valuable too. \(^13\) Determining the criteria without asking the view of faculty members have led to some resistance in them while, their participation in determining the evaluation criteria and the design process could help in acceptance of such evaluations. \(^12\) Existing information about the acceptance of educational promotion criteria is limited, particularly in the Middle East. The perspectives of educational faculty members about the educational criteria for promotion and the reasonability of the scores considered for such criteria can introduce the status, problems, and the current challenges of the faculty members in promotion. The purpose of this study was the assessment of reasonability and attainability of educational criteria for academic rank promotion from the perspectives of faculty members of the Medical Sciences Universities of Iran in 2011.

**MATERIALS AND METHODS**

This cross-sectional descriptive study was conducted in 13 universities of medical sciences in Iran in 2011. These universities were divided depending on the extent of their activity, their experiences, and capabilities in training graduate students in to three types of 1, 2, and 3. \(^11\) \(^13\) The study population included the faculty members of Governmental Universities of Medical Sciences in Iran. The number of subjects was 350, who were selected by stratified random sampling method in terms of types 1, 2, and 3 universities. Samples were included 160 faculty members from four universities of type 1, 120 from four universities of type 2, 60 from five universities of type 3, and 10 from the promotion committee members in the Ministry of Health and Medical Education. The faculty members were at least assistant professor, with a degree higher than Master and member of one of the Educational Department with at least 5-year experience at the same university.

In Iran, the Ministry of Health and Medical Education is responsible for compiling the faculty members’ promotion by law and determines the promotion criteria and the process for calculating the scores. The Universities are obligated to respect this by law. In this study, the same by law has been investigated.

The questionnaire topics were included the quantity and quality of teaching, supervising the thesis in different levels, designing, revising and implementing training programs, utilizing new methods of teaching and having educational awards. The questionnaire measured the faculty members’ perspectives in terms of reasonability and attainability of each indicator with a
scale ranging from 1 to 5. The score of 1 indicated the minimum, and a score of 5 represented the maximum score. The content validity and face validity of the questionnaires were determined making sure of following promotion by law and obtaining the opinions of the experts in the Medical Education Research Center, some of the members of promotion committee and faculty member experts. The reliability of the questionnaire was obtained by calculating Cronbach's alpha equal to 0.865. The questionnaires were sent by mail or given face-to-face to the authorities of Medical Education Development Centers of the universities. They were returned by a distributor or mailed to the researchers after 1 week. Several follow-ups (3 times) were performed to increase the response rate of the questionnaires. Questionnaires were completed with the subjects consent and the received information was considered confidential. The mean and standard deviation of reasonability and attainability scores were calculated with SPSS (Statistical Package for the Social science) software version 16. The three type universities were compared using One-way ANOVA.

**RESULTS**

In this study, among 350 distributed questionnaires, 279 questionnaires were received and after excluding incomplete and problematic ones, 268 questionnaires were considered in the calculations. The questionnaire return rate was 75.57%. The following mean scores, standard deviation and percentages were obtained: Faculty members mean age (45.36 ± 7.07) years old, the male majority (66.41%), clinical faculty members (53.73%), assistant professor (46.26%), associate professor (36.57%) and full professor (17.16%). The majority of 52.6% of the faculty members were promoted and 47.4% were not promoted yet. 41% of the faculty members had a membership in promotion committees and 16.7% had a history of membership in the distinguishing board. The findings showed that the faculty members considered many criteria for promotion of educational activities reasonable and achievable by providing the mean scores of greater than three. The highest mean score of reasonability indicator was related to the quantity and quality of teaching with a relatively high score (greater than 3.5) and thereafter, the highest scores were obtained by medical, MS, and PhD thesis. The lowest mean of reasonability was assigned to curriculum design, revising curriculum, and educational awards [Table 1]. In terms of the attainability of the criteria, the highest mean was gained by the quantity and quality of teaching and thesis. The lowest mean was assigned for curriculum design and revising [Table 1]. The mean and standard deviation of the total scores of reasonability of sixteen investigated criteria were 50.91 ± 14.22 out of the total score of 90. Based on total scores divided by the number of criteria, 3.18 ± 0.88 was obtained out of five. The mean of total scores of the attainability of 16 investigated criteria was 60.3 ± 13.72 out of the total score of 90. Based on the total scores divided by the number of criteria, 3.76 ± 0.85 was obtained out of five. In the promotion regulations, a minimum score must be achieved for some activities and having these scores are necessary for those who are eligible. Without obtaining these minimums, it is not possible for the faculty members to be promoted. The faculty members of Iran medical sciences universities assessed the minimum required score for the quantity and quality of education reasonable with a relatively high-score (greater than 4) and the minimum required score for its attainability was estimated somewhat favorable for all educational activities. However, the minimum required score for the scholarship was assessed with lower scores [Table 2]. One-way ANOVA showed no significance difference between the results of three type universities. Furthermore, the viewpoints of faculty members of different type universities regarding promotion criteria were similar. About necessary minimum scores for some educational criteria, there was a significant difference between the total score of these criteria in three type universities but the difference in sub-criteria was not significant [Table 3].

| Topic                        | Reasonability of the score Mean ± SD | Attainability of the score Mean ± SD |
|------------------------------|--------------------------------------|--------------------------------------|
| Quality of teaching          | 3.82 ± 1.17                          | 4.13 ± 1.06                          |
| Quantity of teaching         | 3.93 ± 1.15                          | 3.9 ± 1.22                           |
| Implementing the laboratory  | 2.96 ± 1.34                          | 3.72 ± 1.26                          |
| Medical thesis               | 3.51 ± 1.40                          | 3.87 ± 1.18                          |
| Master's thesis              | 3.31 ± 1.45                          | 3.84 ± 1.20                          |
| Doctoral dissertation        | 3.24 ± 1.50                          | 3.84 ± 1.15                          |
| Fellowship dissertation      | 3.03 ± 1.53                          | 3.93 ± 1.20                          |
| PhD thesis                   | 3.16 ± 1.54                          | 4.07 ± 1.12                          |
| Training awards              | 2.91 ± 1.41                          | 3.84 ± 1.35                          |
| Providing the course plan    | 3.14 ± 1.52                          | 3.52 ± 1.44                          |
| Revising the course plan     | 3.07 ± 1.56                          | 3.43 ± 1.44                          |
| Curriculum design            | 2.67 ± 1.51                          | 3.20 ± 1.52                          |
| Curriculum revision          | 2.71 ± 1.46                          | 3.24 ± 1.48                          |
| Implementing new teaching methods | 3.02 ± 1.48                      | 3.52 ± 1.45                          |
| Implementation of new methods of evaluation | 3.05 ± 1.48                   | 3.52 ± 1.41                          |
| Short-term courses (research opportunity) | 3.00 ± 1.50          | 3.52 ± 1.41                          |
| Total scores                 | 50.91 ± 14.22                        | 60.30 ± 13.72                        |

*SD: Standard deviation*

| Topic                        | Reasonability of the score Mean ± SD | Attainability of the score Mean ± SD |
|------------------------------|--------------------------------------|--------------------------------------|
| Minimum score of education quality | 4.01 ± 1.12                          | 4.13 ± 1.14                          |
| Minimum score of education quantity | 4.06 ± 1.15                          | 4.06 ± 1.11                          |
| Minimum score of scholarship | 3.16 ± 1.41                          | 3.52 ± 1.29                          |
| Minimum score of educational activities | 3.79 ± 1.21                      | 3.90 ± 1.12                          |

*SD: Standard deviation*
Table 3: Comparison of the Mean scores of the perspectives of faculty members of different type universities about reasonability of the minimum scores of educational criteria of promotion regulations and its attainability

| Reasonability of the score | Type 1       | Type 2     | Type 3       | F    | P    |
|---------------------------|--------------|------------|--------------|------|------|
| Minimum score of teaching quality | 1.18±3.99   | 4±1.03     | 4.06±1.21    | .08  | .92  |
| Minimum score of teaching quantity | 1.13±4.19   | 4.02±1.07  | 4.02±1.28    | .66  | .51  |
| Minimum score of scholarship | 1.5±3.03    | 3.16±1.41  | 3.23±1.23    | .41  | .66  |
| Minimum score of educational activities | 1.08±3.96   | 3.31±1.27  | 3.36±1.24    | 7.51 | .001**|

**The difference is significant**

**DISCUSSION**

Appropriate indicators and criteria for promotion and the specified score for each type of activity are the factor for the speed or delay in the promotion of those who are eligible and a way of judging about faculty member’s competence. This study provided the perspective of faculty members of medical sciences universities about reasonability and attainability of educational criteria for promotion. The strong point of this study was attention to one of the priorities of medical education researches in Iran and conducting a national survey that could show a view of the opinions of the faculty members in the case of academic rank promotion. This study showed that the faculty members of the universities of medical sciences in Iran considered the educational criteria for promotion moderately reasonable and believed the attainability of these criteria was practical. The relative verification of the value of the criteria of the quantity and quality of teaching in promotion is due to the primary and essential role of the faculty members in teaching the students.

The main time of the faculty members is spent on teaching and obviously, their skills in this area are important, and it could be considered as a good indicator for the evaluation. Although, the universities use the evaluation of the teachers for decisions related to recruitment, promotion, contract renewal, and salary amount. The role of the university is significant in the valid evaluation and educational skills development. In order to facilitate the promotion, the role of managers is also important in the evaluation process and planning for improvement. The most important difficulty for the evaluation of teaching is reported in the inefficiency of the evaluation methods of teaching performance. Studies also shows that the presented information to the department heads through the evaluation of students, peers, patient satisfaction, and clinical practice are not with high-quality. The promotion committees are also pay less attention to teaching abilities of the faculty members and it is assumed that they have such related skills. Whereas, these skills are not spontaneous and they cannot be gained unexpectedly.

Leading and guidance of the thesis are beneficial, because, while admitting it as a part of the teaching quantity, the possibility to publish the paper from the thesis is high, and leads to gaining research points. For this reason, it has been proposed in the new regulations in the section of research activities. In recent years, the planners added educational scholarship in to the regulations for evaluating the educational activities and obtaining these points are necessary for promotion. Earning lower scores in educational scholarship could be due to some reasons such as less knowledge and skills of faculty members in planning and educational research along with lack of financial resources for some educational activities and lack of time to do them. The mismatch between the mission and the activities of the organization has been mentioned as an obstacle also. Other studies have pointed out to these cases too.

The educational criteria for the evaluation of the faculty members in the promotion regulations consist of a limited set of activities. Meanwhile, the American Association of Medical Colleges and related educational groups recommended more expectations for the promotion. It means that, in addition to the quantity and quality of education, these cases should be presented: Evidences of the superiority and the effectiveness, evidences of participation in spreading the knowledge related to education, employment in the educational community, awareness of educational issues, and activities involved a geographic scope from regional to international. Based on a comparative study, the educational criteria for promotion in Iran have been more limited than the developed countries, and even in Turkey. Basically, obtaining the score of teaching quantity is readily available and obtained automatically through the time. In fact, while the faculty members are expected to have many educational and administrative activities for the promotion, but actually, they are placed in the bottleneck of obtaining research scores, rather than being excelled in teaching, and clinical success. In the survey of the directors of the U.S. Family Medicine Departments, it was found that the most important factor in recruitment and promotion were the quality and quantity of the performed researches. In contrast, the teaching skills were less important and the patient care and management were not important. For distinguishing between these responsibilities, the health- educational centers of the United States and Canada have different criteria for promotion by creating special categories of faculty members based on clinical, educational...
and research services. The faculty members are appointed and promoted with respect to their tasks and expectations in different categories.\[22\] In general, the medical faculty members whose primary responsibility is in the education and patient care should not be measured by the same standards of faculty members with research responsibilities.\[23\] It is noteworthy that very few faculty members are familiar with principles and techniques of teaching, planning, and evaluation. They were educated in their professional field and did not learn these educational skills.\[11\] However, medical schools do not clearly announce the expectations, responsibilities, educational standards, and the effective method of teaching. They do not provide sufficient guidance for the required balance between the teaching responsibilities.\[11\] In order to facilitate the attainability of educational expected criteria, it is necessary to offer practical work-shops, fellowship programs, and increased funding for educational researches. In teaching skills of faculty members, the feedback and improvement of educational processes are also helpful. Therefore, the use of a consultant can be helpful to review the method of teaching of faculty members in order to improve teaching by identifying the problems and solutions. Such tips can develop the teaching skills.\[24\] The following issues are also important in this regard such as the role of supports and the guidance of department heads and the senior faculty members in the feedback and improvement of the faculty members.\[25\]

This study had some limitations and it was typically a self-report survey and could be different from the reality. There were some changes in some parts of the regulations during data collection, which could influence the response. On the other hand, it was attempted to cover a wide range of medical sciences universities in the sampling however, the participation of faculty members of major universities in the capital of Iran was not much possible due to their lack of co-operation. However, the sample size and sampling method, the response rate, and the validity and reliability of questionnaire were acceptable. It is recommended to review the promotion criteria for determining the appropriate value of each indicator in order to facilitate the access to promotion of educational criteria. The structure should be adjusted with universities’ special requirements, scientific resources and facilities, the needed amount of teaching and the IT facilities of Iranian universities. Actions such as providing the feedback of evaluations, getting help from experts to improve the skills and quality of education at the appropriate time, familiarizing the faculty members with educational scholarship, attainability of role models for theoretical and practical teaching, growth and development of young faculty members’ skills, and encouraging the inter-professional collaboration could help in this regard.

Furthermore, performing the study in appropriate intervals and based on the new educational criteria for promotion can make a suitable assessment for the educational planners. In addition, they will help to identify the barriers and facilities for promotion of educational activities.

CONCLUSION

This study showed that the faculty members of medical universities considered the discussed educational criteria for improving the academic rank to somewhat reasonable and believed that the attainability of these criteria were acceptable. Educational planners can improve the criteria for promotion by revising them, matching with the university’s mission and their particular circumstances, supporting a variety of educational activities, and improving of growth and development activities of the faculty members. Conducting researches in order to identify the existing obstacles and facilities for performing the expected educational activities would be helpful for promotion.

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