

## IMPROVING EDUCATION AND RESEARCH THROUGH THE PAN AMERICAN HEALTH AND EDUCATION FOUNDATION (PAHEF)<sup>1</sup>

Clarence H. Moore<sup>2</sup> and Myron E. Wegman<sup>3</sup>

*The Pan American Health and Education Foundation (PAHEF) is an independent nonprofit corporation that works closely with PAHO. This article describes PAHEF's main program, a highly successful endeavor to supply students of the health professions with essential textbooks at low cost.*

### Introduction

Education of health professionals was an early priority item for the Pan American Health Organization, as it was for the World Health Organization. Efforts to improve teaching programs and teaching methods, to define goals of the educational process, and to prepare qualified teachers in schools for the health professions achieved varying degrees of success. In many parts of the world, however, notably in Latin America, a related difficulty surfaced promptly—the inadequacy of a significant learning resource: medical textbooks.

There were specific reasons for this problem. Medical textbooks are by their very nature costly. The market is limited, relatively few authors have competence in all the disciplines and skills needed to write a good text, and actual production of properly illustrated books is expensive. On top of this, the most popular books are those written in English, so production for Latin

American readers entails the further cost of translation.

The fact that textbooks in Spanish and Portuguese were not within the economic reach of medical students adversely affected the teaching-learning process. Study of theoretical subjects was limited to the repetition of mostly incomplete presentations by teachers—aided, perhaps, by equally incomplete mimeographed notes. By the same token, learning innovations, especially those having to do with more active student participation in delivery of health services, were limited by the students' unavoidable need to attend a great number of theory classes. The economic problem was particularly acute for students of modest means, even though once in practice they might have relatively high income levels.

The goal, then, was to facilitate acquisition of books while students were still in medical school, and in the process to encourage physicians to accumulate their own basic reference libraries.

Analysis of the problem led to a proposal for a revolving fund which could provide the capital needed to conduct direct negotiations with publishers—either for purchase of books in quantity or for the right to print them independently. By operating on a nonprofit basis, holding down administrative costs, limiting the number of books in-

<sup>1</sup>Prepared with information provided by Dr. José R. Ferreira, Chief of the PAHO Division of Human Resources and Research, and by Mr. Richard P. Marks of the PAHO Office of Textbook Administration.

<sup>2</sup>Dean Emeritus and John G. Searle Professor of Public Health, School of Public Health, University of Michigan, Ann Arbor.

<sup>3</sup>Executive Secretary, PAHEF.

cluded in the program, and making each school responsible for sales, storage, and record-keeping, books could be made available to students at half the regular market price. Cooperation, or at least tacit acceptance, by local bookstores could be encouraged by systematically restricting the program to undergraduate medical students and not opening it to practitioners.

Such a scheme, to be feasible, would require a stable capital fund that could be replenished as books were sold. The fund would have to be reasonably large, both because of the high original investment needed—some basic medical books cost as much as US\$45—and because stocks must be maintained to have books ready when needed by the students.

The Inter-American Development Bank, which has a broad mandate to promote economic development in the countries of the Americas individually and collectively, accepted the logic of this proposal and in 1970 made a loan of US\$2 million available at low interest. As an international agency, however, the Bank found legal difficulties in making a loan to another international agency such as PAHO.

The stimulation provided by this contretemps led to establishment of the Pan American Health and Education Foundation as an independent nonprofit organization able to receive and administer the loan. The development and work of the foundation are discussed on pages 19-21.

### **Operation of the Textbook Program**

To make a program like this successful, the textbooks included had to be highly acceptable to students and faculty members, and had to be available to students as needed at affordable prices. Since the concept was based upon high-volume distribution, it was necessary to limit the number of books chosen while offering some alternatives. Accordingly, it was decided to offer one or two books in each major subject.

It was evident that the texts chosen would stand the greatest chance of general acceptance if the choices were based on recommendations by broadly representative committees advising the PAHO staff responsible for the final decisions. Committees of this kind were thus established, one for each discipline. It quickly became clear, however, that each committee needed to carry out a much broader function. A standard practice soon developed. Each committee would meet under PAHO auspices for two weeks, and during the early part of the meeting would make a detailed analysis of the teaching curriculum for the particular subject involved—including consideration of necessary content, new teaching methods, scheduling, and teaching aids. In practice, this meant that each committee not only evaluated traditional teaching, but also established frames of reference for such innovations as multidisciplinary integrated teaching. After these discussions the committee would proceed to review available texts and to recommend one or two for inclusion in the program.

The committees have agreed that textbooks or any other kind of instructional materials serve effectively in the teaching-learning process only when they become an integral part of that process. If a textbook or other material is presented as an isolated item, it will have only a limited impact on teaching. Integrated textbooks, for example, will neither be purchased by students nor recommended by teachers if the teaching process itself is not based on an interdisciplinary approach.

The membership of each committee is a key to its success. The group needs to be representative of the multiple points of view found in universities and medical schools throughout the Americas, yet the number of members cannot be so large as to be unwieldy. Each committee must be prepared to consider the many accomplishments of traditional methods while being open to imaginative new ways of using

modern techniques and resources. Despite the difficulty of the task and the responsibility involved in serving the educational needs of 19 countries, those invited to participate have done so willingly and with dedication.

Beyond committee membership, it is also necessary to draw much more widely on the potential strengths, interests, and desires of the knowledgeable members of the some 150 medical faculties in the Americas. Obviously, the more general the participation in making choices, and the wider the understanding of reasons for them, the more generally the chosen books will be used and accepted. To accomplish this, letters are sent to each school asking for general comments on the subject matter being reviewed, as well as for specific suggestions about particular books the faculty would like to see on the list. In contrast to committee participation, response to this solicitation has been uneven. Some schools have responded quickly and helpfully, but in other instances, unfortunately, no response has been received.

Once the selection has been made, books are either bought in quantity from the publisher or an agreement is reached which allows PAHO/PAHEF to publish directly in return for payment of royalties. The latter procedure offers advantages in terms of simplicity, uniformity and durability of the books and ease of distribution.

At each school an *encargado* is named. This person—sometimes a professor but more often a member of the administrative staff—takes charge of ordering, receiving, storing, and selling the books and remitting the proceeds. In general this arrangement has worked well, although, as might be expected, there have been some difficult situations.

By the end of April 1977 the medical textbook program had exceeded the goals established in the loan agreement. Twenty-eight medical textbook titles had been purchased for use in Spanish and Portu-

guese, and 335,000 books had been sold through 146 participating schools.

Publishers have been pleased with the program and have cooperated very well. An important advantage for them is that the program has expanded the demand among a group that previously bought no books at all. In this way the program has "made the market," so that publishers are able to produce in greater volume at lower cost. In all, PAHEF purchases over half its books from publishers as finished works—editions identical in quality and presentation to those sold to the general public through commercial stores. Somewhat less than half are printed under contract after buying reprint rights from the publisher.

The circumstances which led to creation of the medical textbook program also exist in fields of education preparing undergraduates for other professions. Of these, the program seemed most adaptable to the field of nursing education. Therefore, in 1973 the program was extended on a limited basis to nursing schools. This new endeavor was just as successful as the medical textbook program, and, in fact, was received even more enthusiastically by the schools involved.

In the wake of these two successes, attention has logically turned to assisting in training the entire health team—including the technicians, auxiliaries, and community health workers so necessary to satisfy the priority currently assigned extension of health services to populations not adequately served in the past. To this end, an expanded program is needed to provide, besides textbooks, other tools such as manuals, audiovisual materials, and diagnostic instruments adapted to preparing students and trainees in health subjects at all levels. Accordingly, negotiations with the Inter-American Development Bank are far advanced for an additional loan of US\$3.5 million to provide capital for extending the PAHEF program to dental health, nursing, nutrition, sanitary engineering, veterinary

medicine, laboratory technology, X-ray technology, and training of auxiliaries and community health workers.

Besides students of the health professions, an additional major group for whom the program is intended consists of people who have received formal health-related training at the secondary or technical school level, or who have learned a skilled health services trade through work experience. This group includes laboratory workers, operators of radiographic equipment, sanitary inspectors of various kinds, water plant personnel, practical nurses, hospital food service workers, midwives, and—to the degree that careers are now being created for them—dental and veterinary assistants. These persons tend to be drawn from the lower middle class in most countries. Though not as well-off financially as the average university student, they ordinarily possess the means to buy at least a minimal range of learning materials. The main problem is that such materials often do not exist in Spanish or Portuguese, and those that do exist are often prepared with a different cultural context in mind, limiting their usefulness.

A third major group forming the public for an expanded program probably did not exist as recently as 20 years ago. It is composed of nursing and sanitary auxiliaries, health "promoters," and various kinds of community health workers. The work done by these people ranges from staffing rural health posts, and sometimes actually treating diseases on their own with relatively little professional back-up, to engaging in simple efforts at raising health consciousness among marginal populations. At one extreme the community worker, although not trained at a professional level, works full-time at his or her task, exercising broad responsibility for treating sick patients and knowing when their conditions require more specialized care by a health center or district hospital. At the other, he or she is

simply a community member who tries to educate friends and neighbors about the need to pay more attention to their own health and that of their families, and whose work is on a strictly free-time volunteer basis. Two characteristics that virtually all community workers are likely to share is that they are in the lower economic strata of their respective countries and that they lack access to simplified learning materials that could be of great use to them in carrying out their functions. In general, however, health workers at the community level show surprising ability to comprehend health problems and provide health services if appropriate concepts and procedures are taught through use of advanced teaching techniques.

For this group the learning materials are likely to be purchased largely by health authorities and organizations responsible for their training. Of course, individual purchase of manuals is a possibility to be explored.

At present there are few instructional materials for workers in this category. Consequently, the new loan that is anticipated will be used partly to supplement PAHO/WHO resources in the search for methods and materials suitable for training large numbers of health workers in their own communities at low cost. The Center for Educational Technology in Health (CLATES) in Rio de Janeiro will have a key role in developing instructional materials. PAHO/WHO will establish interdisciplinary working parties at international and national levels to establish criteria, norms, and procedures to guide development of instructional materials, adapt them to local situations, and test them under actual field conditions.

The current PAHEF program has been limited to Latin America because the number of Caribbean area students not using Spanish is too small to make the technique of large-volume purchases eco-

nomically feasible. In the expanded program, however, it is expected that the number of Caribbean health workers involved will be large enough to make inclusion of instructional materials in English a feasible proposition.

### Other PAHEF Functions

Creation of the Pan American Health and Education Foundation has served many other functions beside the textbook program. As indicated previously, PAHEF is a legally independent organization incorporated in Washington, D.C. It is governed by a nine-member board of trustees whose members serve without compensation,<sup>4</sup> and it holds tax-exempt status as a "nonprivate" foundation. Donations to PAHEF are deductible from United States federal income, estate, and gift taxes.

Contributions from any source are accepted by PAHEF, provided they are given for projects which are consistent with the foundation's objectives and which have the technical approval of PAHO/WHO. All grants and donations made for specified

activities are treated as trust funds, are used exclusively for the purposes given, and are accounted for separately. PAHEF receives and administers such funds to support health and education projects that are to be carried out under the technical and administrative supervision of PAHO/WHO. Contributions come from a variety of private and public foundations, public or quasi-public international and national agencies, private corporations, and individuals.

The Trust Fund Program for 1976 included 54 projects and involved an expenditure of US\$1,587,694. The major part of the program dealt with nutrition, comprising training, research, and applied nutrition projects being carried out at the Institute of Nutrition of Central America and Panama (INCAP), at the Caribbean Food and Nutrition Institute (CFNI), and in various individual countries. The remainder of the program was directed primarily at education and training, medical care and hospital administration, family planning, communicable diseases, dental health, and nursing. The two largest grantors and donors were the W. K. Kellogg Foundation and the Research Corporation (which is also a foundation).

PAHEF also has a small reserve of unrestricted funds. These are too limited to finance a comprehensive program, but they permit PAHEF to respond to opportunities where a small investment will fill a key need or supply the impetus needed to start a project and qualify it for greater support from other sources.

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<sup>4</sup>PAHEF's officers are: President—Dr. Abel Wolman, Professor Emeritus of Sanitary Engineering, The Johns Hopkins University; First Vice-President—Dr. John C. Hume, Dean Emeritus, School of Hygiene and Public Health, The Johns Hopkins University; Second Vice-President—Dr. Charles L. Williams, Jr., Deputy Director, Pan American Health Organization; Treasurer—Dr. Abraham Drobny, Adviser in Public Health, Inter-American Development Bank; Executive Secretary—Mr. Clarence H. Moore.

### SUMMARY

A highly productive method for aiding medical education in the Americas has been developed that involves using a revolving fund to buy large quantities of essential textbooks at low cost. The procedure, which utilizes medical schools as intermediaries, has made it feasible to sell books directly to medical students.

Establishment of the revolving fund was made

possible by a loan of US\$2 million from the Inter-American Development Bank. To facilitate the operation an independent nonprofit corporation, the Pan American Health and Education Foundation (PAHEF), was created to receive and administer the funds. The foundation works closely with PAHO.

In the first six years since its establishment the

PAHEF program has grown rapidly, involving a total of 146 medical schools in the PAHEF-sponsored distribution of 335,000 texts. The program has also been extended successfully to nursing

schools, and plans are now underway to extend it still further to a wide variety of other health workers.