

# Editorial

## Evaluation of the Pathology Assistant Education in Two Universities of Medical Sciences in Iran

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The Pathology team of Tehran University of Medical Sciences having tens of years of history is one of the oldest educational teams of university of medical sciences in Iran. Having experienced faculty members, this university is in charge of educating different groups of various levels in Pathology, such as in General Medicine courses, or teaching Pathology to the specialty assistants of this field, and teaching it to students of different fields of medical sciences, (Nuclear Medicine, Nursing, Midwifery, etc...) and paramedicine. The staff also has the technical responsibility of tissue and clinical diagnosis laboratories of hospitals, affiliated to this university. Besides, being member in different committees of the hospital like transfusion medicine, infection control, mortality etc ..., the team plays its role in management of the hospital (1). In this team, one of the members of the staff is responsible for educating academic Pathology and two of them are responsible for training the Pathology assistants. Educational methods of the team are based on the educational program of the Pathology board of the Ministry of Health and Medical Education. Every week a meeting is held by managers of different sections in the hospital, considered by the leader of the team, and exchanges about the affairs takes place (1).

This university takes about 10 – 15 Pathology

assistants each year. As they enter, the assistants go to a 15-day course including human histology and Pathology principles and then go to be distributed for the hospitals (1). The assistants spend four years of their course simultaneously anatomical and clinical, and are supposed to take the endorsement of and intrasectional evaluating form by the section head and to deliver it to the assistance school management. This form contains items as on time presents in the section, the manner towards the colleagues and the patients, taking part in didactic and team work activities, innovation, lecturing etc.

Topics of Pathology references are arranged by the assistance school manager, and every two months assistants are assessed in this specified topics and the results are recorded in their profiles. In addition, two times a year in the months of February and April Pathology OSCE exam is taken. Thursday mornings, classes are journal club, introducing noticeable cases are held, and the assistants attend these classes along with their professors. Medical education is divided to two parts in general medicine:

- General Pathology
- Systematic Pathology

General Pathology is contained of a theory part (3.5 credits) and practical parts (1.5 credits) and is taught by the department professors. Systematic

Pathology also contains theory parts (4 credits) and practical parts (2 credits) and the department professors teach it (1).

The Pathology team of Tehran University of Medical Sciences is also responsible for teaching Dentistry, Laboratory Sciences, Microbiology, Midwifery (courses of theoretical and practical Pathology and Histology) in different schools and international branch of the university in Kish Island. Teaching assessment of the Pathology team is performed constantly and periodically by education department of medicine school.

In Iran (Now Tehran) University of Medical Sciences, the Pathology team of holding technically manages diagnosis and tissue laboratories, which depend on this university. Besides education, the team plays a role in laboratory and tissue diagnosis of diseases, provides consultation to clinicians on these grounds, and attends several educational and researching committees of hospitals.

With the association of some faculty members, the Pathology team of Iran (Now Tehran) University of Medical Sciences provided ground rules for the team in 2007. Based on this ground rules, three main committees organize the whole activities supposed to be done by the group, and decide on them, and check the accomplished works. These committees are composed of educational, researching, and executive parts. Educational activity is the crucial one in the committee. Majority of time of the pathologists in various educational hospitals is dedicated to teaching and training the specialized assistants. Each year six new assistants are accepted in the group and start their works. The whole assistants work according to the alternating schedule established each summer to the accompaniment of junior assistant and under control of the head of the educational committee. In addition to full feeling daily practical duties, assistants take part in releasing journal club and in intrasectional hospital affairs. For clinical sections, a table has been set out by the group in which the duty for each assistant is listed. The assistant is obliged to gain the skills mentioned in the table and take a certification from the educators. There is a certain schedule per each month of education (for instance 1- Biochemistry, 2- Hematology, 3- Microbiology). These schedules

are delivered to all the assistants. At the start of the year for example, each second year assistant who is supposed to be present in Biochemistry section, based on the alternating schedule, is aware that he should go through the program of the table of Biochemistry 2 and get the certifications(1)

Therefore the assistant ought to be present in the laboratory and fulfill the required tasks.

Strengths of the Pathology teaching program in Iran:

- Separation between general education program and assistance.
- Practice of new methods as much as possible.
- Taking the advantage of worthy suggestions and ideas introduced by retired professors.
- Care about general Pathology centers.
- Powerful system of assessments (initial and final)
- Use the own students and professors as feedbacks.
- Assistants' attendance in educational programs.
- Existence of respectable pioneers.
- Having relations with abroad scientific centers.
- High quality education accessing a wide range of samples in hospitals.
- Simultaneous teaching of clinical and anatomical pathology.
- Presence and clinic holding of the professors in hospitals.

Weaknesses of the Pathology program teaching in Iran:

- No coordination between medical science universities in some cases in country.
- No access to some resources as the result of financial problems.
- Not paid enough attention to some educational needs.
- In some cases paying less attention to clinical pathology.
- Spending main part of the time by professors and assistants on anatomical section.
- Desultory of medicine students.
- Passivity of autopsy section.

- Lack of clinical studies in general medicine.
- Dispersed educational hospitals.
- Deficiency of modern facilities as the cause of financial problems.

Absence of educational programs of blood transfusion science in general and assistance courses.

Suggestions for making improvements:

- Reconsidering Pathology courses and care more about current needs, being accompanied by the board and the Iranian society of Pathology and experts.
- Emphasize more on clinical Pathology (considering its growing significance) arranging fellowship programs in clinical pathology.
- Take use of new teaching methods (lay the ground) based on the new references of teaching & learning.
- Get more internet, software and hardware facilities in pathology, and use telePathology (deploy new pieces of teaching ,quality control and retraining software)
- Strong retraining courses depended upon the existing feedbacks (arrangements should be based on specialist assessments plus the new achievements of this science).
- Existence of the electronic retraining and programs for the people in distance to the center.
- Make an attempt to increase the respect for

pathologists in universities and hospitals by the referred responsible.

- Effective interaction between pathologists and other clinical and scientific teams (creation of jointed working groups).
  - To establish multi-disciplinary educational & educational & to boost them.
  - To promote research in Pathology groups and invest more in this area by the research associates.
  - Create a strong research and researcher training centers and make use of statisticians and epidemiologists.
  - More effort on creating post profession courses in both clinical and anatomical parts with the help of educational groups of the university.
  - Send more professors to high-ranking universities abroad in order to pass complementary courses, and profit from them for forming fellowship courses within the country, in cooperation with university governors.
  - Clinical Pathology teaching in general courses and to clinicians.
- Etc...

## Reference

1. Iranian Society of Pathology. Evaluation of The Pathology Course in Iran . Tehran: Iranian Society of Pathology; 2010.