MEDICAL EDUCATION: THE NEEDS FOR TODAY AND TOMORROW

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Preliminary remarks by the editor

Due to the initiative of Professor R. Sikorski an international symposion on "Medical Education: New Trends for the Future" took place in Kazimierz Dolny (Poland) on April, 23 - 25, 1989. This symposion was sponsored by the Ministry of Health and Social Welfare and the Academy of Medicine in Lublin. Prof. Sikorski successfully brought together the presidents and most members of the executive committees of AMDE (Association of Medical Deans in Europe) and AMEE (Association for Medical Education in Europe), officials of other countries and represents of all Medical Academies in Poland, too. The scientific programme of the first day consisted of the following lectures: A. Oriol-Bosch (Barcelona/E): The Declaration of Edinburgh - Report of the World Conference on Medical Education, G. Ström (Uppsala/S): The Lisbon Initiative, A.H.G. Love (Belfast/IRL): Association of Medical Deans in Europe, J.-P. Menu (WHO, Copenhagen/DK): Physician for the XXI Century, W. Tysarowski (Warsaw/PL): Scientific Basis of Medical Education Reform, W. Lammers (Groningen/NL): The Role of Medical School in Support of "Health for All", J. Mares (Prague/CSR): Innovation of Teaching on Medical Faculties in Czechoslowakia, B. Berkada (Istanbul/TR): Medical Education for Primary Health Care, M. Garcia-Barbero (Alicante/E): Need for Change in Strategies in Medical School, P. Uzunow (Sofia/BG): Medical Education in Bulgaria, K. Kothe (Berlin/DDR): Medical Education in German Democratic Republic, D. Habeck (Münster/D): The System of Medical Education in Federal Republic of Germany. - The discussion of the next day was introduced by the following lecture of Prof. R. Sikorski and Prof. Z. Kleinrok. Finally a Polish Section of AMDE was established and Prof. Sikorski had been elected as the Head of this section.

The meetings of the prorectors in charge of education and didactics and the Deans of Medical Faculties from all the medical high schools in Poland are scarce. The present Symposium seems to be the first international meeting devoted to the problems of medical education organized in the post-war history in Poland. It constitutes a unique event in the history of Polish medical faculties as it was able to gather so prominent participants from many countries.

The introductory remarks of the II Plenary Session that we would like to present here follow the lectures and reports already presented by the distinguished specialists in the field of medical education who represent the executive committees of the two international organisations: AMDE and AMEE as well as the European Regional Office of WHO, the latter being an organisation showing an active interest in the reorientation of medical education in accordance with "Health for All" strategy of WHO.

In the following presentation we would like to discuss the selected problems related to so called fourth educational stage eg. according to Edinburgh Declaration, the institutional stage which as a matter of fact is the most important one in the educational processes due to its many references to the country's educational policy.

The health needs of all the communities keep changing due to certain demographic variations such as the population's age distribution, the birth rate, the expected duration of human life. The population of old people grows and the average family size decreases. The familiar ties get weaker so that the grand-parents and single persons remain somehow in the isolation. Even the dominating nowadays model of "nucleus-like family" becomes less stable. The divorces and multiple marriages are observed with growing frequency.

The way people live and work influence their health needs. Many societies become multicultural. The number of people who live and work in the rural areas decreases while urban populations grow. In many regions the differenciation of the inhabitants' living standard rises, especially between rural and

urban areas. The transportation facilities have increased the mobility of the communities. Unemployment has become in many countries a common social problem. There increases a contribution of sports and entertainment to the free-time patterns of modern people. The children and young people have acquired greater personal autonomy although on the other hand they are being more constrained by the ubiquitous competition stress. The birth regulation becomes a behaviour of customs. A social standing of a woman has substantially changed with a part-time employment becoming an option.

The people are, speaking in general terms, better educated. This concerns also the medical knowledge. The changing disposition of mind alters the social mode of thinking. With increasing concern people care about the quality of their environment and make efforts to reduce its pollution themselves prefering the biodynamic food.

The conventional medicine with its technology is being criticized. A tendency appears towards an individual choice of the health care services as well as their control by a patient. Most people apply for an individual health care. The health care system itself undergoes profound changes. The quality of out-patient care increases and the technical equipment involved improves. In many countries, the improved qualifications and equipment of the health care teams result in people's less frequently seeking hospital treatment. Consequently, the number of general practicioners increases.

The morbidity patterns, as well, undergo the substantial changes. The chronic diseases dominate and the impact of age, life style, working conditions and the environment on their morbidity patterns becomes more visible. In some countries, the increasing number of patients choose their home as a place to die in. The perinatal, pediatric, geriatric and psychiatric care, formely available exclusively in the hospital, are nowadays available at home.

The hospital services have become highly technicized and specialized. The patient-physician relationship becomes impersonal. This seems to be a consequence of a complexity of diagnostic and therapeutic procedures, the increasing costs of hospital treatment and the growing effectivity requirements. A visibly growing social interest is directed towards such medical disciplines as epidemiology, prophylaxis and early diagnosis. The dramatically increasing costs of hospital treatment place a shadow on all these phenomena. Hence, more of the health care services are being transferred to the out-patient centers what leads in consequence to the growing qualitative requirements respecting the ambulatory health care. Due to all these considerations, the medical education becomes more receptive to the social needs. For this reason, the educational programmes, methods and targets become the subjects of interest for the general society.

Kryst and Wojtczak have recently stated that the general task of the polish health care system is to assure every citizen a reasonable level of health care rather than to secure the selected community groups in the best health services available ("Undergraduate Medical Teaching in the Light of the Health for All Strategy", 1988).

The health care models realized at present in most of the developing countries have their roots in the era of acute infectious diseases. However, one should keep in mind not only health care measures themselves contributed to overcoming the epidemic diseases and other acute illnesses of the past centuries. An important role was also played by such factors as the improved living standard, safer working conditions, better nutrition and the introduction of vaccination prophylaxis.

A rapid development of the medical sciences often leads to the fascination with the achievements of biomedical technology. This fascination doesn't help to understand the truth saying that only multidisciplinary knowledge of social sciences may lead to the effective application of biotechnology in the medical practise (Kryst and Wojtczak, 1988). The above cited report concludes: "the health situation in Poland is not satisfactory (...). The neonatal mortality rate remains three times higher than the lowest responding rates noted recently in Europe. Moreover, the mortality rates of children and young people place Poland among the countries with the highest figures. In the last few decades, the mortality rate characterizing Polish population of production age (35-64 years) has been one of the highest in Europe. The major causes of these alarming figures are the circulatory system diseases and neoplasmatic diseases (especially lung carcinoma) (...). The problem of infectious diseases

has not yet been overcome: mass influenza endemies occur; the prevalence of virus hepatitis and children diarrhoea remain much higher compared with the other countries; HIV infections and AIDS cases increase; the alimentary tract intoxications, shigella and salmonella still constitute considerable health hazards.

The number of handicapped people in Poland has reached 3 millions and many of these cases are related to the congenital malformations, perinatal traumas, accidents and related injuries. A large number of these crippled conditions had their causes in the infancy and childhood."

These health problems have important social references so that the society's health remains in many interrelationships with every field of human activity.

Without the properly educated, skilled and orientated health personnel and without complex and intense studies, the efforts undertaken to improve the society's health may not be succesfully realized.

During the last decade the number of physicians has enormously increased in all the european countries.

In the east european countries, the numbers of students admitted to the high medical schools are centrally regulated and so do recently western countries where the intake rates are being reduced or the rigorous selection rules are being applied to the preclinical educational stage. These regulation efforts would influence the number of graduates after 6-10 years and may influence the number of physicians in practice not before 10-20 years.

The purpose of the medical teaching is to educate a physician who would promote the "Health for All" strategy.

Each individual patient expects the doctor to be an effective professionalist able to listen carefully to his complaints and to observe sensitively.

Thousands of people suffer and die from diseases which are preventable and many of them are caused by the patients themselves.

The Edinburgh Declaration of August, 1988 and the Lisbon Initiative of November, 1988 meet the individual and social demands mentioned above by providing theoretical and practical basis to a reorientation of the health care policies. The participants of the Ministerial Consultation for Medical Education in Europe which took place in Lisbon in November, 1988 expressed unanimously their wish for medical education to be reorientated in order to make it more relevant to health needs.

Ladies and Gentlemen,

Each of the participants of our Symposium has got a great didactic experience. Some of you have devoted almost all the professional efforts to the problem of medical education and many (especially the Deans) have a specific experience concerning the whole educational process and therefore are able to express their synthetic points of view.

As an introduction to the discussion we would like to present several opinions based on the studies made in various medical centers in Poland and concerning the students' esteem of the didactic process.

Goralczyk and Matusiak from the Medical Academy in Lodz write in their report published in 1987 that the public opinion inquiries have indicated for many years that people in Poland expect a physician to be closely associated with the social environment of a patient and therefore fully able to realize the continuous and complex health care for the patient. The described model of a physician is being succesfully realized in many countries. In Poland, a primary health care physician was to fulfil these requirements. But did this model ever become real? Many social medicine theoreticians including medical sociologists and psychologists as well as the authorities in charge of health care policy in Poland emphasize the substantial discrepancy between the model and the present reality. Despite of the reorientation of the medical education system and the reform of the health care policy in Poland, the present situation in the field of primary health care in our country is far from being satisfactory. Both the physicians and the patients find this institution far beyond their expectations and ambitions. The reasons are obviously multiple. One of the major reasons is that a graduate of the medical faculty isn't fully prepared to begin his work as a "first-line" physician. The opinions exist that "the medical schools are partly responsible for this by not developing a motivation to work at the primary health care institution".

It is known, however, that during the first few years of practising, a considerable percentage of graduates join the primary health care institutions.

Goralczyk and Matusiak questionnaired a population of 250 medical students of the 6th academic year. 120 of them (50%) have estimated themselves as insufficiently prepared to begin the medical practice. This opinion concerned mainly the practical experience that was gained. Of the 210 undergraduates under questionnaire study, 118 have evaluated themselves as poorly practically trained. In the opinion of the students, the reasons are to be searched for in the educational policy of a high school. The criticism of the questionnaired students concerned mainly the following facts: - to scarce practical training "with the patient"; - inappropriate attitude of the teaching staff to the students' needs; - insufficient qualifications of the teachers; - the lack of programme coordination among the teaching institutions; - the domination of the specialized knowledge over the basic skills; - to extent programme of the paramedical subjects. In conclusion, the students have expressed a negative esteem of their medical qualifications, especially practical, obtained during their studies. And for this they blame their medical school, in the educational programme of which the specialized and theoretical elements dominate over the basical and practical ones.

Despite of the above mentioned objective reasons, the following personal features of an undergraduate are in the opinion of the 31 questionnaired students most frequently responsible for the unsatisfactory educational results: laziness, inability to organize one's time, lack of courage and lack of force to bore one's way, the abundance of non-studying occupations such as family life, overloading with learning, no interest or ambition to rise qualifications.

This certainly causes the stress connected with the initiation of medical practice. This stress concerns mainly the uncertainty as for the ability of a graduate to act effectively in the emergency status. Bilski et al. (1987) from the Medical Academy in Lodz state that the present system of recruitment for the medical studies includes only the reproducing testing capabilities and doesn't estimate the cognitive abilities and the psychomotor and emotional characteristics of a candidate nor does it aim at evaluating his/her moral and ethical posture. The well definded, measurable purposes of medical education are lacking. Without them, the appropriate programmes and methods of education as well as the control systems may not be constructed. The objective estimation of a graduate's medical qualifications and abilities therefore is impossible.

The lack of objective returnable information on the effectiveness of educational process makes impossible the introduction of the desirable changes in educational policy. The presently used criteria of student's knowledge appraisement are incomparable. The present educational system is oriented to the average students and gives no possibility to adjust it to the individual abilities of a student. The methods of teaching favour the passive attitude of the students and do not motivate them to realize above the average study purposes. Both the programmes and methods of the present medical education do not make students accustomed to the continuing education.

The formation of the highly specialized clinics and departments does not promote the primary health care teaching despite of its importance as an indispensable branch of medicine.

No possibilities exist to develop within the present health care system the teacher-student relationship based on the master-scholar model.

Due to the necessity of providing a complex health service for extent populations inhabiting certain region assigned to a hospital, it is impossible to follow the didactic requirements by the departments and educational staff concerns mainly the scientific production and the medical qualifications.

200 medical students of the 6th academic year served as a study population in a questionnaire inquiry performed by Przybyl et al. from Poznan. The subjects have found their diagnostic abilities much better than their therapeutic qualifications. The above cited authors consider altruism as the most important feature of a physician. The following interpersonal attitudes are also important in the light of the future medical practice of an undergraduate: - respecting the personal dignity of a patient; - tutelary attitude; - fellow feeling; - tolerance.

During the medical education process attention should be paid to the development of certain physician's attitudes to his own person. The most important of them are: - the professional perfectionalism meaning the continuous development

of the own abilities and qualifications as well as an improvement of the own personality; - the responsibility for the own activities; - the personal courage eg. maintaining one's own opinion regardless the expected disadvantegous consequences.

Among the ideological postures, those of the outmost importance for the physician are humanism, emotional sensitivity and understanding of the necessity to treat rightly and equally all the patients.

As the triangle relationship: physician - student - patient constitutes a specific feature of medical education process, all the attitudes of importance for effectivity of the future practice should be developed or consolidated during the study course. Almost 20% of the questionnaired students expressed their opinion that during 6 years of studying medicine most of the above mentioned attitudes have not been developed.

Budner from the Medical Academy in Lodz studied the hierarchy of valuation with respect to 15 selected features in the population of 287 6th-year students (189 females and 98 males). The author made the following comments on the results obtained: "the following major elements appear in the disposition of mind of the future doctors. The subjects consider preferably the self-dependence and courage in thinking, acknowledging one's own faults, unselfish action in the other's behalf, showing respect and favour to the patient regardless his dependency on the doctor and the conscientious fulfilling of one's professional duties."

This indicates that the students appreciate the posture orientated "towards the people" as well as the responsible attitude to the medical profession. However, underestimated were the physician's features such as the ability to keep in secrecy the information obtained (12th position), continuous improving of one's professional qualifications (13th position) and the loyality to one's principals (15th - the last - position).

While discussing the problem of medical education there appears the necessity of: - changing the educational programmes; - introducing the intense educational efforts in order to develop or consolidate the undergraduate's attitudes of fundamental importance for the future medical practice. Both these recommendations are associated with the necessity of improving the educational abilities of the academic teachers.

Kryst and Wojtczak write in their report that educational programmes in Poland are based on the idea that has been evolved for many decades. This idea, however, does not fully reflect the changing needs of health care system. The educational programmes realized in the majority of the high medical schools are dominated by the selection of the specialized contents and does not seem to be a consequence of clearly established, general aims and specific targets. Almost every one of these program components can, to some extent, satisfy the health care demands, however, in total they are hardly able to meet the general needs of people. The growing criticism is being expressed concerning this inconsistent and over-specialized programme. The programme which in the consequence of its deficiencies does not develop independent decision-making nor it stimulates a life-long continuing education. The latter is of special importance due to the rapid disactualization of the medical knowledge taught during the studies.

Due to the fact that almost all the practical training of medical students take place in the university clinics, far apart from the general practisioning reality, the student's interest is directed towards the very specialized problems requiring certain level of technical equipment. Therefore a student sees a disease as a hospital episode rather than a local society problem. An emphasis is layed on the acute health problems with little concern directed to the chronic diseases as far as they do not require a physician's intervention. The prophylaxis, health promotion and rehabilitation focus rather marginal interest, if any. The medical school graduates are therefore poorly qualified for the primary health care practice.

Our students are physically inefficient, 22-25% of them requiring the rehabilitation treatment and about 5% of them not being able to do the simplest physical exercise. Moreover, the general incomprehension of the physical culture needs is common among the medical students. The implications of this situation are two: firstly, the physical inefficiency may lead in the future to certain health problems of considerable economic and social dimension and secondly, a physician unable to understand the benefits of physical

culture for himself, wouldn't be able to follow in his practice the rule *"in corpore sano mens sana"* with respect to the rehabilitation and social reintegration of a patient.

We are aware of the fact that the multidirectory problem of medical education with its references to the social health at the turn of XX and XXI centuries, may undergo a profound discussion in all its aspects and in the atmosphere of conflicting opinions even in the nihilistic manner. We realize the discussion that will follow our presentation will not bring us to final decisions solving all the problems we face. Nevertheless, we hope that the opinions expressed here will make good beginning in the path that will lead us to a significant educational reform.

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