INTERNATIONAL CO-OPERATION IN POSTGRADUATE MEDICAL EDUCATION*

BY

EDWARD GRZEGORZEWSKI, M.D.

Professor and Head of Department of Preventive Medicine and Public Health, San Juan, Puerto Rico

It would be impossible and perhaps superfluous to attempt to review in a brief statement all the efforts and methods applied internationally in relation to what some call "post-basic" medical education. Therefore I shall limit my remarks to a few more general aspects of the subject.

The desire to share with others the benefits of advanced knowledge was characteristic of all truly great civilizations. Indeed, many famous centres of science in the East and the West alike, at the time of their flourishing, spread medical knowledge far beyond the boundaries of their countries.

Because of its multiple roots, its goals, and its applicability, medicine is with good reason looked upon as an international science and a part of a world-wide civilization.

Outstanding medical achievements sometimes place one or another nation ahead of the others and make such a nation the example and teacher. But so far in history, such a leading position usually has been rather limited in duration and scope; no single centre, no single country—no matter how powerful—has been able to rely exclusively on its own resources and stimuli for any length of time.

International co-operation in advanced—that is, postgraduate and graduate—medical education has mainly two aspects: (1) training abroad at a level, or regarding a type of knowledge, not available at home, and (2) keeping abreast of medical progress achieved elsewhere.

A large number of forms and methods have been tried out, applied, and developed in this area by various agencies and institutions working in collaborative activities. For instance, the W.H.O. in its programme uses (1) fellowships and travel grants for studies abroad, (2) visiting professors for short and long assignments, (3) visiting teams of medical scientists, (4) consultants on educational matters, (5) exchange of teaching and research staff, (6) international courses and seminars, (7) support to conferences on medical education and world-wide, national, or regional meetings, and (8) studies of selected educational subjects.

Studies Abroad

In relation to training abroad, it is interesting to observe that, in spite of the various financial, administrative, and linguistic barriers, about 20,000 medical people studied abroad in each of the last few years, and over 2,000 institutions accepted foreign postgraduate students. In recent years a higher proportion of these studies has been sponsored by official agencies in comparison with the early part of the century, when much study travel was personally arranged by the interested individuals. We can also note a gradual increase in educational travel sponsored by international agencies. In several countries special arrangements have been made in order to meet the

growing programme for foreign physicians and to facilitate access to host institutions. In some of them the programmes sometimes go beyond the walls of the host institutions and include extramural aspects of the problem studied.

This point deserves some elaboration. In almost all countries great advances in health could be achieved through medical and related measures right now if the already available knowledge were put into action properly and on an adequate scale. Therefore, acquaintance with methods of practical and massive application of medical progress is often equally important to foreign students as the acquiring of the scientific substance itself.

Anyone who is acquainted with the problem knows how often postgraduate students from many countries have been frustrated on their return home because of the difficulties they encountered when they tried to apply their new knowledge in their own local conditions. The stronger ones among them attempted to change the conditions—not always with success—but many became discouraged and limited their struggle to their immediate personal problems. How often the latter return from foreign study acquainted with only one organizational pattern of medicine, of medical research, or of their own specialty. They are naturally bound to imitate the only pattern they know, and could be easily criticized at home for imposition of a foreign model unsuitable for the local conditions. Studies in more than one country can improve the situation, but the problem should really be tackled from the other end—that is, finding out the proper ways to advance the matter in the country itself. A great task emerges of making education abroad meet the real needs not only of the students themselves but also of their nations. This in turn requires much more knowledge of the various ecological and health conditions in all corners of the world.

In addition to the well-recognized, time-honoured objectives to improve the individual's knowledge and technique, and to stimulate research and teaching in the home countries of students, international co-operation should put great emphasis on the search for talented persons who, because of lack of adequate conditions in their own country, cannot develop to their best and thus remain lost to their nation and to medicine.

Another aspect of training abroad needs to be strongly reflected in the programmes—that is, preparation for the functions of leadership in the student's own specialty. Whereas upon completing their training the national trainees usually expect to find a clearly defined place in an organized structure under the guidance of more senior leaders, the foreign trainees quite often will be the only advanced specialists in their city or their country. They will have to do the pioneering work, create the working conditions for themselves and their juniors. Although it is true that good individuals make good institutions, the complexity of modern medicine requires well-organized machinery at its every step from research to practical massive

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application. Some knowledge about these matters should be acquired at some stage of all the types of programme we are considering here.

Technical skills, scientific methodology, acquaintance with the modern equipment, are but a part of the benefit of the training abroad. This should be supplemented by inspiration with medical and scientific ideals, social usefulness of medicine, and knowledge of effective organization of work. With all due respect to the spontaneous growth of national experience in these matters, the potentialities of international cross-fertilization of ideas should not be overlooked. Indeed, they urgently need further energetic advancement.

In spite of their unprecedented growth, studies abroad still do not meet adequately the needs of all nations. Moreover, the other equally important side of the same problem remains even farther behind the needs and requires even more vigorous strengthening and support. This is bringing the advanced medical knowledge from abroad to the place within each country where it can be usefully absorbed. National centres for advanced education can reach a greater number of doctors than those who can travel abroad. International support is greatly needed for the establishment and operation of such centres, for in several countries national resources can be stimulated and developed if strengthened from abroad.

In some areas a national centre for postgraduate education can serve several neighbouring countries and thus become a regional centre. In others a co-operative inter-country programme can be limited to certain selected subjects. Examples of successful international co-operation of this kind are already available. They should be followed.

Importance of Research

Everybody to-day is convinced of the importance of fundamental research in medicine, and the problem of development of researchers and teachers will receive adequate attention at this conference. Therefore it will suffice here just to emphasize that international co-operation in this area seems to be particularly indispensable and promising. However, medical knowledge finds its complete justification, and indeed its title to glory, when it is fully and widely applied to all people in all nations. Postgraduate educational programmes should be conceived with the consideration of this basic aim of medicine in mind.

In spite of some shortcomings, other means of advanced education, such as international scientific and professional meetings and the flow of medical literature between countries, continue to increase in scope and volume. Language difficulties still represent a considerable handicap in communication, but there is still another point of some importance which may be raised in such an international gathering as this conference. Medical literature and other educational media in many countries give relatively more attention to the achievements of their nationals than of foreigners. Except for a number of universally recognized names, medical publications, and particularly textbooks, mention more often the names of those who published in the same language than in others. This rather understandable phenomenon presents some problems, as, for instance, when medical progress is attributed to the contributions of the various national or linguistic groups. Attempts have been made in some

countries to review medical history so that the contribution of those who worked and published in the less-known languages might be duly recognized. This trend to appreciate the "forgotten men," not only of the medical past but also of its present, may well deserve some place in international educational co-operation. I cannot forget an experience in a country exposed to changing cultural influences, where the oldest group of leading medical scientists reflected the influence of German medicine, the middle-aged group French, and the youngest one English and American medicine. The loyalty to their teachers and the literature of the language they knew well made the understanding between the three groups quite difficult.

Some understanding between the natural preponderance toward national source and a broader international perspective may lead to more just and balanced views on the truly multi-national sources of medicine, yesterday, to-day, and to-morrow.

Further exploration and action through international co-operation is needed in postgraduate medical education, with particular regard to programme, co-ordination, languages, orientation. The following questions might be asked:

1. How to develop further internationally assisted programmes best suited to the future responsibilities of postgraduate foreign students and the needs and potentialities of their countries? This should also include international support for the host and home training institutions.
2. How to bring about a sufficient but not too rigid co-ordination of the various efforts undertaken internationally?
3. How to overcome the language barriers in the flow of medical knowledge, particularly with regard to the less generally used languages?
4. How to preserve, enrich, and make universal the inherent permanent values of medicine, independent from transitory "cultural accretions" and national dominations, which can constructively support any freely developing culture based on science and ethics and thus permeate international educational programmes?

The answer to these questions should bring us closer to Descartes's far-sighted image of medicine as a constructive guide towards a better and wiser community of men throughout the world.

Supervoltage and radioisotope radiation has an essential place in the treatment of cancer, and one of the main requirements at the present stage is the specialized training of personnel. This was the conclusion of a Study Group convened jointly by the World Health Organization (W.H.O.) and the International Atomic Energy Agency (I.A.E.A.), which met in Vienna from August 3 to 5, under the chairmanship of Professor B. W. WINDEYER of the Meyerstein Institute of Radiotherapy, London. Training programmes should be utilized extensively for this purpose, the Study Group recommended, as should exchanges of experts and visits to radiotherapy centres in various countries. It was the opinion of the Group that further studies would be needed particularly with reference to the determination of the radiation doses (dosimetry) in clinical practice, the standardization of radiotherapy methods and their clinical evaluation. The Study Group consisted of radiotherapists and radiation physicists from Canada, France, Germany, Hungary, Italy, Japan, Mexico, Sweden, Switzerland, United Kingdom, U.S.A., and U.S.S.R.