

FORUM: REVITALIZATION OF ACADEMIC MEDICINE

Are Problems of Academic Medicine a New Phenomenon?

Lajos Kullmann, Tamás Kullmann¹

National Institute for Medical Rehabilitation, Budapest; and ¹Aladár Petz County Hospital, Győr, Hungary

Many of the problems of academic medicine are related to the actual challenges of health-care. Some disciplines have high prestige; these have advantages in education, while the needs of the society may differ to some extent. Introduction of the World Health Organization (WHO) concept on health as well as on functioning and disability into the training of physicians and more training in communication may remedy some of the discrepancies. The increase in the demand for physicians calls for improved ethical standards in the practice of importing health workers by the wealthy nations.

Many conflicts of interests are typical in contemporary health care. The challenges presented in Table 1 may have major role in creating problem areas. It is not our intent to discuss everything presented in the table. The selection is subjective.

Academic medicine emerged in the 13th century with the creation of the Medical School in Bologna. In the early times, medical schools were small institutions based on a personal relationship of teachers and students, with relatively low capacity of training. History provides several examples of highly appreciated doctors who got in conflict with academic medicine. Some of the great reformers of medicine in the 16th century got in conflict with their respective medical faculties. If Paracelsus can be accused of his disagreeable character, the origin of the conflict in the cases of Paré and Vesalius was rather jealousy (1). The first medical schools in Hungary were founded in the 15th and 16th centuries but had very short periods of activity. The first medical school with a national impact was founded in Budapest in the 18th century, with increasing international reputation. Semmelweis, who introduced antiseptic washing of hands before any gynecologic or obstetric intervention two decades be-

Table 1. Conflicting interests in health care

Prestige of disciplines
Health and functioning*
Freedom in research
Technically possible
Complexity of the profession
Female dominance in medicine
Value of research workshops
Responsible, thinking physician
Local training

Needs of society
Contents of training
Influences by funding
Economically feasible
Lack of team building
Problems of female workforce
Mass production at universities
Protocols' guided practice
Global needs

fore Lister's publication on antisepsis, was rejected by the scientists of Budapest, Paris, and Vienna (2,3).

These examples reflect not only personal conflicts but the problems of academic medicine of earlier times as well. One may become a good healer of hypertension or surgeon of cataract by training. One cannot become a good doctor by attending a school only. Healing is based on a personal confidential relationship.

Prestige of Disciplines and Needs of Society

Technical development led to the discovery of infectious agents, genes, and tumor factors, and to the understanding of vascular pathology. Diagnosis of many academic doctors is by consequence limited to the demonstration of the bacteria, tumor, or vascular aberrance. They are incapable to tell why the infection, tumor, or myocardial infarct affected one person rather than another, why the disease emerged at a given time, and what does it mean in the life of a person. One of the basic insufficiencies of academic medicine is its technical standpoint. The ancients regarded man as the unity of soma (body), psyche (soul) and nus (spirit). Technical medicine completely neglects the nus and separated the psyche from the soma. The definition of health by the World Health Organization (WHO) (4) tries to recover the forgotten unity but it does not really influence the doctors' dayto-day practice.

Health and Functioning and Contents of Training

Recently, WHO issued the International Classification of Functioning Disability and Health (ICF), encompassing all aspects of human health and some

^{*}The concept of health by the World Health Organization (WHO) includes social aspects and the concept of functioning and disability influenced by environmental factors.

Table 2. Academic medicine in Hungary in figures	
Number of medical students entering medical studies per year	700
Number of physicians leaving Hungary in the first two months	250
after joining the European Union	
Percentage of resident physicians planning to work abroad:	62
up to five years	46
for a longer period	16
Percentage of compulsory contact hours in the field of	8
psychosocial medicine (including hygiene and psychiatry) at	
the Semmelwiez University, Budapest	

health relevant components of well-being and describing the health and health-related domains. These are body functions and structures and life areas characterized by activities and participation in life situations. A person's functioning and disability is interpreted as a dynamic interaction between health conditions and contextual, environmental, and personal factors (5). The impact of this new and fundamental classification is even smaller on present day medical practice.

Academic medicine is largely influenced by the prestigious specialties. Academic medicine promotes the prestige of these specialties. This circle is constantly reproduced. Another factor in raising the prestige of some specialties is the pharmaceutical industry, which has large influence on research and training of physicians. The interest of this industry is to increase the sale of their products. They do not refrain from manipulating doctors - or even studies - for gaining higher influence (6). Media too may have an important role in increasing the prestige of specialties or procedures, like new imaging techniques, transplantation surgery, or cancer research and treatment. No question, these highly technical specialties and procedures may provide a lot of benefit for both the individual patient and the society. Yet, society and its members need more of the traditional interventions, more personal communication by physicians, more understanding of chronic conditions and their impact on human life, on the quality of people's life. Society and its individual members need to understand their role in healing, rather than expecting reparation of their body by medicine, similarly to the reparation of utensils. People also need guidance to cope with the "limitless information gathered from unsystematic and limitless Web" (7). These areas, however, are covered with a far smaller share of the compulsory contact hours during gradual training of physicians (Table 2, ref. 8). Also medical students choose optional education programs by prestige and fashion.

Is there a Possible Remedy?

What could be done? Is there anything to be done? Some self-restraint by the teachers of the most prestigious specialties at the distribution of the available pool of contact hours may be helpful. The optional disciplines may be grouped into sets in such a way that the choice does not allow the selection of fashionable disciplines only. The introduction of the International Classification of Functioning, Disability and Health (ICF) and especially of the more user-friendly condition-specific ICF Core Sets (9) into the training of different disciplines requires some prepa-

ration or continuous medical education of the teachers. Necessary financial resources are negligible although we usually mention the lack of resources as the obstacle to the required changes. Finally, larger parts of the teaching could be organized outside the universities, in other health care settings. Motivated and capable teachers could be found there. This final solution could help decrease the burden of having three jobs in academic medicine (10).

Local Training - Global Needs

Another problem area is the output of the academic medicine. In Hungary the number of candidates to become medical students decreased dramatically in recent years. Contrary to this, more and more newly graduated doctors tend to leave the country and find jobs in countries with expected higher income and better working conditions (Table 2, ref. 11).

The decreasing number of candidate medical students does not originate from the insufficiency of academic medicine but rather reflects the challenges of today's health-care and perhaps the crisis of western society. Professional orientation of youth is predominantly motivated by a wish of earning well with less effort. Medicine is never going to be practiced without efforts.

Often there is a concern of employers in recipient countries about the education level, language skills and cultural differences of guest workers. Yet the brain drain is working effectively and state, federal, and commercial agencies are involved in the recruitment of health workers. In most European countries the lack of physicians is higher than that of nurses and other professions allied to medicine. We can fully agree with Professor Svensson's comment, "...that the receiving countries should not only be mindful of but concerned about the possible drain of human resources caused in the supplying of poorer countries. ... It is, however, the responsibility of the respective receiving country to show restraint and work according to ethical standards in its practice of importing health workers" (12).

References

- 1 Schott H. Chronicles of medicine [in German]. Dortmund: Chronik Verlag; 1993.
- 2 Benedek I. Semmelweis. Budapest: Gondolat; 1980.
- 3 Céline LF. Semmelweis. Paris: Galliamard; 1999.
- 4 Organisation Mondiale de la Santé. Constitution [in French]. Chronique de l'Organisation Mondiale de la Santé. 1947;1:30-44.
- 5 World Health Organisation. International Classification of Functioning, Disability and Health. Geneva: World Health Organisation; 2001.
- 6 Horton R. Second opinion: doctors, diseases and decisions in medicine. London: Granta Books; 2003.
- 7 Anonymous. Academic medicine: resuscitation in progress. CMAJ. 2004;170:309-11.
- 8 Semmelweis Egyetem. Year Book 2003/2004 [in Hungarian]. Budapest: Semmelweis Egyetem; 2003.

- 9 Stucki G, Ewert T, Cieza A. Value and application of the ICF in rehabilitation medicine. Disabil Rehabil. 2002; 24:932-8.
- 10 Marušić B. Academic medicine: one job or three? Croat Med J. 2004;45:243-4.
- 11 Belicza E, Rethelyi J, Kullmann L Shortage of human resources in the Hungarian health care system: short-term or long-term problem? World Hosp Health Serv. 2003; 39:13-8, 42, 44.
- 12 Swennson PG. Challenges of yesterday, today and tomorrow. World Hosp Health Serv. 2003;39:1.

Correspondence to:

Lajos Kullmann National Institute for Medical Rehabilitation POBox 1 1528 Budapest, Hungary I.kullmann@rehabint.hu