WHO WILL SPEAK FOR POSTGRADUATE MEDICAL EDUCATION?

Medical education in Pakistan has been fairly advanced. In fact, it can be safely said that perhaps the medical qualification is only one of the very few professional degrees which are recognised widely internationally. Unlike other professions such as graduates from engineering and law colleges, the doctors who graduate from medical colleges in Pakistan would land in any advanced country and get a job after qualifying the basic examinations such as PLAB. Not unsurprisingly perhaps doctors are the largest professional group working abroad. In fact, there are now many doctors working at the highest level in number of clinical fields only with postgraduate qualifications such as FCPS and no UK qualification, basic or higher. The high standards of the medical education and training can also be gauged from the fact that the government did not need to hire or ask foreign assistance even for the most high tech and complicated medical and surgical fields. The government and even private companies commonly hire consultants in other disciplines such as engineering and telecommunication for their projects. In contrast, not only the most complicated procedures are being routinely carried out in fields such as Cardiology, Cardiothoracic Surgery and Radiology etc but the trainees are also being trained in these sophisticated fields

These high standards have been achieved due to variety of factors which cannot be covered here. Various postgraduate medical training institutes have made significant contribution to this. The College of Physicians and Surgeons (CPSP) has played pivotal role in this. Unfortunately, the significant contribution made by the Post Graduate Medical Institute (PGMI) is not often realized. As someone who has been witness to the changes in health systems in the country for more than a decade, I have often heard the comments that what is the need of PGMI? The arguments seem to run like this: you do need medical colleges to train the doctors but postgraduate doctors can train under the supervision of any medical teacher working in any medical facility, whether a postgraduate medical institute or the undergraduate teaching hospital. The argument seems to carry weight as the postgraduate trainees are being recruited, trained and qualifying FCPS from the teaching hospital attached to medical colleges such as Khyber Medical College or Ayub Medical College.

The argument is flawed at several levels. However, the basic caveat is that it does not recognise the difference in undergraduate and postgraduate medical education. The training in medical colleges is concerned about teaching the basic skills required to diagnose, refer and treat the common and serious medical conditions. The Postgraduate medical training is much more complicated. There are more than 40 specialities. The training programmes vary in duration from two to five years which require rigorous supervision to achieve the skills and competence in managing difficult, complicated and life threatening conditions. While developing these skills, the trainees as well as trainers need to keep up to date with state of the art research and technology. The sheer number of specialities and organization involved in achieving and maintaining the high standards means that a dedicated authority and institute is needed for the management of postgraduate medical education. The role of the deanery and the Post Graduate Medical is therefore vital.

It would be worthwhile to examine the system of postgraduate medical education in UK to put the situation in perspective. Our medical education system closely follows the medical education system of the UK. More than 90% of the foreign qualified medical specialists in Pakistan

had higher qualifications such as MRCP or FRCS from UK. This will give us an idea of how the postgraduate medical education is organised,

The system of postgraduate medical education is quite complex in UK with different institutions involved. These include medical royal colleges and their faculties, General Medical Council, the Specialist Training Authority, the Joint Committee on Postgraduate Training for General Practice and different universities. However, the basic responsibility for postgraduate medical education lies with the postgraduate deans. The deanery is responsible for the following major functions[1]:

1. To commission, develop, manage and quality-assure the delivery of postgraduate medical education to standards set by the different authorities such as GMC, the Specialist Training Authority, the Royal colleges in partnership with the relevant universities , the Regional Office of the NHS Executive, and the NHS generally.
2. Maintain databases of doctors and dentists in training.
3. Approve advertisement of training posts.
4. Manage the size and distribution of the junior doctor workforce regionally.
5. Manage recruitment and appointment to specialist registrar programmes (equivalent to senior registrar).
6. Appoint programme directors for different training programmes.
7. Commission training, mainly from NHS Trusts through educational contracts.

The postgraduate training is completely separate from the undergraduate medical education. An educational supervisor may have medical students and postgraduate trainees assigned to him/her but there will be separate commitment of time for each type of trainees. The educational supervisor will also be accountable to the deans of undergraduate and postgraduate institutes separately.

A significant development in the last decade has been the shift away from the traditional apprentice model of the training. Essentially, in this model training is completed in a specific time period following a master trainer. The skills are learned on the 'see one, do one' basis. This model required less elaborate arrangement and anyone could be trained by following a competent trainer in a specific period. This is now increasingly replaced by the competence based model[2]. In UK this has not only become part of the performance evaluation procedures of the General Medical Council (GMC)3 and The Royal College examination but is also being used for the selection of registrars in general practice and interviews2. The competency based approach essentially consists of the detailed analysis of occupational roles and competencies required to perform roles as a physician or surgeon. The training and assessment process is then guided by these competencies and outcomes. The trainees' progress in their career is on the basis of their demonstrated performance of these outcomes and not on passing an exam at the end of a specified period. Increasingly, the competencies required to perform the complex tasks as a surgeon are likened to the tasks performed by pilots[4,5]. The Royal Air Force defines the following competencies for its trainees,

- Confidence and resilience
- Oral communication
- Problem solving ability
- Team working

It has been claimed that these are applicable to surgeons and have been adopted and are included in the competencies delineated by the Royal College of Physicians and Surgeons of Canada in the CanMEDS document[6]. At a more practical level the surgical field has benefitted greatly from the use of simulators. The simulators are used extensively within aviation in the pilot's training. The advantages for air safety are tremendous. Pilots can learn to manage emergencies without putting lives at risk. The laparoscopic surgery has increasingly used these simulators identifying the fine skills required for each step and delineating the steps required for carrying out these. Virtual reality simulators can both assess and improve psychomotor skills. The safety of passengers is the responsibility of the pilot but is carried out by team work. The meticulous checking of the seat belt for every single passenger by the air crew is just one example of this. It can be argued that in a surgical theatre it is the responsibility of the surgeon to ensure that everyone working in the theatre is properly dressed and scrubbed, if required. The essential skills for this involve the communication and observation as well as an attitude of not compromising on safety standards. These competencies can become part of the requirements to become a surgeon. A competency based model then would require that these skills are demonstrated in training (and recorded by the supervisor) and be part of the outcome tested in the examination. The competency based model is being increasingly implemented in almost all the industrialized countries and one wonders it may be a matter of time that the 'black box' will become part of the surgical theatres.

These aspects of postgraduate medical training only highlight that modern postgraduate medical education has become highly complex. Overlooking postgraduate medical education requires institutions of high calibre which can meet the demands of advances in medical education as well as developments in the medical field. Not surprisingly, there are fourteen Deaneries in England (not including Wales and Scotland). The population of NWFP is almost half of the England population. However, the demand for specialist services in NWFP may be much higher in view prevalence of communicable and Non Communicable diseases morbidity and greater disease burden compared to UK. Therefore a compelling case can be made for not only strengthening the postgraduate medical institute but perhaps also increasing the number of deaneries in NWFP.

We must take fair share of the blame for not highlighting the significance, value and the need for a modern postgraduate medical institute. The medical teaching and training especially at postgraduate level has close integration with patient care and services. This is great strength of the postgraduate medical education but it has become one of our main weaknesses as well. Consider this. The teaching faculty in professional disciplines, say for example, in Engineering and Law are not bound to provide professional services to a government organization while being a faculty member with responsibility for postgraduate training for their students. A professor in civil engineering, for example, has no commitment to provide the consultation to C&W. The same holds true for almost other professional involved in higher education. In case of medical education, the faculty provides professional service as well as teaching. The faculty in surgery carries out operations, examines and treats patients as well as do teaching. With ever increasing demand for services and patient care, the services almost always takes priority over teaching and training. In these circumstances, the main job of the faculty i.e. teaching and training becomes a 'bye product' of the in patients, out patients and theatre work. The 'protected time' for teaching and training, an essential component of postgraduate medical education either does not exist or is always eroded by demand for patient services.

High quality medical training has been one of the hallmarks of our province. The doctors trained in the province have not only achieved highest standards in every field of Medicine in the health systems in West and North America but have provided services in most difficult

circumstances. Recent example is the present wave of trauma and terror. The postgraduate medical institute has been at the forefront of providing care for the most difficult and complicated cases resulting from bombings and other traumatic activities. The faculty as well as trainees have provided high standard medical services while putting their own safety at risk.

To maintain these high standards, the postgraduate medical education will need to be taken more seriously. The complex nature of the postgraduate medical training demands management and supervision which can only be provided by the deanery that is dedicated for this purpose. The deanery also needs adequate resources and support. The present level of funding is almost entirely limited to the salary for faculty and trainees. We have taken the postgraduate medical training for granted for a long time. We need concerted efforts for advocacy to promote and maintain high quality postgraduate medical education in our province. Otherwise medical expertise could become a scarcity in a decade time. So in common with other fields, we may need a foreign consultant to run our ICU (Intensive Care Unit). This may well be part of some Kerry Lugar Bill in future!!

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Prof. Saeed Farooq
Department of Psychiatry,
Postgraduate Medical institute,
Lady Reading hospital,
Peshawar – Pakistan.
E mail: sfarooqlrh@yahoo.com