Factors Affecting the Development of Teaching Competencies

ORIGINAL ARTICLE

Background: Faculty members are the main sources of universities. Determination and promotion of their competencies lead to the overall performance promotion of universities. Faculty members’ teaching competencies have the greatest role in the improvement of education, research and universities social services quality. Therefore, in order to investigate this issue more carefully, this study aimed to determine the level of teaching competency in medical faculty members and factors affecting it.

Methods: This applied research is a descriptive cross-sectional study that was done by stratified probability sampling with 160 medical faculty members as subjects (52 science basic faculty members, 128 clinical science faculty members) in Mashhad University of Medical Sciences, solar year 1390. Selected items from Alabama University teaching competency self-assessment instrument was used as the questionnaire. The data were analyzed with the software SPSS 11.0.

Results: The median score of teaching competency was 92.0 with the minimum score of 39.0 and maximum score of 112.0; there was no significant difference between basic and clinical faculty members’ competencies score (p = 0.05). The most powerful competency was the classroom management, and students performance evaluation had the lowest score. There was a significant difference between teaching competency scores depending on academic degree (p = 0.009), adult education competencies (p = 0.02), and marriage (p = 0.05).

Conclusions: Because of the key role of faculty members in educational system, with the revision of educational plans and policies, we can promises the teaching competencies of teachers.

Keywords: Competency, Teaching Competency, Faculty Member

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Received: JANUARY 3, 2012
Accepted: MARCH 4, 2012

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INTRODUCTION

Higher education institutions, particularly universities that train manpower for the health and medical education influence the economic, social, cultural, political sectors of the community (1,2). So we can say that, one of the components of successful communities, is the success of universities, therefore changing and improving the structures, systems, processes and methods of the classical education and research can be useful (3). According to evidences, faculty members are the greatest resources of universities and trainers of manpower in health, treatment and medical education organization (4,5). Improving their teaching competency leads to promote the overall performance of the universities and students. Faculty members’ teaching abilities play an important role in improving the quality of education, research, and social services of universities. Faculty members at universities have three main functions: teaching, doing research, and management. Special competencies and capabilities are required to perform these tasks (6). Competence means using technical and communication skills, knowledge, reasoning, emotions and values in the environment wisely and constantly (8,7). Teaching competencies are the set of knowledge, attitudes, and skills with which the teacher can help students development physically, mentally, emotionally, socially and spiritually. Determination of teaching abilities in educational institutions are based on the type of their attitude to human and educational system (10,9).

American Medical Education Committee knows the process of achieving the educational performance capabilities as the part of accreditation (11). In Iran in recent years, the necessity of competency has been felt (12). Experiences show that; despite the fact that graduates have enough scientific and theoretical bases, these individuals don’t have well performances and skills in workplace and graduates’ inabilities have been seen in different fields such as: Deployment of theoretical issues in practice, problem solving, performing Psycho-motor skills. Checking the capabilities of teachers and factors associated with these capabilities, may give the solution of this problem (Why graduates have difficulty in applying the theoretical issues?) to the educational managers (7).

Teaching is a conscious activity that is done based on specific objectives and conditions with regard to student learning to make changes. In fact, effective teaching should encourage students to dynamic learning. In the past, it was thought that if a person knows something, it can be transmitted to others. It means that, having something to teach was the teaching condition. But today; many educational experts believe that although scientific expertise or master teachers are required, but just being dominant on the subject for teaching is not enough; other conditions such as psychological knowledge and teaching abilities also are also needed (13,14).

A study was done in 2010 by Hamdan, et al. in Malaysia on teaching capabilities of instructors. The aim of this study was to determine the abilities of teachers in teaching skills, effectiveness, professionalism characteristics, and class control. Finally, this study emphasized that the instructors have to increase their abilities in class control and management, and educational study emphasized that the instructors have to increase their abilities in class control and management, and educational programs planning (15).

We can say that among many ways of assessments, the best way to assess the teaching competency may be self assessment. Because, whenever the teacher himself assesses teaching competencies, he will accept mistakes better (16). Regarding the concerns of educational managers in quality education and increasing teachers’ abilities, and the problem of recognizing poor educational effectiveness, academic failure, and low academic performance by teachers themselves; and according to the sensitive role of faculty members in educational context of the university; this research aimed to determine the level of teaching competencies and its influencing factors.

METHODS

This applied research is a descriptive cross-sectional study that was done by stratified probability sampling with 160 medical faculty members as subjects (32 basic science faculty members, 128 clinical science faculty members) in Mashhad University of Medical Sciences, solar year 1390. Teaching ability assessment was done through teaching competency self assessment inventory. This inventory was a selection of Alabama’s teaching competency self assessment instrument which was translated, edited, and validated with more than 10 specialists in education and research issue. Also pilot study was done with 30 subjects except research participants. Its validity and reliability was evaluated with Cronbach’s alpha coefficient. Its reliability coefficient was 0.86, and its internal validity of factors was 0.7. This questionnaire is a compressed form of the competencies that was used in Alabama’s university instrument. The scale includes demographic characteristics and 29 items and each item is presented in four incremental levels numbered from 1 to 4, when the person is dissatisfied with his performance and should do more to improve their performance (1=unsatisfactory), when the function can be modified to reach an acceptable level (2=needs improvement), when the Performance in some cases require more work but overall acceptable (3=area of strength), when the person is completely satisfied with his performance (4=demonstrates excellence).

RESULTS

From 160 faculty members of the study, there were 32 of basic science (20.0%) and 128 of clinical science (80.0%). 34 persons (22.0%) were female and others male. Most of the faculty members (35 people) were under the age group of 40-30 years (48.2 %). 146 persons (91.2%) were married and 14 persons (8.8 %) were single. 154 persons (96.2%) were satisfied with their jobs and others were unsatisfied. 159 persons (99.4 %) were interested in their jobs, and 1 (0.6%) was not interested. 93 of the faculty members (58.0%) participated in this study were assistant professors. 125 of them (78.0%) were working 31-40 hours a week, 80 of them (50.0%) were employed formally. 110 persons (69.2%) had last degree of Doctorate and Board. 144 persons (90.0%) had graduated from State University. 76 of
Factors Affecting the Development of Teaching Competencies

In this study the determination of the faculty members’ teaching competencies, were done from their own assessment. Classroom management was the most dominant teaching competency and other teaching abilities, which had lower grades, should be upgraded.

According to the results of the descriptive study by Hamdan, et al. (2010) in Malaysia, teachers must promote their teaching competencies in classroom management and educational planning (15).

In a descriptive study in 1387 called "master features of a powerful competent teacher from the perspective of the Martyr Sadoughi Yazd University of Medical Sciences students" the results showed that the ability to communicate, teaching experience and general knowledge in teaching, criticism, creativity and good appearance, given the essential concepts, presented in a logical order, and teaching materials in plain language are the most important features of a powerful teacher (17,18,19).

According to this study "communication" was an important teaching competency from the students’ perspective. In the research of Jules and, Kutnick titled "students' views about the good professor" also this competency had priority (20). In the present study the ability to communicate is in third place. And it is better to strengthen and improve this competency and other competencies.

Holy Qur’an in Surah Rahman verse 33 says: "A group of jinns and humans, if you go out from the sides of the heavens and the earth, going out, but you

### DISCUSSION

In this study, the teaching competencies of faculty members were determined based on their own assessment. Classroom management was the most dominant teaching competency, and other teaching abilities, which had lower grades, should be upgraded.

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### Table 1. Description of subject’s teaching competency

<table>
<thead>
<tr>
<th>Teaching competencies</th>
<th>Basic sciences</th>
<th>Clinic sciences</th>
<th>Total</th>
<th>P-value</th>
<th>z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation for instruction</td>
<td>9.5(6-12)</td>
<td>9(4-12)</td>
<td>9(4-12)</td>
<td>0.06</td>
<td>1.9</td>
</tr>
<tr>
<td>Presentation of organized instruction</td>
<td>20(8-24)</td>
<td>20(7-24)</td>
<td>20(7-24)</td>
<td>0.21</td>
<td>1.3</td>
</tr>
<tr>
<td>Assessment of student performance</td>
<td>11(8-16)</td>
<td>11(5-16)</td>
<td>11(5-16)</td>
<td>0.06</td>
<td>1.8</td>
</tr>
<tr>
<td>Classroom management</td>
<td>7(3-8)</td>
<td>7(2-8)</td>
<td>7(2-8)</td>
<td>0.8</td>
<td>0.3</td>
</tr>
<tr>
<td>Positive learning climate</td>
<td>13.5(7-16)</td>
<td>13(5-16)</td>
<td>13(5-16)</td>
<td>0.06</td>
<td>1.9</td>
</tr>
<tr>
<td>Communication</td>
<td>7(3-8)</td>
<td>7(2-8)</td>
<td>7(2-8)</td>
<td>0.9</td>
<td>0.14</td>
</tr>
<tr>
<td>Professional development and leadership</td>
<td>9(5-12)</td>
<td>8(4-12)</td>
<td>9(4-12)</td>
<td>0.2</td>
<td>1.4</td>
</tr>
<tr>
<td>Performance of professional responsibilities</td>
<td>17.5(5-20)</td>
<td>16(5-20)</td>
<td>17(5-20)</td>
<td>0.4</td>
<td>0.8</td>
</tr>
<tr>
<td>Total</td>
<td>95(48-111)</td>
<td>91(39-112)</td>
<td>92(39-112)</td>
<td>0.05</td>
<td>2</td>
</tr>
</tbody>
</table>
cannot go out without having the power", Imam Ali (peace be upon him) believes that the way of getting this power is science (21). Obviously, improving the education system is in getting competencies. According to social cognitive theory of Albert Bandura, individuals’ beliefs or judgments of their capabilities have an impact on duties and responsibilities performance. Human learning and performance is affected by cognitive trends, emotional, and emotions, expectations, beliefs and values. The human is a creature that affects his life events. Man is influenced by psychological factors and actively affects his work motivation and behavior. Bandura says, "people are quite aware that what do the tasks and skills to perform their duties, but most of the times are not successful in implementing the appropriate skills" (22,23).

We concluded that self assessment is a very suitable method. It can be said that such a research is a great help for teachers understanding their capabilities. Thus strengthening the abilities of faculty members due to their key role in the education system is noteworthy (24). As this study was done to determine the competencies of faculty members, therefore, appropriate educational programs to promote the abilities of faculty members is recommended. Limitations of this study were setting appointment with faculty members due to their busy schedule, pointing of some faculty members to impracticality of such studies and uselessness of the results. This is the problem that educational planners and managers should think about it. Using only one tool (self-assessment questionnaire) to assess the teaching competencies, this defect may be due to a small jurisdiction of researcher is negligible.

ACKNOWLEDGEMENT

The authors would like to thank the vice-chancellor of Research in Mashhad University of Medical Sciences who supported this study and also thank all of medical faculty members who contributed in this research despite their lack of time.

Conflict of interest: The authors declare no conflict of interest.

Funding and support: This study was approved and supported financially by vice-chancellor for Research of Mashhad University of Medical Sciences (code 89922).

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