Original Research Paper

Medical education administration in Iran: competencies and defects

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Abstract

Background: Medical education in Iran is integrated with health systems. To prevent the neglect of education in comparison with healthcare, the existence of competent educational administrators is necessary. However, the preparation of competent administrators has not been considered appropriately.

Objective: This study aimed to determine the competencies considered to select educational administrators in the Iran medical sector.

Methods: This descriptive study used a 20 statement questionnaire about administrative competencies in higher education. Validity was determined through expert revision and reliability through test and re-test. The present status of professional competencies considered to select or adopt educational administrators was determined by 336 present and previous educational administrators who participated in the study.

Findings: Analysis of questionnaires indicated that of the 20 necessary competencies to select or employ educational administrators in medical universities, none of them were considered “very much”. Nevertheless, “Medical Ethics” was the highest scoring factor (mean= 2.73 of 5) and “Knowledge and information management” was the lowest (mean= 1.61 of 5).

Conclusion: Expert opinions in Iran did not show an acceptable picture of the administration in universities of medical sciences. It seems that there is a far distance between the present and ideal status, so it needs a serious attention.

Introduction

The integration of medical education into health services in Iran in 1984 was approved by Iran national assembly. In order to achieve higher productivity and effectiveness toward excellence of academic education in medicine and related fields, and quality care in health service system, the universities of medical sciences were established in 1985 (Arasteh, 2007).

In this system, the educational administrators in various levels of medical universities should adjust the educational programmes with the limitations of the health system as well as academic obligations.

Therefore, although a good opportunity has been provided for medical students to have better clinical experience, problems and expectations of the health sector has had negative influences on academic activities. Thus, the focus of academic administrators' concerns (physicians in particular) has become the quality of care delivered to clients and not the education itself. Therefore, it seems to be necessary to consider a minimum of administration related competencies for the candidates of such positions to be able to conduct activities in these complex educational organizations.

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Most of the competencies considered for such positions in Iran have focused on personal attributes and educational degrees rather than administrative excellence and competence (Arasteh *et al.,* 2004). At present, rapid knowledge creation in the field of management and administration has forced different organizations to employ qualified and competent managers to meet their special needs. Bone and Bourner (1998) in a research about the development and improvement of administrators showed that half of the universities in England hold courses to empower those involved in administrative positions. That study further showed that at least seven universities mandatorily send their managers to pass those courses.

The most important subjects of these courses were: fiscal management, staff evaluation, recruitment, change management, organizational order, and quality. These are supplemented by managerial supervision to help a manager to run meetings and also some other briefing sessions (Bone & Bourner, 1998).

Thomson and Harrison (2000) conducted a research through which they distributed a questionnaire with 62 items of important managerial and leadership activities in universities among top administrators. 400 persons were involved to develop a model for university administration roles. This model could be used for personal development and as reliable criteria for selection and evaluation of university administrators.

The main administrative roles defined were as follows: University leadership, following academic standards, monitoring student achievement and welfare, marketing, establishing courses, and resources and fund raising. Categorization of proposed subjects included: 1) Management of activities, 2) Management of resources, 3) Management of human resources, and 4) Information management (Thompson & Harrison, 2000).

In addition, many other studies have emphasized the importance of competencies for educational administrators including those by Pedler *et al.* (2001) for social and public relations, Harris *et al.* (2007) for educational administration in health fields, Crawford (2005) for knowledge and information management, O' Their *et al.* (2000) for educational administration in clinical settings, Abraham *et al.* (2001) for quality management, Henderson (2005) for management of political affairs, Mapp (2008) for knowledge about laws and regulations, Hellriegel *et al.* (2002) for educational planning, and Dubrin (2003) for leadership competencies.

Methods

In this descriptive study, faculty members with more than 3 years of experience in administrative positions such as the university chancellor, deputy of education of university, deans, deputy of education of schools, and chairperson were involved. Data were gathered through a questionnaire based on related literature. The questionnaire consisted of 20 statements on main administrative competencies and respondents were requested to select a response on a 5 item likert scale (Always=5, Usually=4, Sometimes=3, Seldom=2, Never=1) to express their viewpoint about how that statement is generally considered whenever a faculty member is selected to engage in an educational administrative position (regardless of the level of administration). The 20 competencies were as follows:

1. Knowledge and information management
2. Leadership skills
3. Budgeting and fiscal management
4. Innovation and entrepreneurship
5. Human resource management
6. Quality management
7. Educational planning
8. Management of international relations
9. Students services
10. Educational administration in health fields
11. Social and public relations
12. Management of virtual education
13. Knowledge about educational laws and regulations
14. Change and crisis management
15. Management of cultural affairs
16. Management of physical resources
17. Personal qualifications
18. Educational administration in clinical settings
19. Medical ethics
20. Management of political affairs

Content validity of questionnaire was assessed through expert opinions by 10 experts. In addition, reliability was determined through a pilot study. For this, the primary questionnaire was completed by 20 faculty members twice within a one month interval. Internal consistency was determined by Cronbach Alpha coefficient (98.9) and external consistency between the two times was 99.3.

Questionnaires were distributed to the samples in 43 universities of medical sciences with the mediation of educational development centres (EDCs). Data analysis was done using the principle component of factor analysis to determine the most influential factors, and Kolmogrov-Smirnov test was used to determine the normality of the distribution of factors. ANOVA was used to determine the effects of faculty administrative positions, field of study, and educational level on the viewpoints. T-test was used to determine the effects of sex, and regression analysis to determine the effect of age, management history and work history.

Findings

Of the 400 questionnaires, 352 returned but 16 questionnaires were incomplete, so 336 questionnaires were assessed and analyzed. Results indicated that 229 respondents were male and 107 female. There were 24 university chancellors, 30 deputy of education of university, 40 deans, 45 deputy of education of schools, 75 chairpersons, and 122 previous administrators. Professionally, 32.1% had Master's degree, 37.8% PhD, and 30.1% were specialists or subspecialists in medicine or dentistry. 7.1% of respondents had a degree related to management, 24.7% in medicine, 5.4% in dentistry, 27.7% in basic science, 21.1% in nursing and midwifery, 11.9% in paramedical sciences, and 2.1% selected "other fields".

Results showed that, the average grade for all competencies had a considerable distance with the ideal situation. The selected competencies based on the priority are as follows:

The highest grade was given to the medical ethics (0.836), then management of political affairs (0.823), knowledge about laws and regulations (0.812), students services (0.786), personal qualifications (0.784), educational administration in health fields (0.781), management of physical resources (0.777), social and public relations (0.740), management of cultural affairs (0.722), management of human resources (0.699), educational administration in clinical settings (0.698), educational planning (0.697), budgeting and fiscal management (0.693), quality management (0.671), management of virtual education (0.647), leadership skills (0.607), change and crises management (0.503), innovation and entrepreneurship (0.398), management of international relations (0.390) and knowledge and information management (0.383). The average grade for each competency and standard deviation are shown in table 1.

Table 1: Mean and standard deviation of categories

Categories	Mean of 5	Standard Deviation
Medical ethics	2.73	0.69
Management of political affairs	2.72	0.60
Knowledge about laws and regulations	2.59	0.64
Students' services	2.44	0.63
Personal competencies	2.40	0.62
Educational administration in health fields	2.37	0.78
Management of physical resources	2.32	0.67
Social and public relations	2.22	0.66
Management of cultural affairs	2.20	0.73
Human resource management	2.14	0.66
Educational administration in clinical settings	2.10	0.75
Educational planning	2.02	0.69
Budgeting and fiscal management	2.01	0.60
Quality management	1.95	0.76
Management of virtual education	1.84	0.65
Leadership skills	1.84	0.75
Change and crisis management	1.83	0.73
Innovation and entrepreneurship	1.71	0.74
Management of international relations	1.65	0.68
Knowledge and information management	1.61	0.66

The first selected items (which was considered in selection of a faculty member to an administrator post) based on the respondents' field of study, level of education, and administrative level are illustrated in tables 2, 3 and 4 below.

Table 2: First selected competency based on respondents' major

Majors	Category	% of Var.
Management	Educational planning	0.768
Medicine	Medical ethics	0.845
Dentistry	Management of human resources	0.926
Basic Science	Leadership skills	0.851
Nursing & Midwifery	Knowledge and information management	0.863
Paramedical Sciences	Educational administration in clinical settings	0.887
Other	Innovation and entrepreneurship	0.949

Table 3: First selected competency based on respondents' level of education

Level of education	Category	% of Var.
Master of Science	Leadership skills	0.830
PhD	Leadership skills	0.844
Specialty	Medical ethics	0.847

Table 4: First selected competency based on respondents' level of administration

Level of Administration	Category	% of Var.
Chancellor	Management of physical resources	0.908
Dept. of education of university	Management of human resources	0.873
Dean	Educational planning	0.879
Dept. of education of faculty	Educational administration in clinical settings	0.840
Head of department	Leadership skills	0.854
Previous administrator	Medical ethics	0.861

Results of ANOVA test showed a significant relationship between the administrative positions and viewpoints (P=0.014), and between field of study and viewpoints (P=0.004), but no significant relationship between level of education and viewpoints (P=0.116). T-test showed a significant correlation between the gender and viewpoints (P=0.000), and regression test showed a significant relationship between age and viewpoints (P=0.000), between work history and viewpoints (P=0.000), and between management history and viewpoints (P=0.000). In general, the present and optimum status of professional competencies were significantly different (P=0.000).

Discussion and Conclusion

Educational administration is a vital activity with both academic and social impacts. Results of this study conformed to other research results about the defects and problems of medical education administration in Iran. Arasteh (2000) has stated that Iranian higher education institutions have attempted little to empower their administrators. He also emphasized that since no one is born as manager, everyone who has to engage in these positions should pass some theoretical and practical courses, training courses. Further, on-the-job development programmes are necessary. He also claimed that only

those graduated from higher education administration programmes are really qualified to be selected as educational administrators.

Sayari (2002) who has a long administrative history in the Iran higher education system, has criticized the university administration in Iran. He believed that the trial and error style of management was very common. Malekzadeh (2009) while criticizing medical education in Iran, states that medical universities are managed like high schools. He also believes that there are too many defects in medical education administration and graduates are not as qualified as expected. Karimian *et al*. (2009) in their study on the quality of educational programmes and educational administration in an Iranian university have expressed that 76.9% of department heads believed that there was no clear connection between the medical university and workplaces to receive proper feedback. 83.3% of them believed that programmes provided students with little skill to perform research studies and 53.8% believed that there was no way to get the community feedback about services provided by students and graduates of the university.

Mohammadi *et al.* (2007) through a descriptive study on faculty members in TUMS (an Iranian university) found that 55.4% of faculty believed that the designed educational goals could not meet the professional needs of students, 69.9% believed that there was a weak relationship between basic and clinical sciences, and 79.3% believed that evaluations of students were not appropriate. In another research about clinical teaching, Aghakhani *et al*. (2009) stated that 48.2% of interns scored the clinical faculty performance as average or poor, and 75% believed that the cooperation of clinical staff with students was very poor.

Moradi et al (2009) wrote that in spite of a decrease in the number of admitted students in recent years, surveys do not show higher quality among the graduates. Results of their qualitative study on faculty showed that the medical school had problems such as negligence toward the evaluation process, lack of appropriate educational goals, interns' work overload and lack of attention to the students' welfare and facilities.

Mirzaee and Karimi (2007) have emphasized the knowledge of management and mentioned that since physicians pass no course about management or administration, they can only run their managerial job based on personal experiences rather than academic principles.

Mohammadi *et al.* (2003) in a research about governance of Iran medical universities assessed faculty viewpoints. From the 647 faculty participants, 85.4% believed that the universities had a poor relationship with other community organizations, 77.3% believed that the cooperation inside the universities was poor, 94.8% believed that the connection of universities with international organizations was unacceptable and 60.9% believed that the faculty had poor performance in relation with participation in scientific congresses.

Yazdanpanah *et al.* (2006) through a research about clinical teaching (assessed the faculty viewpoints in KUMS another Iranian university). Results indicated that the fundamental weaknesses of the educational system were mainly in structure and management then in the mission and goals. This study also mentioned problems such as inability of graduates to identify the common medical and health problems in Iran, lack of supervision from authorities on clinical teaching, lack of academic atmosphere in the university, lack of knowledge about teaching methods by faculty members, improper educational environment in hospitals, and lack of appropriate exams to discriminate among the students.

Because the distance between the present and optimum status is very far, serious attention is needed by the authorities of the Ministry of Health and Medical Education. Since, the most discrepancies are with knowledge and information management, management of international relations, innovation and entrepreneurship, change and crisis management, and leadership competencies, it is suggested that these categories are included in training and re-education of educational administrators as the primary priorities. Many specialists in the field of medical education during their visits to Iran have claimed that the structure of universities of medical sciences and the integration between health system and medical education is an excellent innovation with a high potential for effective outcomes and impact. However, we should confess that there are some defects in processes and outcomes which are attributable to the lack of knowledge in administration and management. It seems that authorities in the Ministry of Health and Medical Education should expand the programmes and courses about medical

education and higher education administration and involve the related people to enhance their administrative roles and ensure the predetermined outcomes. The AMEE congresses and other specific medical education and academic administration seminars and workshops would be helpful in this regard. There have been 15 medical education congresses held in Iran so far and in each, some aspects of the issue has been the focus of the congress. But it is only in recent years that planners and designers of the congress have been attracted to the issue of administration. The other positive approach was that started in 2006 by the Supreme Court of Cultural Revolution to design the scientific map of the country which was followed by an extended contribution of all universities to illustrate the road map of scientific activities in the country that has a powerful emphasis on administration and management in universities. Thus, in an optimistic view, we can be hopeful to overcome the above mentioned defects in the future years.

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