MEDICAL TEACHERS AWARENESS AND PRIORITIZATION OF THEIR ROLES
Zulfiqar uddin Syed¹, Usman Mahboob², Gohar Wajid¹, Zafar Iqbal⁴

ABSTRACT
BACKGROUND: This research is brought about by the assumption that medical teachers’ awareness of their roles is a constituent of reflective professionalism. There is a need to know whether medical educators in Pakistan are aware about the twelve roles of a teacher as given by R M Harden in AMEE guide 20 and how they will prioritize these roles for their future practices.

AIM: To find out the awareness of medical faculty about twelve roles of a teacher and prioritization of these roles for their future practices in three medical institutions.

METHODS: A quantitative, cross sectional study was carried out in Multan. Questionnaire was filled by 84 medical teachers of a tertiary care military hospital, a private sector medical college and a public sector medical college.

RESULTS: All the surveyed medical teachers were aware of the traditional dimensions of the teaching profession i.e. lecturer, clinical teacher, student assessor and learning facilitator. New roles were known to around half and a few participants of the survey; on the job role model (54.4%), role model as a teacher (53.4%), learning facilitator (94.5%), mentor (19.3%), curriculum assessor (15.5%), curriculum planner (13.6%), course planner (30.3%), learning resource developer (30.6%) and study guide producer (4.5%). Once aware of the twelve roles of a teacher, the priority of participants changed from traditional to modern role for their future practices.

CONCLUSION: It is the low awareness about twelve roles that medical teachers perceive and practice their roles traditionally. However, this gap can be filled through professional development programs in medical education.

KEY WORDS: Medical teacher roles, role awareness, role prioritization

INTRODUCTION
Teaching is one of the oldest, most respected and demanding profession that require time, nerves and responsibility. Teacher has traditionally been the source of information and inspiration for their students, who are deeply affected by the teacher’s roles and attitudes i.e. their love, affection, character, competence and moral commitment. In this era of rapid global change, education and education system around the world is also changing and so do the roles of a teacher. Technology, business and even religion have adapted to an ever changing culture but comparatively education has remained unchanged. Major changes have taken place in medical education over the past few decades. It is now community based education with more systematic curriculum planning and increased emphasis on performance based assessment. Standardized patients, log books and self-assessment have been advocated. The learning has changed away from teacher and now it is student centered learning. One of the major changes in medical education today, is the changing role for a medical teacher. Twelve roles of a teacher have been identified by Harden and grouped into six areas given in AMEE guide 20 (Figure 1).

Medical teachers’ awareness of their roles is important and relevant to be an effective teacher. However awareness of medical teachers about their roles may be different depending on their own educational background, the way they were taught by their teachers, the educational environment of their institution and their training as a medical teacher. Several studies have been conducted glob-
ally to understand the perception of teachers about their roles. These studies indicated that teachers perceived their roles traditionally but differently in different specialties and institutions. Tabinda et al, 2011 revealed that the trends of medical education in the “classroom” as well as “the bedside” are greatly changing with the incorporation of new learning technologies and advocacy of novel educational approaches. Medical teachers are not just instructors or a task masters; they are helpers and guides who fits into many different roles; all at the same time. A study conducted by Ernstzen in 2012 explored the attribute of a good physiotherapy undergraduate clinical teacher. Results showed that a good physiotherapy teacher models professionalism, expertise and holistic care to both the patient and the student, and assist the student as an individual to develop academically and professionally. The teacher as a role model was a strong theme in this study. 

Another study by Ernstzen in 2013 revealed that teachers and students perceived roles like demonstrator, assessor, knowledge provider, mentor and facilitator conducive to learning in clinical environment. Shazia et al in 2015 explored teachers’ perceptions of their roles and their teaching experiences at three medical colleges of Islamabad, Pakistan. Results revealed that the participating faculty perceived their roles traditionally; information provider (lecturer, clinical teacher), learning facilitator, role model and student assessor. The familiarity of teachers with their multiple roles is very important and they should have adequate training to perform them effectively. Once these roles are understood, medical institutions can prepare faculty development programs themselves to train teachers about their roles.

This study was conducted to find out the awareness of medical faculty of a tertiary care military hospital, private sector medical college and public sector medical college in Multan about twelve roles of a teacher and that how the faculty will prioritize these roles for their future practices?

The study will help to find out the gaps and give suggestions to fill these through effective teacher training programs that will enable teachers to develop themselves in various dimensions of medical education including twelve roles of a teacher.

**METHODS**

A quantitative cross sectional descriptive survey was conducted on 84 medical teachers of three medical institutions of Multan. A tertiary care military hospital thereafter known as institution ‘A’, private sector medical college, institution ‘B’ and public sector medical college, institution ‘C’, to maintain confidentiality. The questionnaire used in the study was developed from two sources; Association for Medical Education in Europe (AMEE) Education Guide No. 20, Table 2 and International Project Consortium; Organization for Economic Cooperation and Development (OECD) Teachers and Learning International Survey (TALIS), teacher questionnaire, main study version (MS-12-01).

The questionnaire had four parts having total ten questions, which asks for information about: Part-A: Background Information of the participants less their identity, Part-B: Teaching practices, beliefs and attitudes of medical teachers, Part-C: Twelve roles of a teacher as given by R M Harden, awareness and pri-
oritization and Part-D: Professional development - teachers training opportunities. The questionnaire had one open ended question in which participants were asked to add role other than which in their opinion is not given in the given list, the rest were closed ended questions in which participants had to choose from the given options.

The questionnaire was pilot tested on twenty five teachers not included in the study. The major purpose of pilot testing was to see the clarity of language and understanding of the terms used in the questionnaire. Pilot study showed that the overall level of the questionnaire language was suitable as the participants responded without any difficulty to all the questions.

Approval was obtained from the Research and Ethical committee of the Khyber Medical University Peshawar. All participants were informed about the content and intent of the study and were assured about maintenance of confidentiality.

Data from the three institutions was collected from May to end June 2014. Eighty four faculty members including undergraduate lecturers, demonstrators, senior registrars, assistant professors, associate professors, professors and postgraduate supervisors were included in the sample.

Questionnaire was distributed to and collected from all the faculty members in person. This method was preferred in order to answer any enquiries from the participants during the completion of the questionnaire, explain to them the goals of the study, clarify the instructions for answering and obtain a good return rate. All 84 participants (17 from institution 'A', 26 from 'B' and 41 from 'C') filled the questionnaire.

For data analysis participating medical teachers were divided into two groups. Group I, post graduate supervisors (N= 36) and group II included undergraduate teachers and demonstrators (N=48). Data was entered in statistical package for social sciences (SPSS) version 17 to perform the statistical analysis. Comparative analysis according to gender, experience was done and presented as percentages in the form of figures and tables.

### RESULTS

The overall response rate for the study was 100%, all 84 participants filled the questionnaire. 83.3% of the respondents were males and 16.6% females. Average age of the participants was 40 years. Teaching experience of 39 participants was between 1- 10 years and 45 participants between 11-20 years.

When presented twelve roles of a teacher suggested by R.M Harden, all 84 teachers of the three institutions unanimously agreed that these roles are important for medical college teaching.

In response to an open ended question, to add other role of a teacher that is not given in the list. Administrator as a new role was suggested by 50% of the participants, researcher by 25% and both administrator and researcher by 13% of the participants.

When asked about the personal awareness of twelve roles of teachers from the list provided, there was negligible difference in the awareness of male and female participants. All the participants of both groups were equally aware of the traditional dimensions of the teaching profession; lecturer, clinical teacher, student assessor and learning facilitator. Modern roles which are the reply to new individual and social needs were known to around half and fewer participants of the survey; On the job role model and role model as a teacher were known to around half of the participants. Mentor, curriculum assessor, curriculum planner, course planner, resource material creator and study guide producer were known to less than half of the participants of the survey (Table 1).

One supervisor from institution ‘A’ was aware of all the roles of a teacher being student of Diploma in medical education. Senior teachers who had been involved in curriculum planning and assessing were aware of the roles like curriculum planning, assessing and course planning. However teachers who had their postgraduate training or job abroad were aware of the role modelling and mentoring. Young demonstrators had poor knowledge of the modern roles.

<table>
<thead>
<tr>
<th>S. No</th>
<th>Roles of a teacher</th>
<th>Group - I Postgraduate supervisors N=36</th>
<th>Group - II Undergraduate teachers and Demonstrators N=48</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lecturer</td>
<td>36 100 48 100</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Clinical teacher</td>
<td>36 100 48 100</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>On job role model</td>
<td>21 58 27 56.2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Role model as teacher</td>
<td>21 58 26 54.1</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Learning facilitator</td>
<td>35 97 43 89.5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Mentor</td>
<td>8 22 11 22.9</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Student assessor</td>
<td>36 100 48 100</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Curriculum assessor</td>
<td>10 27.7 7 14.3</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Curriculum planner</td>
<td>7 19.4 8 16.6</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Course planner</td>
<td>13 36 18 37.5</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Resource material creator</td>
<td>17 47 12 25</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Study guide producer</td>
<td>3 8 2 4.1</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 2: PROFESSIONAL DEVELOPMENT IN MEDICAL EDUCATION AND ITS IMPACT ON ROLES AWARENESS

<table>
<thead>
<tr>
<th>Professional development activity</th>
<th>Group - I</th>
<th>Group - II</th>
<th>Impact on their awareness about 12 roles of a teacher (Yes / No)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postgraduate supervisors</td>
<td>Yes</td>
<td>No</td>
<td>Nil</td>
</tr>
<tr>
<td>Mandatory supervisory workshops of the postgraduate examining college</td>
<td>Yes</td>
<td>No</td>
<td>Nil</td>
</tr>
<tr>
<td>Workshops on medical education</td>
<td>No*</td>
<td>No</td>
<td>Nil</td>
</tr>
<tr>
<td>Conferences on Medical education</td>
<td>No*</td>
<td>No</td>
<td>Nil</td>
</tr>
<tr>
<td>Certificate in medical education</td>
<td>No*</td>
<td>No</td>
<td>Nil</td>
</tr>
<tr>
<td>Diploma health professions education</td>
<td>No*</td>
<td>No</td>
<td>Nil*</td>
</tr>
<tr>
<td>MHPE</td>
<td>No</td>
<td>No</td>
<td>Nil</td>
</tr>
</tbody>
</table>

After awareness, participants were asked to prioritize twelve roles of teacher for their future practices. Prioritization of participants irrespective of their teaching status, teaching level and experience changed from traditional to modern roles (Figure 2).

Data in Table 2 reveals that there was drastic shuffle in priority of faculty among first five roles, whereas roles 6-12 remained at same priority.

For group one (postgraduate supervisors) mentor was at priority one followed by on job role model, role model as a teacher, clinical teacher and lecturer. Learning resource developer and study guide producer were at last priority.

Prioritization of group two (undergraduate teachers and demonstrators) was similar. They kept role model as a teacher at priority one, on job role model at priority two, mentor at three, lecturer at four and clinical teacher at priority five. Here again study guide producer was at the last priority.

Postgraduate supervisors prioritized roles related to clinical teaching and training whereas undergraduate teachers and demonstrators kept teaching roles at highest priority. Student assessor was at priority six and study guide producer at priority twelve.

Postgraduate clinical supervisors of the three institutions have attended all the mandatory supervisory workshops of the postgraduate examining college, but these workshops had very negligible impact on their awareness about twelve roles of a teacher (Table 2).

The participants revealed that they don’t get special leave, monetary benefits or any other incentive for professional development in medical education, moreover there is no compulsion from the employer/organization as well.

All senior and junior faculty desired need for training in all aspects of teacher roles, but highest lev-
el of training in their opinion was required in role modelling (59%), mentoring (60%), curriculum assessment (69.5%), curriculum planning (75.6%), learning resource development (90%), student assessment (90.5%) and study guide development (100%).

DISCUSSION

New roles of teachers’ are anchored to science and civilization changes and are promoted to boost the effectiveness of education. Taking into account the roles teachers declared to fulfill, it can be discerned that they undertake roles personally perceived as important or the way they have idealized their teachers.

This study was conducted in three medical institutions of Multan to find out the awareness of faculty about twelve roles of a teacher and prioritization of these roles for future.

The participating faculty provided more varying perspective about the teacher roles awareness based on their experiences. Younger teachers had more awareness of the traditional dimensions of teacher roles whereas more experienced teachers and those who have worked abroad were also aware of some of the latest roles.

Results revealed that the surveyed teachers rather neglect new roles. All the listed roles in respondent’s opinion were connected with the profession. They were all aware of the traditional roles of a teacher i.e. lecturer, clinical teacher, learning facilitator and student assessor, whereas their awareness about new roles were between 30-60%. This is in line with our traditional curricula where maximum teaching is done through long didactic lectures and students act as passive learners. Teachers’ perceptions about their roles indicated that they still prefer teacher-centered approach and consider themselves as main source of information. Moreover, while suggesting new roles we saw a weak trend towards research and the faculty was more inclined towards administrative role; with power, importance and nuisance.

In this era of information explosion, students are dependent on appropriate resource material. New technologies have greatly expanded the formats of learning materials and as developers of resource materials; teachers must keep themselves abreast with the changes in technology. Electronic or printed study guide is students’ personal tutor available 24 hours a day prepared by teachers. Study guides tell the student what they should learn; learning outcomes, the learning opportunities available and whether they...
have learnt it i.e. students assessing their own competence. Mentor is a trusted counselor or guide who is always there for help and support but not dependency. Mentoring is about wider view of issues relating to the student, not just for educational issues. Role model is another dimension of teaching. Students learn not just from what their teachers say but also from the knowledge, skills and attitudes they exhibit in their clinical practice. Therefore teacher should exemplify what should be learned.

Results of our study are comparable with that of Shazia et al in which the faculty of three medical colleges also rated all roles high. Roles perception by the faculty was somewhat traditional; lecturer 88%, clinical teacher 86%, learning facilitator 82%, on the job role model 77%, student assessor 77% and mentor 75%. The study also suggested that the awareness of faculty can be changed through training programs. When compared with the results from Dundee University, the respondents recognized all twelve roles as the responsibilities of a teacher. The role of the teacher as information provider had high rating as in our study and the teacher as mentor had good rating at Dundee as compared to ours. Differences between the results of present study and Dundee University could be attributed to educational environment, training of faculty and influence of national cultures on management, including material wealth.

The cumulative examination of data indicated that the understanding of roles in work context is very general and superficial. The rather superficial and simplified interpretation of roles and low awareness of them may be attributed to the traditional way of teaching. But once aware of the latest roles the prioritization of faculty changed from traditional to new ones irrespective of age, gender and teaching experiences.

However, good education can only be provided by competent, reflective and creative teachers. Consecutively a problem with teacher selection and education emerges. It is therefore crucial that the employers and organizations should provide high standard selection to the faculty, engage faculty and teachers to be early in teachers’ education programs, provide opportunities and incentives to the teachers for professional development in medical education (Figure 3).

CONCLUSION

We need generation of good teachers who aim to develop learners instead of teaching them, who help their pupils to become independent (learning to learn), who provide students with motivation and interest for life-long learning and urge them to become autonomous learners. A good teacher need not be competent in all twelve roles. Some teachers may assume only one role but majority of the teachers however will assume a number of roles. Staff development programs can be tailored considering “twelve roles” that will help to equip the teachers with the competencies necessary for them to fulfill the roles expected of them.

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REFERENCES