A need and necessity for faculty development : the role of medical education units in the Indian context

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Introduction

India contributes significantly to the world's disease burden. At the same time, the Indian health care and medical education are facing systems and standards challenges.

With the highest number of medical colleges in the world, and an unprecedented growth of medical institutions occurring in the past two decades, there is a marked shortage of teachers. Additionally, although recent advances in medicine have been understood and adopted by medical and other health science institutions, the same is not true for methods and strategies in medical education. Curricula need to be better aligned with health needs and changing methodologies. Developments in the field of medicine and allied health sciences need to be adopted and assessment systems need to be modernized. These are critical in order to maintain educational standards and, as a result, quality of graduating doctors produced by the system.

There is an urgent need for educational leaders to come forward with strategies to overcome this crisis in medical education and initiate reforms at the earliest.

The key to successfully initiating and implementing these and other reforms is educational capacity building through faculty development.

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Medical Education Units can play a critical role in faculty development and thus contribute to educational improvement and reforms in a major way.

Need for faculty development in education

Until recently in contemporary medical education, teachers used to teach as they were taught. No formal training programs for teachers existed. It was believed that 'good' clinicians may be 'good' teachers and time and experience polish teaching methodologies as well. Though this has changed in many parts of the world, in India, even today a large number of the academic faculty joining medical schools are not really trained to teach - one of their basic responsibilities. Hence, introducing teachers to the principles of teaching and learning is essential.

Efforts for sensitizing the teachers to teaching have become more organized into activities that fall under the term 'faculty development'. The term 'faculty development' has been traditionally used to describe the activities undertaken by academic staff in educational institutions and implies that some individual intellectual and professional growth will take place as a result of these programs. Simply stated it includes all activities taken up by the faculty in an institution targeting their all round development, personally or professionally and finally implying the growth of the institution. More recent descriptions include institutional growth as well, and most definitions of faculty development in literature reflect the role of the institution in the process in form of free time or fees (Jolly, 2002).

The key question is how we develop medical 'teachers'? There are very few papers describing faculty development programs in medical education and there is no conventional framework for doing so. Most medical teachers feel that their lack

of knowledge of teaching skills and lack of availability of formal training in teaching hinders their growth as teachers. For clinicians, the additional clinical responsibilities impinges on the importance and time they may give to the actual teaching they undertake (MacDougal & Drummond, 2005).

There is no encouragement or recognition for medical teachers. The range of activities in medical teaching are diverse and the additional emotional aspect of the teaching makes the training of doctors to be teachers a complex process. All these make the designing and implementation of a faculty development program difficult.

Doctors train themselves to be teachers by observing their role models and use their own insight in developing their own teaching methodologies. Training medical teachers to teach and to be able to reflect upon and analyze their teaching strategies is thus an important aspect of faculty development. Like other formal training programmes, there is a need to develop and actively promote a formal programme towards achieving excellence in medical teaching.

Ramani (2006) suggests the following guidelines to help medical teachers excel at teaching;

- Having concrete teaching-learning outcomes planned for teachers to help them plan what they teach
- Using best evidence in medical education, similar to evidence based medicine used in clinical practice, where teachers have access to educational research to guide them to the applicability of the recent changes in teaching-learning methodologies
- Organization of education based journal clubs
- Organized faculty development programmes to create an environment for learning for the teachers themselves
- Evaluation of teaching to help the teachers know how they teach
- Evaluation of the impact of teaching methods on the learners
- Creation of a senior-junior mentoring relationship where a senior faculty member can guide the junior faculty member about the intricacies of teaching
- Provision of institutional funding for research in the field of medical education
- Promotion of a culture of teaching to a level where teaching is recognized as much as clinical research
- Rewarding teachers who excel in teaching
- Recognizing the scholarly attributes of teaching
- Participation of teachers in international collaborations through BEME (best evidence in medical education)

Besides enabling the teachers to develop their basic skills in teaching, evaluation and making suggestions to the curriculum, faculty development also includes the responsibility of enhancing the management, administrative and leadership skills of teachers as most of the medical teachers are required to take on various roles, including that of an administrator, a leader, a mentor for juniors and students and a facilitator for learning. The whole process of faculty development, though apparently individual centred, finally aims at the development of the institution as a whole.

It is not difficult to assume that this task of faculty development is unlikely to be successful without an organized effort. The key to implementation of any faculty development programme is the establishment of a Medical Education Unit.

While such organized units are an integral part of most western medical schools, the importance and utility of such an establishment is still being realized and poorly implemented in India.

History and status of faculty development programmes in India

It is necessary to understand the situation of health and educational infrastructure in India. The number of medical schools in India has almost doubled in the last 20 years (Supe & Burdick, 2006). This growth has been largely in response to the growing population and health needs.

This exponential growth has resulted in a fall in the teacher student ratio. The economic growth in urban areas has made the private sector a more attractive option for medical professionals (Duggal, 2006).This has further compounded the teacher shortage. Though recommended by the Medical Council of India, the training in educational techniques is not compulsory for medical teachers in India. There is still no formal policy on teacher training. Additionally, we have not kept pace with the newer trends in medical education and that research in medical education exists is virtually unknown to most medical teachers.

The World Health Organisation (WHO) recognized the importance of training medical teachers as early as 1965 and suggested creation of three levels of training - the specialists in education, the leaders in the field of education who could integrate the science of educational research into institutional programs and the educational practioners who would be trained in the basic skills of classroom or clinical teaching.

In 1969, it set up centres for development of medical education at the University of Illinois and University of Southern California, which served as International Teacher Training Centres. Regional Teacher Training Centres (RTTC) and further National Teacher Training Centres (NTTC) were set up in some medical colleges, including a few in India. The first such centre was set up at the Jawaharlal Institute of Post Graduate Medical Education and Research (JIPMER), in Pondicherry, India in 1976. These programs were supported by WHO grants until 1984 and subsequently by the government of India until 1999. Subsequently, three more centres were set up in India. However, most of the NTTC centres ceased after government funding was discontinued. Of the four institutions, the JIPMER, Pondicherry centre is the only one that is still functioning (Bansal & Supe, 2007).

More such faculty development initiatives were organized in the form of the Centre for Medical Education and Technology (CMET) at the All India Institute of Medical Sciences (AIIMS), New Delhi and the setting up of Medical Education units by motivated teachers in a few medical colleges in Manipal, Mumbai, Ludhiana, Belgaum, Bangalore and Visakapatnam. The Medical Council of India (MCI) initiative in this direction in the year 1999 requires every medical college to have a medical education unit (Medical Council of India, 1997). Although this directive has resulted in a fast paced establishment of medical education units all over India, their 'function' is far from satisfactory in most institutions.

FAIMER (Foundation for Advancement in Medical Education and Research), Philadelphia, is a non-profit organization of ECFMG (Educational Commission for Foreign Medical Graduates), USA that supports faculty development in education through fellowships. It has a unique curriculum in that it combines basic education principles, teaching skills, leadership and research skills, as well as networking with fellow educators from all over the country and international experts in its programme. Presently, it is being offered in collaboration with three regional centres at Christian Medical College, Ludhiana, GS Medical College, Mumbai and PSG Institute of Medical Sciences, Coimbatore and has successfully taken these activities to a large group of medical teachers in India in a very short period of time (Burdic et al., 2007).

Role of medical education units

What role can education units play in the medical education system? With increasing awareness among patients and expanding medical frontiers, societal expectations from doctors have increased considerably in recent times. Medical curricula have become more complex. Newer methods of curriculum delivery are being innovated and adopted, as are new assessment methods. Skills such as change management are needed due to the rapid advancements and corresponding systems changes. Medical education units are therefore needed to have the ability to train teachers in these advancements.

The WHO has played a key role in the establishment of medical education units, as described above. The earliest medical education units established in the USA were offices for research in the field. In contemporary medical education and research, the role of a medical education

unit (MEU) is varied, from research and teaching to nurturing a fulfilling career. The need to concentrate on one of these roles of a MEU may vary in different colleges. Some of the important attributes of a medical education unit (Davis et al., 2005) are as follows;

- The MEU should be able to create a culture of educational research.
- It should be able to keep the faculty aware of the ongoing research in the field
- It should be able to generate publications and resources in medical education
- A medical education unit essentially needs to concentrate on the teaching-learning needs of the students and hence facilitate the same
- It should provide instructional design
- It should focus on newer learning technologies such as simulation and e-learning
- It should develop guidelines for student evaluation and curriculum development
- It should provide on the job training or formal courses for teachers

Medical education units can be instruments in nurturing the careers of faculty interested in the field of medical education, who could in turn become educators to guide the rest of the faculty. Organized units can also be service providers, helping other colleges in setting up faculty development programmes and curriculum evaluation or designing. A MEU can provide a forum for learning the principles of ethics and professionalism in clinical practice and in research and support the teachers to understand the relevance of research in the field of education and the skills of scientific writing. In addition to training medical teachers in teaching, a medical education unit should be able to consider innovations in curriculum design, assessment methods and newer advances in technology and their application to medical education and establish research and scholarship in the field.

Organizing a medical education unit

A medical education unit may be staffed by varied personnel - clinicians, educators and support staff (technical support in information technology). Members of this unit may be medical educators working fulltime or clinicians spending a part of their time working in these units. The issue of the structure or organization of such a unit is a subject of interest. Detailed guidelines on the role of various staff members have been provided in the AMEE guidelines for creation of medical education unit (Davis et al, 2005) and can be applied in the Indian context as well.

There can be two distinct models of MEUs. The first model is where the MEU is an entirely separate unit, independently handling everything regarding medical education. This unit, comprising of highly focused staff can be a centre of great activity providing rich research contributions to the field of medical education. However, as it does not include clinical faculty as staff of the unit, the relevance of its activities is a matter of debate.

The other model is the 'hub and spoke' patterned model. This model has a core group that manages the work of the medical education unit and has representation from all the teaching departments. This helps in carrying the information and resources generated by the medical education unit into practice of each of the teaching departments. The core group members can also engage in activities such as teaching the rest of their departmental faculty in teaching methodologies (Singh, 2008).

The second model is similar to the one suggested by Mehta, in a paper presented at a national workshop in 1996 (as quoted in 11). This model recommends having a MEU with representation from various fields of medicine with most of the members working part-time. 5-6 members who could devote at least 2 hours per week to medical education and one main member (= the unit leader), who is trained in medical education, who spends at least 6 hours per week to the activities of the unit. This kind of difference in approach to continued professional development has also been recognized earlier (Verma & Singh, 1995).

While structuring a MEU, several other factors may also need to be considered with respect to the needs and organization

within a medical school and its relation to other units (Singhe, 2008). Some of the questions that need to be considered are - Should a MEU be given a status equal to the status enjoyed by any other teaching department or should it be a unit providing supportive service? Should it facilitate educational activities or should it be the centre for organizing education meetings alone? It should definitely be organized with bright individuals who have a special interest in medical education, taking extreme care that it does not become a dumping ground of otherwise unproductive individuals. To best utilize the services of a MEU, it is essential to be able to assimilate the activities of the MEU with rest of the activities in the medical school, letting all teaching faculty identify the educational activities, rather than leave it to the few who are part of the MEU.

Road blocks

Lack of motivation among teachers in general and among educators and lack of recognition or rewards for work done are impediments in implementation of a faculty development program and setting up of medical education units. A well organized medical education unit can be an effective tool for faculty development program. While at the initial stage, organizing the structure and composition of a medical education unit should be a vital and well thought of step towards its success.

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