Original Article

Internal Evaluation of Department of Anatomy and Cell Biology at Kermanshah University of Medical Sciences

Shiva Roshankhah Ph.D.[1], Rostam Ghorbani Ph.D.[2], Mozafar Khazaei Ph.D.[2], Mitra Bakhtiari Ph.D.[1], Mohammad Reza Salahshoor Ph.D.[1], Cyrus Jalili Ph.D.[2*]

1. Dept. of Anatomy, Medical School, Kermanshah University of Medical Sciences, Kermanshah, Iran
2. Fertility and Infertility Research Center, Kermanshah University of Medical Sciences, Kermanshah, Iran
**Address for Correspondence: Fertility and Infertility Research Center, Kermanshah University of Medical Sciences, Kermanshah, Iran, Zipe-code: 67148-69914, Tel: +989188317220, Fax: +988334276477, Email: cjalili@yahoo.com*

(Received: 7 Oct 2015 Accepted: 24 Feb 2016)

Abstract

Introduction: The sensitivity of teaching and learning processes at universities highlights the necessity of assessment, which is followed by improvement of education quality and efficacy of education system in the country. This study was carried out to perform an internal evaluation of department of anatomy and cell biology at Kermanshah University of Medical Sciences in 2015.

Methods: This cross-sectional study was conducted in the first six months in 2015, aiming to perform an internal evaluation of Department of Anatomy and Cell Biology at Kermanshah University of Medical Sciences. Data were collected through the Ministry of Health's internal assessment questionnaire. The questionnaire was completed by 9 faculty members and 50 students. At the end, the mean scores obtained from the questionnaires were evaluated by the standards determined by the ministry of health and were presented as percentages.

Results: A total of 40 criteria were assessed, from which 7 criteria were reported to enjoy a good status (100%). The criteria related to financing and education and research space were not favorable and demanded more attention on the part of authorities.

Conclusion: The internal evaluation showed that despite a favorable status found for various criteria, some domains still needed more accurate planning and attention for quality improvement.

Keywords: Anatomical sciences department, Medical education, Quality improvement

Citation: Roshankhah Sh, Ghorbani R, Khazaei M, Bakhtiari M, Salahshoor MR, Jalili C. Internal evaluation of Department of Anatomy and Cell Biology at Kermanshah University of Medical Sciences. Educ Res Med Sci. 2016; 5(1): 37-41.

Introduction

In the realm of higher education, the policymakers seek such objectives as consistency of higher education with the social and economic needs of the country, better access of the public to higher education and reduction of costs along with promotion of education (1). According to the objectives of Iran's 1404 perspective document, aimed to achieve the first rank in economy, science and technology in the region and to gain sophisticated knowledge, it is necessary to make changes in the education and research system at universities around the country in order to accomplish these objectives. In higher education, the education quality of universities has been an important focus for the faculty members and heads of departments. What is

agreed upon by scholars regarding this quality in higher education is conformity of the educational, research and managerial programs with professional growth, generated knowledge and standards (2).

Despite the significance of promotion, authorities believe that poor education quality has been a major issue that educational planners, especially in underdeveloped countries, have been facing in recent years (3). That is why in the past two decades there has been an increasing tendency to fruitfully promote the efficacy of higher education system, and most countries have made special efforts to enhance the quality of higher education, including assessment policies of higher education around the world. Nowadays, education assessment is an indispensable part of all educational programs all around the world (4).

Education systems, to be consistent with the development of knowledge, have to maintain their dynamicity and perform regular assessment of quality of education (5). Assessment is carried out for several purposes such as determining the fulfillment of learning objectives included in the curriculum, measuring the value of program in the reliability and achievability of objectives, fulfilling the intended purposes and analysis of the quality of the given objectives and organization, and management of the functions and structures in which faculties act (6). Therefore, to present an appropriate model to evaluate the scientific-education-research validity of the departments and to get the confirmation of Deputy of Education of university and Ministry of Health on this issue, especially the departments with postgraduate students, an internal evaluation of Department of Anatomy and Cell Biology was carried out according to the defined criteria in the medical education system.

Methods

This cross-sectional study was carried out in the first six months in 2015 to perform an internal evaluation of Department of Anatomy and Cell Biology at Kermanshah University of Medical Sciences. The instrument for data collection consisted of the Ministry of Health's internal evaluation questionnaire, which included 8 domains of organizational status, management and organization, faculty members, students, graduates, curricula, learning-teaching processes, research, equipment and facilities, and mission and objectives. The validity and reliability of the questionnaire had already been confirmed by the Ministry of Health Evaluation Center, with indicators of favorable, relatively favorable and unfavorable in each domain being specified. The research questions and objectives were adopted from the standard questionnaire suggested by the Ministry of Health. Several meetings were held to familiarize the faculty members with internal evaluation and to explain the necessity of doing internal evaluation. The necessity of internal evaluation plan along with all its stages was explained in details and discussed. Then, the factors under evaluation along with criteria and specified indicators were analyzed, and the necessity of using these factors and criteria were approved by the evaluation committee. Next, each group of respondents was given the prepared questionnaire to complete, and the questionnaires were collected after one week. Based on the data extracted from the questionnaires, a preliminary report was prepared to be presented to the evaluation committee. The weaknesses and strengths as well as opportunities and threats of department of anatomy and cell biology were identified and discussed. The obtained qualitative data were changed into quantitative data as the mean of each variable in each domain was designed in tables and an efficient program for promotion of the quality of research and education at the level of faculty and university was presented.

Results

A total of 8 domains, which included all dimensions of education, research and facilities, were elaborately evaluated. In this evaluation, in addition to assessing the fulfillment of standards, the faculty status for each indicator was determined as favorable, relatively favorable and unfavorable. Totally, 40 criteria were evaluated, from which 7 criteria gained a favorable status (100%) in the department, including participation of faculty members in educational planning, education, research and administrative activities of faculty members, library and notification system, quality of theses, and managers' perspectives on capabilities of graduates. The most challenging domain was the domain of financing and education-research space, which did not have a favorable status. The tables for the domains under evaluation are separately presented (Tables 1-8).

Table 1. Distribution of first factor: training courses and curricular and extra-curricular activities

No	Indicator	Favorable	Relatively favorable	Unfavorable
1	Training courses and their objectives	20%	80%	-
2	Consistency of academic disciplines with specialty of faculty members	42.85%	57.14%	-
3	Necessity of revising the curriculum and training courses	80%	20%	-

Table 2. Distribution of second factor: mission, objectives, organizational status

No	Indicator	Favorable	Relatively favorable	Unfavorable
1	Mission and objectives	50%	37.5%	12.5%
2	Management of department	86.66%	13.33%	-
3	Development program of academic disciplines and levels	66.66%	33.33%	-
4	Development of resources	60%	40%	-
5	Regulations and enactments	75%	25%	-
6	Participation of faculty members in educational planning	100%	-	-
7	Required financial resources	-	100%	-
8	Activities out of university	85.7%	-	14..28%

Table 3. Distribution of third factor: faculty members

No	Indicator	Favorable	Relatively favorable	Unfavorable
1	Composition of faculty members	40%	40%	20%
2	Educational activities of the faculty members	100%	-	-
3	Research activities of the faculty members	100%	-	-
4	Administrative activities of the faculty members	100%	-	-
5	Characteristics of the faculty members and promotion trend	40%	60%	-

Table 4. Distribution of fourth factor: acceptance and academic achievement of students

No	Indicator	Favorable	Relatively favorable	Unfavorable
1	Acceptance and academic achievement of students	62.5%	37.5%	-
2	Composition and distribution of students	66.66%	33.34%	-
3	Students' participation in educational programs of department	49%	36%	15%
4	Students' interaction with faculty members	45.33%	41%	13.67%
5	Students' interest in and knowledge of academic discipline and job market	44%	49.34%	6.66%
6	Students' ideas about the department	45.33%	35.5%	19.17%
7	Students' research activities	75%	25%	-

Table 5. Distribution of fifth factor: teaching/learning strategies

No	Indicator	Favorable	Relatively favorable	Unfavorable
1	Teaching methods	71.44%	14.28%	14.28%
2	Use of educational resources and facilities	80%	-	20%
3	Evaluation of academic achievement	80%	20%	-
4	Using the feedback of evaluation results	80%	20%	-

Table 6. Distribution of sixth factor: educational facilities

No	Indicator	Favorable	Relatively favorable	Unfavorable
1	Educational and administrative spaces of department along with course and major	50%	50%	-
2	Library and notification system	100%	-	-
3	Computer facilities and services	60%	40%	-
4	Workshops and laboratories	60%	40%	-
5	Audio-visual equipment	60%	-	40%

Table 7. Distribution of seventh factor: theses, fellowships and seminars

No	Indicator	Favorable	Relatively favorable	Unfavorable
1	Quality of theses	100%	-	-
2	Seminars and conferences held by the department	40%	40%	20%
3	Research contracts	50%	-	50%

Table 8. Distribution of eighth factor: graduates

No	Indicator	Favorable	Relatively favorable	Unfavorable
1	Continuing education	75%	-	25%
2	Relationship of department with graduates	50%	-	50%
3	Articles and academic works of graduates	75%	-	25%
4	Future job of graduates	75%	-	25%
5	Managers' views on the abilities of graduates	100%	-	-

Discussion

The regular evaluation of quality of higher education in Iran was administered for the first time in 1996 by research proposals in six departments of medical universities following the formulation of internal evaluation plan in medical education. The results of this plan showed that internal evaluation plays a vital role in the improvement of quality of education (7).

In line with quality promotion and assessment of the weaknesses and strengths of Department of Anatomy and Cell Biology and to present a comprehensive qualitative analysis, an internal evaluation of the given department was carried out. Based on the obtained data regarding the criteria of Ministry of Health in the domain of mission and objectives of department, a representative of postgraduate students should attend the department council meeting in which decisions are made about research proposals and projects. Of the participants, 86.6% reported a favorable status for the head of department criterion because internal evaluation in this department was performed according to the demand of the university authorities, not on a regular basis; however, it was decided to repeat this process every three years to assess the performance of department.

Moreover, the internal evaluation of anatomy and nursing and midwifery departments of Rafsanjan, Qazvin and Semnan universities has been performed in the same fashion in other studies (8-10). Since no foreign student had been accepted to the Department of Anatomy, the development of academic disciplines and levels was found to be 66.6% favorable. Of course, the students of master and general medicine programs were accepted to the international branch of the university. Further, no specific funding existed on the part of faculty or university, and unfortunately, financial resources were not absorbed out of university. It was suggested to allocate a certain budget, at faculty and university levels, according to the needs of the department.

Regarding the faculty members of the department, it should be noted that Department of Anatomy and Cell Biology consists of three sections of anatomy, embryology and histology and covers about 300 units of basic medical sciences and other educational levels from other faculties. In addition, they have been selected as top researchers of university every year and have been involved in administrative responsibilities, too. Furthermore, this department has the maximum space and facilities in the School of Medicine. Therefore, it seems necessary for the university authorities to provide financial and spiritual support to adjust and develop the number of faculty members and expand physical space, laboratory equipment and academic resources of the department. As for the evaluation and assessment of students, it was decided that the faculty members submit their tests to the University Development Center for analysis at the end of each semester in order to eliminate the possible problems of the test items. In general, based on the above remarks, it seems necessary to devise a plan in order to develop and improve the performance of the department via annual assessments.

Conclusion

Generally, it can be concluded that internal evaluation has a significant role in the improvement and promotion of the objectives of Department of Anatomy and Cell Biology. It should be considered as an efficient tool to enhance the quality of education, and it needs to be performed regularly to determine the weaknesses and strengths of the department. However, evaluation alone cannot create valuable changes in the education system; it

requires financial and spiritual support on the part of the authorities of faculty and university.

Acknowledgments

We sincerely and gratefully thank the Kermanshah University of Medical Sciences for financial support of this project (No. 94008).

References

1. Bokaie M, Farajkhoda T, Enjezab B, Mojahed S. Buzz groups: Introduction to a new teaching strategy. Journal of Medical Education and Development. 2014; 9(1): 79-81. [Persian]

2. Haghdoust AA, Sadeghirad B, Fasihi Harandi M, Rouh Alamini A. Ph.D. education model in medical fields in Iran and the application of research based curriculum. Hakim. 2009; 11(4): 8-15. [Persian]

3. Spellings M. The secretary of education's commission on the future of higher education. US Department of Education. Council for Higher Education Accreditation, Washington DC. 2006. Available from: http://www2.ed.gov/about/bdscomm/list/hiedfuture

4. Hatami J, Mohammadi R, Eshaghi F. The challenges of structuring, monitoring, and evaluating the quality of higher education in Iran. The fifth conference of "Quality Assessment, the University System", Tehran, Iran. 2012. [Persian]

5. Safdari F, Hasanzahraee R, Ehsanpoor S. Survey validation process with international standards of midwifery education and proposing appropriate national standards (Dissertation). Isfahan School of Nursing and Midwifery, Isfahan, Iran, 2003; 43-52. [Persian]

6. Harvey L, Williams J. Fifteen years of quality in higher education. Quality in Higher Education. 2010; 16(1): 3-36.

7. Bazargan A. Internal evaluation as an approach to revitalize university systems: The case of the Islamic Republic of Iran. Higher Education Policy. 2000; 13(2): 173-180.

8. Rafiee GH, Khodadady Zadeh A, Kazemi M, Shahabi M, Raveri A, Bakhshi H. Internal evaluation of Medical Surgical Nursing Department of Rafsanjan University of Medical Sciences. Koomesh. 2004; 5(2): 9-18. [Persian]

9. Yousefi B, Tabrizi Arnjad MH, Taherian AA, Safari M, Sameni HR, Aldaghi MR, Haghighi S. Internal evaluation as a means of quality improvment of education in the Department of Anatomical Sciences in Semnan University of Medical Sciences. Koomesh. 2002; 3(1): 19-27. [Persian]

10. Ajh N, Ranjkesh F, Alimoradi Z. Internal evaluation of Midwifery Department in Qazvin University of Medical Sciences. Journal of Medical Education and Development. 2011; 1: 28-37. [Persian]