PAN AMERICAN SEMINAR ON EDUCATION AND HEALTH CARE

Final Report

PAN AMERICAN HEALTH ORGANIZATION
Pan American Sanitary Bureau, Regional Office of the WORLD HEALTH ORGANIZATION

1979
FINAL REPORT OF THE PAN AMERICAN SEMINAR ON EDUCATION AND HEALTH CARE

(Caraballeda, Venezuela, 20-24 February 1978)

Sponsored by:
World Federation for Medical Education,
in association with the
World Health Organization

Pan American Federation of Associations
of Medical Schools in association with the
Pan American Health Organization

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The Pan American Seminar on Education and Health Care (which from now on will be called simply the Seminar, in the interest of brevity), was sponsored by the World Federation for Medical Education (WFME) in association with the World Health Organization (WHO) and was organized by the Pan American Federation of Associations of Medical Schools (PAPAMS) in association with the Pan American Health Organization (PAHO). The meeting which was held at the Macuto Sheraton Hotel in Caraballeda, Venezuela from 20-24 February 1978, under the aegis of the Ministry of Health of Venezuela was supported partially by a grant from the United States Department of Health Education and Welfare.

The meeting was attended by representatives from health services; universities, and social security organizations; by medical educators and educators in other health-related disciplines; and by the staff of interested national and international organizations. The list of participants appears in Annex I.

I. BACKGROUND

It is universally recognized that the efficiency of health care depends on many interrelated factors: social, economic, cultural, historical, scientific and technical, and educational. The last mentioned, represented by teaching institutions, professional associations and similar bodies, can make a great contribution, particularly in training a type of personnel that will not merely meet limited health needs, but will devote itself more actively to the task of administering the health programs required to meet the real health needs of the community.

The gaps in the delivery of effective health services, particularly in rural and marginal areas, are considered to be the biggest obstacle to world progress in health. The problem has long been causing a concern which has grown considerably in recent years within international agencies and countries and in organizations of different kinds.

The two traditional lines of action connected with primary health care are easy to identify: (a) organization of services for this purpose; (b) production of qualified human resources. In the past, these two lines of action have been the responsibility of separate institutions, and it has been clearly recognized that this prevents them both from carrying out their tasks. For many years, efforts have been made to solve this problem on both the national and the international planes,
but the need for a greater effort to analyze and envisage the problem jointly, with the equal participation of both "sides" and of other interested sectors, with a view to evolving a joint plan of action, is obvious.

For these reasons, the above-mentioned organizations decided, on the initiative of FMEM, to hold this Seminar, the first of a series of similar meetings to be held in different regions of the world, which will culminate in a World Conference on Education and Health Care. This World Conference will be responsible for formulating the objectives and lines of action for the educational side of the joint effort to be made.

The Seminar was planned as a multisectoral effort, so as to ensure the active participation of different components: education and service at different levels, and other elements which are closely linked with the problem (professional associations, agencies for international action, financing bodies, etc.).

II. AIMS OF THE SEMINAR

The Seminar's general purpose is the effective establishment and dissemination, down to the operational level, of an internationally acceptable attitude regarding the responsibility and the role of the educational component in the effective delivery of health care. The specific objectives of the Seminar may be summed up as follows:

- to focus the attention of the leaders in education and health services, and of the general public, on the responsibility and the role of personnel training in meeting the community's health needs;

- to consider methods of developing the human resources required to constitute an effective health team;

- to evaluate to what extent education is carrying out its responsibility as part of health care;

- to consider the patterns of action and interrelationships through which medical training and education in other health sciences fulfill their responsibility for training personnel in those fields.

- to identify the problems and objections preventing effective action and the means of dealing with them; and

- to recommend procedures for securing effective interrelationships between education and health care that would be international in scope.
III. AGENDA

The subjects discussed by the Seminar were as follows:

A. The need for coordination between education and health services.
   A.1 The responsibilities of education to the community.
   A.2 The health sector's need for educational support.
   A.3 The effects of coordination on the improvement of health.

B. Present interrelationships.
   B.1 Interrelationships at the policy level.
   B.2 Interrelationships at the operational level.

C. Procedures for securing a productive interrelationship.

D. Strategy for action.

The subjects were first discussed at general meetings at which previously selected rapporteurs and commentators made introductory statements, and were later analyzed in discussion groups. In order to facilitate the discussion, a series of questions on each subject was prepared in advance. Different moderators, rapporteurs and co-rapporteurs took part in the discussion groups as follows:

GROUP 1

Moderator: Dr. Rodolfo V. Young
Rapporteur: Dr. Kenneth L. Standard
Co-Rapporteur: Dr. Jorge Castellanos

GROUP 2

Moderator: Dr. José Laguna García
Rapporteur: Dr. Carlos Arguedas
Co-Rapporteur: Dr. Julio Ceitlín

GROUP 3

Moderator: Dr. Rafael Velasco Fernández
Rapporteur: Dr. Jorge Haddad
Co-Rapporteur: Dr. Tibaldo Garrido
IV. OPENING SESSION

The meeting opened at 10:00 a.m. on 20 February 1978. The following were on the platform: Dr. Andrés A. Santas (President of FMEM), Dr. Rodolfo V. Young (Vice-President of FEPAFEM, representing Dr. Aloysio de Salles Fonseca), Dr. José Roberto Ferreira (Chief, Human Resources and Research Division, PAHO, representing Dr. Héctor R. Acuña, Director of PAHO), Dr. Efrén del Pozo (Secretary-General of UDUAL), Dr. Luis Manuel Manzanilla (Executive Director of FEPAFEM), Dr. Henry van Zile Hyde (Executive Director of FMEM), Dr. Carlos Luis González (General Rapporteur) and Dr. Ovidio Beltrán Reyes (General Coordinator).

The meeting opened with a welcome address by Dr. Luis Manuel Manzanilla on behalf of the sponsoring and organizing bodies.

Message from the Director of PAHO

Dr. Ferreira said a few personal words of welcome and then read the message sent to the Seminar from the Director of PAHO. In his message, the Director referred to the strategies approved by the Ministers of Health of the Americas to ensure that the entire population of the Americas receive at least a minimum level of health care, and pointed out the importance of this decision in view of the fact that the population groups in rural and peri-urban areas will be 140 million by 1980. He then mentioned another fact of fundamental importance, the lack of health service systems and the unsuitability of the educational system. After analyzing the role that might be played by human resources in an overall solution of the problem, he emphasized the necessity of coordinating and integrating the health services with medical training.

He stressed how important it was for the Seminar to study in depth the "interrelationship of professional training and the system for the delivery of health care services," since it was a multisectoral meeting comprising eminent figures in health, education, social security, universities, faculties of medicine, professional associations and agencies concerned with international development.

He mentioned a meeting of the PAHO Textbook Program Committee on the Teaching of Preventive and Social Medicine, and termed one paragraph of its report a basic premise for the Seminar's discussions, namely: "In all actual social training, medical education plays a fundamental role in the reproduction of the organization of the health services, which crystallized in the updating and conservation of specific procedures, both in the field of knowledge and in that of techniques and ideological content. Moreover, the structure of medical care itself exercises a dominant influence on the training of human resources, mainly through the structure of the labor market and the conditions circumscribing the practice of medicine."
The limited context in which professional training was carried on, usually in tertiary-level hospitals, had impeded integrated training, which should be based on the whole breadth of a regionalized system with an important community health care component. He gave a brief account of PAHO's efforts to find a political definition, at the highest decision-making level of the countries, that would underline the need for a link between health services and manpower training, understood as a process of joint programming and joint participation in the service and training activities; and to ensure that the training system visualizes the system of health services as a basis for the development of its curricula, the definition should incorporate such ideas as on-the-job training, the objectives of the process, large-scale training, with emphasis on self-education and the evaluation of performance; and, as a counterpart, the delivery of services, which should themselves be transformed, not only to ensure better coverage of the population, but also to serve better the educational process.

In conclusion, he expressed the conviction that the Seminar could have a profound significance by "establishing the bases for real coordination between all the institutions which contributed to the improvement of the health of our peoples."

Address by the Representative of the Ministry of Health and Social Welfare of Venezuela

The next speaker was Dr. Luis E. Moncada, Director of Human Resources Development, Ministry of Health and Social Welfare of Venezuela, on behalf of Dr. Antonio Parra Leén, Minister of Health, who welcomed the participants in the Seminar. He expressed his confidence that the Seminar would help to unify criteria for the coordination of activities between the educational sector, the community and the health institutions. He briefly described Venezuela's success in developing health manpower which had been achieved thanks to the close cooperation of the Ministry of Health and Social Welfare with the Ministry of Education and the universities. Owing to that combined effort, Venezuela had tackled the training of specialized medical personnel, graduate nurses and intermediate level personnel, and had also developed an important program of continuing education for doctors in rural areas, which had been carried on in conjunction with the Central University of Venezuela. Plans had been put forward for the reorganization of the training of the professionals who would be responsible for the integral health care of the people of Venezuela in the near future. He said that in Venezuela there was an awareness of the need for general practitioners, a goal in which all the organizations concerned were interested: the Ministry, the universities and the Venezuelan Medical Federation. He concluded by wishing the participants from the various countries the best possible stay in Venezuela, on behalf of the Minister and on his own behalf.
Speech by the President of FMEM

Dr. Santas began by recalling that FMEM represented teachers of medicine in the different regions of the world; that this Pan American Seminar was the first of a series of meetings that would culminate in the World Conference on Education and Health Services, which was expected to make concrete recommendations on policies, strategies and activities and to secure coordination between the educational system and the system of services of the health sector.

He emphasized that teachers and officials had only recently become aware of the necessity for joint action by both systems and they were still a long way from achieving a consensus that would permit progress, in the educational sector, at least. However, the idea that the personnel must not only have a suitable humanitarian, scientific and technical training, but also a correct social attitude, which means that it should be convinced that a fundamental part of its task is to serve the community, bearing in mind the national health goals. He added that there were factors in the educational system which opposed change and integration. First, the existing philosophy and methodology were largely based on the simple transmission of knowledge and placed more emphasis on teaching than on training. Moreover, the concept of university autonomy was deeply rooted in all the seats of learning, and led to distrust of any commitment outside the institution.

There were also some professional circles which were imbued with the idea that the institution had no other obligation to society than to create, preserve and transmit knowledge, disregarding the fundamental mission of service.

As a result of what he had described, the educational process was disease rather than health-oriented. There was often more interest in a new and untested enzyme than in infant mortality or malnutrition in rural areas and marginal settlements, or in mental disease and bronchitis in the big cities.

He pointed out that training was given in highly complex hospitals, which were referral centers and which did not reflect the real pathology of the community; and that in the curricula, almost no consideration was given to national health problems or to different systems for the delivery of services, because medical practice was an individual matter.

In nearly every country, health policies had been laid down in such broad terms that they could be taken merely as expressions of hope. The health plans intended to implement those policies were not always adapted to the real possibilities and needs of the community, nor fitted in to overall development plans. Furthermore, the plans for an overall
and meaningful approach to primary care were inadequate because the determining factor in the delivery and quality of health care was still the financial capacity of individuals and groups. The resources were not always distributed in accordance with priorities, and the effectiveness was not often evaluated.

He emphasized that if there was no change in that approach, proper manpower training would be difficult and that if the traditional mentality and attitude of medical educators remained unchanged, students would not be prepared for the necessary changes, either in services or in education. As the basic goal must be for the community to receive the best possible care within the limits of the available resources, both sectors must be convinced that they are fulfilling their responsibility to the community through the service and through manpower training.

Integration of the two sectors was imperative since the care and training systems had a single aim, to improve the people's health. To achieve that aim, the essential element was manpower. If the spirit of understanding and cooperation based on the principles he had mentioned was lacking or dormant, it would be useless to plan something which could never be put into practice. And it was no good to think that the goal could be attained through coercion, even on the part of the highest authorities. In conclusion, he thanked PAHO and FEPAFEM for their help and expressed his conviction that the meeting would be fruitful as a result of the exchange of experiences and views at the highest level. As President of FMEM, he thanked the participants for taking on the responsibility they had assumed; nothing could be more acceptable to the university spirit than the privilege of contributing, however modestly, to the well-being of the peoples of the Americas.

V. ITEM A: THE NEED FOR COORDINATION

The Moderator of the general meeting on this subject was Dr. Santas, and the three sub-items were presented as follows:

A.1 The Responsibilities of Education to the Community

Dr. Rafael Velasco Fernández and Dr. Robin Badgley spoke on this sub-item. Summaries of their statements follow:

Statement by Dr. Velasco Fernández

The speaker divided his statement into the following three parts:

1. In the past, traditional tasks of the institutions of higher education were to produce, transmit and certify knowledge. That had been done first and foremost through research, discussion and individual
thinking in the university spirit. A further task had appeared with
time, that of extending educational activities outside the university,
which was now recognized as fundamental.

2. The traditional pattern had produced positive and negative or
doubtful effects. The following might be mentioned among the positive
effects: (a) The production of knowledge had been speeded-up and in-
creased; (b) Dogmatic attitudes, which distorted the truth, had been
abandoned in favor of scientific method; (c) Capable and well-trained
professionals had been trained to deal with all kinds of individual and
community problems; (d) The prestige and presence in the community of
institutions of higher education had been promoted; (e) Many people who
were "free through knowledge" had been trained; they had been research-
minded, critical in their attitude and they were promoters of social
change. Among the negative or questionable effects, he mentioned the
following: (a) The creation of an intellectual elite, often cut off from
or opposed to social realities, had been encouraged; (b) Many high-level
"liberal" professionals had been trained but many of them had no inclina-
tion toward social action; (c) A chaotic distribution of professionals
had been encouraged in accordance with personal inclination, ill-
understood "vocations" and sometimes, with political expediency.

3. The universities of Latin America now recognized that higher edu-
cation had other functions and goals. There was a greater social aware-
ness among professors, students and graduates. A feeling of gratitude to
higher education had sprung up in the community, and as a result, there
had been some changes: (a) The universities had become sources of social
services; (b) The universities represented a kind of "national con-
science" with the social effects that might be expected, which had not
all been positive, and the "critical university", which was always a
well-informed questioner of government action, had itself, seen the light
of the community; (c) The educational curricula tended increasingly to
bring students into touch with social realities and community problems.

4. Education in the health sciences had received a special impact
from the new attitudes as: (a) Stress had been placed on the social
component of disease, although it had to be admitted that that factor had
been recognized in medicine ever since Hippocrates; (b) For that reason,
it was now necessary to revise curricula and devise new health courses,
as had been done in many countries.

5. In the present situation, it was essential to adopt a fair and
balanced attitude. The teaching of medicine was in danger of going to
ideological extremes, which could distort the real purposes of the uni-
versity. The community action required the contact with social problems
and full recognition of all the pathogenic factors should not lead to
the adoption of curricula which omitted basic clinical training, full understanding of the physician-patient relationship and individualized treatment. The suffering of the patient was also a reality, and without a knowledge of pathology and the basic sciences, it was not possible to practice medicine properly, in the community or with individuals. Insofar as social disciplines were added to the curricula, they would enrich medicine; but insofar as they took the place of basic subjects, they would have a negative effect and would help to lower the teaching levels more. Those arguments were often heard, mistaken as they were, because of the excessive emphasis they placed on the social component of disease. It was said that prevention was better than cure, but these concepts are not antagonistic. It was also stressed that a doctor received better training in the primary contact centers than in the hospital, but the incorporation of primary centers in the training program did not mean that hospital work was no longer necessary as some people had come to believe.

Statement by Dr. Robin F. Badgley

Dr. Badgley said that through the years, medicine had been distinguished by the search for excellence, and medical education and medical care were still imbued with that spirit; but irreversible changes in technology and a greater complexity in social organization had oriented education care toward community service.

In its search for excellent techniques, medicine had sometimes seemed to be more concerned with buildings and equipment than with patients. At the same time, some curricula had become rigid, impossible to adapt to the changing community situations. A service bureaucracy had developed, characterized by an impersonal delivery of health care. The objectives of contemporary medical education did not seem to be related to those social purposes. Although a universal technology had increasingly been adopted, it should not be forgotten that practice was closely bound up with social and political values. Those facts had a direct and critical effect on all aspects of health manpower training. For example, cultural values determined what people considered to be disease, how it was classified and how care was sought and administered. Above the health system there was the political ideology. Doctors and scientists often detested that expression and preferred to ignore its consequences, although the nature of their work and the use of communal resources were affected thereby. It was, however, very dangerous to consider the political ideology for medical education and medical care irrelevant. There were many national and local differences in medical education but a number of trends were emerging, although they were isolated and often uncoordinated. The trends were not often found together, but they seemed to indicate that a point had been reached where there would be substantial changes in medical education. There were various social forces that were changing the health system, which were briefly as follows:
1. Medical education must be directed to satisfying people's health needs. Although that was a very obvious point, it was often forgotten, and precedence was given to technical excellence when the medical education curriculum was being formulated. But there was increasing recognition of the fact that that process had to be changed, if not reversed, and the great health needs needed to be given the priority they deserved.

2. Community participation. There was increasing recognition of the need to combine professional interests effectively with public interests.

3. Social responsibility. There was increasing interest in getting public institutions to account for the use and assignment of the resources allocated to the health services. As the personnel and the number of services increased, all the components of the health system should be under constant critical scrutiny so they could be evaluated in terms of cost/efficiency ratio and social impact.

4. Multidisciplinary and multiprofessional work. In recent decades, a large number of health workers had appeared, but as a general rule there had been a lack of effective coordination between training programs themselves, and between training programs and programs for the delivery of health care. Among the great exponents of that idea were Bismark, Marx, Beveridge and Sigerist, and whether it was based on the altruism of the profession, political ideology, or other criteria, it had produced far-reaching changes in many national health services. That movement also contributed to the redefinition of medical education and medical care. The idea that health care was the right of all human beings was something which should penetrate deeply into medicine.

A.2 The Health Sector's Need for Educational Support

This sub-item was introduced by Dr. Luis Fernando Duque and Dr. Horacio Rodríguez Castells, whose statements are summarized below.

Statement by Dr. Duque

Dr. Duque called his paper "An Integral Approach to the Development of Health Services and the Training of Personnel." He began by emphasizing the fundamental importance of human resources for any country desiring to make changes in its health care systems. In his view, any country's health care system, whatever its structure and orientation, drew upon various components, such as health policies, technology, administrative skills, physical resources and manpower.

He pointed out that at the present time the goal of health policy in Latin America was to extend coverage. The health system's mission of
providing efficient services was closely bound up with the educational system for training personnel, carrying out research and generating critical judgement; both systems had one common goal—the health of the community.

The educational sector obviously offered great advantages for the health services sector, such as an improvement in the quality of health care and the development of programs of continuing education; but it was also true that that interrelationship might give rise to some negative characteristics, such as the following: for the health system, it sometimes made the services more expensive or distorted some of their integral objectives; and for the university, it was potentially dangerous at a given time, as it could lead to the loss of its critical faculty, which could go as far as "university castration."

The governments of the Latin American countries had long recognized the need to coordinate the health and education sectors in order to train health manpower, but little had been achieved.

He quoted the recommendation of the Meeting of the Ministers of Health of the Americas in 1963 regarding the establishment of inter-institutional bodies among the ministries of education, university and public health authorities, and the professional associations to study the training of the professional manpower needed for health plans. Nine years later, however, the second Meeting recognized that "the training of high-level human resources in health in the majority of the countries is separated from the health sector and subject to the educational sector's decisions." The speaker referred to the responsibilities of the health and education sectors in the development of health manpower. In conclusion, he said that there must be an integration of teaching and service not only at the level of higher education and technology but also at the primary and secondary levels of education.

Statement by Dr. Rodríguez Castells

The speaker's first point was that the need for a linkage between education and service in the health field would seem to be beyond discussion; but in view of the far-from-satisfactory results achieved so far, it was justifiable to discuss the question at the Seminar. He would try to give the fruit of the experience he had gained while discharging responsibilities in both of those fields.

He recalled that up to 1970, more than 70 agreements between teaching institutions and health organizations had been signed in Argentina; but there had been no continuity and the links that had been established had practically disappeared for many years, and efforts were now being made to reestablish them. There were various justifications
for the health sector's need of educational support, such as the increasing complexity of medicine, which inevitably led to specialization; the fragmentation produced by specialization, with the danger of the dehumanization of medical practice; the development of a technology which was often more than was needed; the vertiginous rise in costs, hand in hand with the demand for medical care; the rise in life expectancy, which led to greater prevalence of chronic diseases; the increasing importance of preventive and social medicine; and lastly, the trend towards egalitarian health care systems with guaranteed funding, which could be achieved only through adequate coverage and suitable regionalization. He said that the first thing the health sector should expect from education was the training of professionals capable of espousing its purposes. As the trend was towards coverage with good primary medical care, it was obvious that the need was to train general practitioners, with a solid knowledge of internal medicine, pediatrics, general surgery, as well as some gynecology, all with the accent on prevention. One stumbling block had been the attitude of the teachers; nothing could be done without their agreeing to it.

Educational cooperation could also take the form of incorporating academic units in the health sector, which had been achieved on a broad scale in Argentina between 1966 and 1971. During that period, the teaching faculty had taken part in technical meetings in order to establish criteria for different programs and activities of the health bodies.

Another contribution made by the education sector was that of social and biological research. The studies on systems of health care, new types of personnel fit for the activities to be carried out, and new techniques were now of fundamental importance. The same could be said of the studies on human resources, such as the one carried out in Argentina during the period he had mentioned.

The responsibility for continuing education, another of the great educational supports required by the health sector, should be shared by the medical faculties, health bodies, scientific societies, trade unions and university associations and the education must be adapted to realities in the health field, as nothing would be gained by providing up-to-date training at a high academic level if the professionals to whom it was directed were unaware of the country's real health problems.

Lastly, he said that another field in which the universities could give strong support was in the health education of the people through a multidisciplinary approach aimed at changing the attitudes of the community.
A.3 Effects of Coordination on the Improvement of Health

The speakers on this sub-item were Dr. Thomas Hunter and Dr. Carmen Velasco, the gist of whose statements will be found below:

Statement by Dr. Hunter

The title of Dr. Hunter's paper was "The Need for Cooperation in Providing Basic Health Services." He said that although the problems differed considerably from country to country, as a general rule, it could be said that the formulation and introduction of a health policy was a multidisciplinary effort to which all the segments of society should contribute. He continued with a discussion of some questions the answers to which he felt were unclear or controversial.

The first of these questions: "What should we expect of doctors?", gave the impression that the medical schools and the medical profession were expected to solve most of society's problems; but the truth was that they were not able to cure many social evils, such as ignorance and poverty.

The second question was: "To what extent was the doctor's behavior the outcome of his education and the models he had had to observe; and to what extent did it reflect the realities he had to face in the exercise of his profession?" Obviously, the answer was not simple, but it was reasonable to suppose that if a doctor found himself in a milieu which did not suit him, he would have to give in and adapt himself to the conditions which surround him. For that reason, it was very important that the service and educational organizations should strive to ensure that doctors and other health personnel should find themselves in reasonable surroundings at the outset of their careers.

Another question might be framed as follows, "What can general practitioners achieve?" In the speaker's view, in spite of the excellent work that was being done to train them in community medicine and primary care, the result would be frustration and failure if once they were on the job, they found it impossible to do what they had been taught to do.

One problem which was world-wide in scope was that of health care in rural areas. Experience everywhere showed that doctors and institutional resources tended to be concentrated in urban areas. The general view was that the maldistribution of resources would not be remedied simply by producing more doctors trained according to the old model, or on any other model. It was obvious that doctors would not be willing to practice in areas where there were no hospitals, they did not have the support of their colleagues, and there was no recreation for their families, nor educational facilities for their children.
Dr. Hunter said that that was true for the majority of doctors but that there would always be some who were willing to go and work in isolated areas.

Dr. Hunter concluded by saying that it would be unrealistic to expect that, as a general rule, doctors would want to work far from suitable hospital facilities, or that the problem of complete coverage of the basic health needs of the population could be solved to any major degree by more doctors or by doctors trained in primary care and community medicine. It would be necessary to rely on training local teams at a less sophisticated level than the doctor's.

Lastly, he emphasized that real human motives must always be borne in mind; otherwise, no system would operate satisfactorily.

Statement by Dr. Carmen Velasco

Dr. Velasco called her paper, written jointly with Dr. José M. Ugarte, "Coordination for the Improvement of Health."

She said that, in common with most of the Latin American countries, her country faced big health problems, and for that reason, medical education bearing in mind national health policy, must be focused on an extension of the coverage to the entire population and take full advantage of the social welfare network for the training of the different types of health professionals. For that reason it had been found desirable to include in undergraduate training continuing experiences in urban and rural clinics and health posts, since highly complex hospitals did not reflect the majority of the health problems or the conditions under which the doctor had to carry on his professional practice. In her opinion, the relationship between teaching and service in Chile was the outcome of a long historical process begun in colonial times and perfected over more than 150 years.

She then described the demographic characteristics of her country, its health situation and the resources available for teaching. She pointed out that there was coordination between the Ministry of Health and the universities both in the undergraduate and postgraduate training in medicine as well as in the training of other health professionals. A Teaching-Service Commission helped to ensure the proper distribution of professionals throughout the national territory, bearing in mind both primary care and the harmonious development of specializations for the more complex centers in the provinces and in metropolitan areas. The Commission was responsible for strengthening existing teaching-service centers and for the accreditation of new ones. In addition, the Chilean Association of Faculties of Medicine was responsible for the yearly accreditation of the postgraduate training centers and for fixing the quotas for the different specialties.
The close teaching-service relationship in Chile had produced the most fruitful results, including the following:

- Achievement of a consensus on the characteristics of the doctor the country required;
- The periodic analysis of professional training;
- The utilization of the human and material resources of the Ministry of Health in university teaching in all the regions;
- The participation of health professors and students in the medical care of the population and the incorporation of officials from the Ministry to the university academic career.
- The distribution of doctors in rural and suburban areas, thus helping to extend coverage;
- The teaching-service regionalization of each faculty of medicine within a specific region, providing teaching and service support to the base hospital, the rural hospital and the posts of the region;
- The training of specialists in accredited centers distributed in provinces, thus improving the quality of health care.

In conclusion, she expressed the view that each country should seek its own system of coordination, recognizing that a population's health can be improved only by uniting the efforts of the institutions responsible for professional training, the delivery of health services, education and the improvement of living conditions.

CONSOLIDATED REPORT OF THE DISCUSSION GROUPS

The timetable provided for the discussion groups to meet separately for a two-hour session. The reports of the three groups have been consolidated in the following paragraphs:

The responsibility of the education sector to the community and the health sector's need for educational support were discussed by the groups within the frame of reference set by the speakers. One of the groups, for instance, analyzed the changes that had occurred in both sectors and which, in the field of higher education have enriched the
traditional functions of the production, transmission and certification of knowledge, and also the dissemination of culture outside the university, with the awakening in students and faculty of a social consciousness, since the educational institutions have contracted a conscious commitment to the society they are called upon to serve.

The incorporation of this new medical orientation, once the social component of disease became clearer, stressed the relationship between medicine and its practice with the social and political ideologies and contributed to the development of other health disciplines. Important changes have taken place also in the health sector as a result of the advances in medicine and the development of different trends of thought. Five basic aspects which should be borne in mind in approaching the joint responsibilities of the education and health service sectors to the community are:

- The education of the health professionals as a means of satisfying the health needs of the population;
- Community participation in the organization and delivery of services;
- The necessity of answering to the community for the actions taken;
- Multiprofessional and multidisciplinary teamwork;
- Seeking an equitable delivery of services, on the ground that every member of the community has a right to demand health services.

It was recalled that health is the outcome of many factors, most of which have nothing to do with medical activities; and that, therefore, community health is not the sole responsibility of doctors or health professionals. The activities of many other professionals trained by the education sector have an influence on the achievement and preservation of community health.

It was reaffirmed that in any society, the educational sector has a primary responsibility to the community: that of producing qualified personnel to meet the health needs of the population concerned.

The fundamental problem is how to ensure that the training of that personnel meets the community's expectations. In seeking solutions to this problem, two grave dangers had to be recognized and avoided: on the one hand, the strife toward excellence for a product with no relation to reality, which leads to the frustration of the doctor and the over-medicalization of his services; and on the other hand, exaggeration
of the relevance of training, which can lead to a drop in the scientific level and the delivery of second-class services to some population groups. All the groups agreed that there is a need to define the role and the responsibilities of the educational sector in health activities and that that definition implies a real knowledge of the social context and historical development of each country, of the determinants of health conditions, and of the reasons which explain a given type of relationship between the university and the health services, and the degree of complexity of that relationship. In the latter connection, it is important to bear in mind the fact that health services do not develop in a vacuum, but are the fruit of a given political and social context.

Although most countries differ in the type of health services they maintained, the trend was toward the weakening of the influence of the private sector and consequently toward more public control of the services. The exercise of that control leads without fail to the establishment of priorities, and their determination, in accordance with the values of the society. Both are, therefore, key instruments for the application of social policy.

Referring to the present political objective of most of the countries of the Americas, which is the extension of health service coverage to the rural and periurban population, one of the groups stressed the importance of coordination between the sectors, advancing as arguments the mutual benefit to be gained from such coordination, the improvement of the quality of the service in the teaching centers, and the advantages of the teaching being given in surroundings that were more closely connected with reality.

The opinion was expressed that the educational and health institutions should act jointly from the level of primary care up to whatever level of specialization was necessary. It is very important to establish machinery for coordination between the sectors and the communities themselves. In that connection, it was pointed out that research and a better knowledge of the traditional ways of providing services are a fundamental factor in achieving a better understanding of community needs to realize the possibilities of securing extended coverage.

From a purely educational point of view, the interrelationship had no limits; but if it implies that the university is to provide services, it is necessary to define the scope of that interrelationship very clearly. Coordination should not be confined to the delivery of services only; it should be extended to all aspects related to them: the formulation of health policies, the definition of activities, the determination of the type of personnel required for each activity, the formulation of
educational programs, the development of technologies and the evaluation of the personnel trained. For this purpose working models must be adopted which combine teaching, research and service according to the needs of the society to be served. That was the only way in which the process of apprenticeship could be based on reality and that human resources that really fit the demand could be trained. Such a model should comprise a close linkage between theory and practice so as to foster the development of a fruitful work, thanks to which, the objectives which are relevant to the national interest—educational or service interests—can be reached in the best way.

Teachers and students must be considered as integral parts of the system as a whole, without the artificial distinction that has arisen according to whether they came from the education or the service sector. Nevertheless, it is necessary to define the role of the teacher and of the student in relation to the degree of responsibility they have in the system; to define the role of the students in all the joint activities; and to establish, beforehand, the levels of supervision to avoid the overlapping of functions.

All these decisions must also be taken jointly by the two sectors involved. There is an obvious need to consider carefully every facet of an integration such as the one that is proposed, including the attitudes of the students toward the health system that is in operation and toward the responsibility they acquire, and also the reactions—whether spontaneous or not—of the patients to the idea of being cared for by nonprofessional personnel.

Despite the importance of the role it is called upon to play, the university must not renounce its vocation of questioner and critic of the health policies that the State adopts.

Lastly, it was stressed that the students should be exposed to reality early on, not only so as to make their apprenticeship of this reality more effective but in order to achieve more complete coordination with the services. That implies investigation of the new teaching methodologies and of others suited to the requirements of the proposed integration, particularly in the approach to problems such as the increase in the student population which is now observable in all courses in the health area.

VI. ITEM B: PRESENT SYSTEMS OF INTERRELATIONS

B.1 Interrelations at the Policy Level

This part of item B was discussed in a general meeting, in which Dr. Rodolfo V. Young was the Moderator, Dr. José Laguna the speaker, and Dr. John A. D. Cooper and Dr. Carlos A. Moros Ghersi the commentators.
Statement by Dr. José Laguna

Dr. José Laguna García had prepared a paper entitled "Systems of Relationships between the Educational Institutions and the Health Institutions." He analyzed the experience of Mexico regarding the coordination between the educational sector and the health institutions, with emphasis on medical education.

He stressed that the systems of medical care and the training of health personnel should be closely linked. Unfortunately, in many countries the systems of health care and of human resources training were not designed to cover the needs of individuals and families, but, apparently, to meet those of the system's personnel itself.

As a rule, medicine was an activity which had an individual and curative approach, and which was linked to work in the hospital and to a high degree of specialization. This approach to professional practice had resulted in the almost exclusive use of hospitals for medical training and the application of a methodology which was very useful in strengthening the tasks of specialists. He pointed out that in that field of work, a high degree of coordination had been achieved between the medical schools and the institutions where the medical knowledge was applied. In his view, the problems of integration between teaching and service arose when one became aware of the fact that a medical training based on hospital teaching and with a bias towards specialization was not the answer to most of the health care situation. He thought that the main problem was the lack of doctors providing primary care and the serious deficiencies in the capacities and skills of the personnel available for such care.

He went on to refer to some concrete situations that had arisen in Mexico in the context of inter-institutional coordination in medical training for primary care. He mentioned examples of undergraduate training programs for general practitioners of primary care, and of postgraduate training programs for family or community doctors.

Problems in teaching-service integration were encountered when an attempt was made to introduce changes which, as a general rule, the infrastructure of the educational or practical training institutions was not prepared to receive. In the effort to achieve a proper integration between teaching and service, the personnel should be trained to recognize that medical and educational acts were a single and indivisible whole since they were two facets of the same phenomenon.
Comments by Dr. John A. D. Cooper

Dr. Cooper's paper entitled "Coordination of Medical Education and Medical Services in the United States," described the efforts of private bodies concerned with medical education to coordinate their activities with the public sector and with the system of medical services. That task fell to a body called the Coordinating Council on Medical Education, whose establishment had been recommended as long ago as 1939 but which had not come into being until 1971. It was composed of three representatives for each of five institutions: the American Association of Medical Colleges, the American Medical Association, the American Hospital Association, the Council of Medical Specialty Societies and the American Board of Medical Specialties. It also included a representative of the consumer public and a representative of the Federal Government. The Council's three main functions were as follows:

(a) To act as a forum for the development of policies on medical education and its interrelationship with the delivery of medical services;

(b) To serve as machinery for the private sector to be in closer touch with the government and other public bodies;

(c) To supervise the quality of the different educational programs. It carried out the latter function through three Liaison Committees: one, established in 1942, for undergraduate medical education; another for postgraduate education, and the third for continuing education. The staff of the Council and its Committees was supplied by the AMA; but plans were being made for them to have their own staff before very long.

It had thus been possible to bring together organizations that had been working independently in order to seek common approaches to medical education and care. Among the successes achieved, the following could be mentioned:

(a) A study had been carried out on the primary care doctor (which included the members of the medical profession concerned with general internal medicine, general pediatrics and family medicine), many of whose recommendations had been incorporated in the legislation adopted by Congress in 1976;

(b) Another study had been done on doctors who had taken their degrees abroad; it recommended that the advanced training courses should return to their original purpose,
which was the preparation of doctors who would exercise their profession efficiently in their places of origin, instead of being a means for them to enter the United States medical system, with the consequent flight of personnel from their respective countries;

(c) A study was under way to establish the most effective ways of helping doctors to keep up to date with the new knowledge, and another study was being done on women's opportunities and problems in medicine.

Dr. Cooper concluded by expressing the hope that the kind of relations between individual (or groups of) scientists in the private sector with the Federal Government, through the National Institutes of Health, which had been so effective in promoting progress in the biomedical sphere, could be repeated in connection with the institutions of medical education and the national system of medical services.

Comments by Dr. Moros Ghersi

The speaker said that teaching-service integration was one of the fundamental changes that had occurred in medical education in Latin America and the Caribbean. After reviewing the needs of and the obstacles to such integration, he went on to discuss the systems of interrelationships, particularly at the policy level.

Those relationships depended on the definitions and trends of the medical care bodies and the institutions for the training of human resources. For instance, in some countries the faculties of medicine belonged to the health sector, but methodologically answered to the education sector; in others, practical training was given in institutions belonging to the health sector although the faculties were separate and functioned independently; in still other countries, the medical schools had their own hospitals (university hospitals).

From a brief analysis of what happened in most Latin American countries it was possible to deduce the difficulties encountered by the bodies providing health care and by the universities. In the case of the former, the absence of any well established health policy was to be noted. It was due largely to the multiplicity of public and private service institutions and the lack of coordination between them, which led to duplication of services, unequal coverage for different population groups, waste of resources and the unnecessary high cost of care.

Efforts to correct the situation had recently been made in Venezuela with the establishment of the National Health Council, and with the steps that had been taken to launch a National Health Service.
For their part, the universities had to enter into relationships with different bodies whose policies were not the same. In addition, the human resources they trained were not used equally, as happened with general practitioners. However much the universities strove to train that type of doctor, the general practitioner would try to specialize if he was not used equally in all institutions and if he was not given an appropriate grade and salary.

The difficulties at the university level were the result of various factors: intramural teaching; rigid curricula; almost exclusively hospital practice; lack of general practitioners on the teaching staff—specialists were being used when what was wanted was to train general practitioners; contradictions between the proposed curricular structure and the organizational structure of the university; lack of educational experiments that would bring the student into contact with reality; and lack of integration of the basic sciences and the clinics.

The incorporation of preventive and social aspects, the trend toward the integration of basic and clinical sciences, the use of different types of services for teaching, the revolving internship with rural apprenticeship, and a new educational concept involving the progressive inclusion of changes in curricula and experimental plans as well as modern educational technology, had increased the need to multiply relationships. That had happened in all the medical schools in Venezuela.

The Central University of Venezuela had signed agreements on this subject with the Ministry of Health and Social Welfare, the Venezuelan Institute of Social Security, the Public Assistance Board of the Federal District and the State Governments. In addition, compulsory apprenticeships in regional hospitals had been instituted in the postgraduate courses; and continuing medical education activities were being carried on in six Federal institutions.

B.2 Interrelations at the Operational Level

Dr. José Roberto Ferreira acted as Moderator to the session of the general meeting devoted to this topic. Dr. Carlos Arguedas' statement and the ensuing comments by Dr. Jorge Haddad and Dr. Augusto J. Mercado are summarized below.

Statement by Dr. Arguedas

Dr. Arguedas spoke of teaching-service integration in Costa Rica, a country that was characterized by a single health service (Servicio Unico de Salud), which was operated through the Costa Rican Social Security Fund (Caja Costarricense del Seguro Social). That body, created in 1942, had grown very slowly during its initial years. By 1968, the
coverage had reached 40% of the population, but by 1977, it had risen to 80%, while another 5% were covered by private practice and the remaining 15%, corresponding to the indigent population, by the Ministry of Health. The Faculty of Medicine had been established in 1961 and had produced 450 doctors so far. In 1975 far-reaching changes in the curriculum were started, with the cooperation of all the groups concerned: University, Costa Rican Social Security Fund, Ministry of Health, Medical and similar associations. The same year, the Committee on Human Resources for Health was set up, under the chairmanship of the Ministry of Health and with representatives of various bodies which included the Faculty of Medicine and the Social Security Services.

There were now 1,400 doctors, i.e., one per 1,400 inhabitants, and it was hoped to reach the ratio of 1 per 900 inhabitants by 1982. There were 27 hospitals, with 9,000 beds. There were no university hospitals which were not considered essential. Any health institution could be used for teaching. Integration was stronger at the primary care level, at which there were 400 health stations provided with staff supervised by doctors, and the secondary level. There were assistants at both levels for medicine, nursing, dentistry, microbiology and social sciences.

The study program had followed an in-depth investigation of the community. Among the findings of that study, the disproportionate distribution of doctors, both geographically and between specialists and general practitioners to the prejudice of the latter, was worthy of mention. He emphasized that one of the biggest challenges in the formulation of the new medical curriculum had been how to induce a more favorable attitude among the teaching staff. Discussion workshops were used as a tool to achieve this purpose; 36 had been held over a period of two years.

The fundamental principles of the curriculum were discussed and agreed upon by teachers and students at those workshops. The curriculum now comprised the following areas: 1st year, health and society; 2nd year, structure and normal functioning of the human body; 3rd year, general pathology and maternal and child health; 4th - 5th years, integrated medicine of the adult; and 6th year, rotation of internships.

It was to be noted that right from the beginning of the course the student was in contact with problems outside the hospital.

As to postgraduate education, there was a National Council which was responsible for establishing what was needed in the way of specialists and for approving the educational programs that were to be given. As an example, he said that it had already been estimated that no cardiovascular surgeons or neurosurgeons were required.
Continuing education courses had begun in 1975 and now covered all the regions of the country.

In conclusion, he said that in Costa Rica the integration of teaching and care had been practically achieved and that the situation was fairly satisfactory. Of course, there had been difficulties, and there probably would be others from time to time, but on the whole there were grounds for satisfaction.

**Comments by Dr. Haddad**

Opening his comments on Dr. Arguedas' paper, Dr. Haddad said he was worried because people had been talking for many years about coordination and integration of the educational and curative services, and little apparent progress had been made, despite the efforts toward it in many countries. The reasons for this would be worth analyzing. Some of them were general in character, while others were connected with the particular conditions of each country. Among the former, he underlined the following:

1. Efforts towards coordination had been concentrated on the implementation stages. That meant that it had been forgotten that coordination was necessary also at the previous stages of planning and designing activities in both the service sphere and that of education. The mere use of services for training and the mere incorporation of university-trained manpower in health care did not achieve the objectives of either. He cited the case of Costa Rica as an example that should be followed; in that country, the health plan had been the product of an overall analysis by different institutions and the design of the medical courses had seen the day in multi-institutional consultation. Costa Rica had a socioeconomic system similar to most of those in the other Latin American countries, and also had a system of integrated health service. The fact that there was a single procedure, a sort of panacea for all cases, should not be forgotten, however.

2. The coordination machinery that had so far been tried had been confined to the health sphere, passing over other factors, which in his opinion was counterproductive. He mentioned the example of the United States of America and Cuba: in the United States, the enormous development of health and education had run parallel to achievements in other sectors; in Cuba, the social and economic structure had been designed so that all sectors could work in harmony for the progress of the community. Coordination between teaching and care in Cuba had culminated in integration, and the Ministry of Health had been given the responsibility for training health personnel.
3. The mistake had been made of envisaging the problem as though it affected doctors only, disregarding the fact that health operations required many workers, even voluntary community workers. In that connection, he drew attention to the widespread use of health teams; the team must be reviewed in the light of the training process, as if people are to work in teams, they must be trained as teams.

4. Regarding the role of international organizations which participated in different ways in national education and service activities, he emphasized its importance, but he pointed out that they often disregarded a factor of capital importance: the personnel in the countries which was responsible for implementing the recommendations of meetings like the present one. The organizations should make sure that the machinery existed for bringing the message to the different levels, particularly those that were responsible for executing programs.

Comments by Dr. Mercado

Dr. Mercado said he would discuss two facts which were an example of the need for coordination between the education and the health sectors.

In 1977, 8,500 doctors had graduated in Mexico and had applied for postgraduate rotating internships. The health services could offer only 2,400 places throughout the country, so that 6,100 graduates had had to forego that opportunity. It could be argued that that was not very important, but it is generally felt that the rotating-internship year is needed in the preparation of recent graduates, and is an indispensable requisite for specialization. It might also be expected that those 6,100 graduates who had no hope of future postgraduate education would go into the provinces and even start to work in rural areas. But if that happened, it would be as fortuitous consequence and not as a planned measure resulting from coordination at the operational level. One thing was certain, and that was that those doctors felt very discontented and full of doubts.

The other fact was the specialization in family medicine. The Mexican Social Security Institute (Instituto Mexicano de Seguridad Social, IMSS), realizing that it did not have doctors that were fitted for the health care of the population, had decided to establish that specialization, which would be given the same standing as the others. The curriculum had been worked out and university recognition had been obtained. Soon afterwards, it was clear that the curriculum was not properly balanced and gave too much weight to social sciences. The graduates in this new specialty then began to feel frustrated when they did not find what they needed to apply what they had learned.
He went on to say that medical care had little effect on the health level of the population, which was why he wished to stress once again that integrated health care was neither the direct nor the primary concern of the doctor.

He added that he did not know of any profession which could take such a responsibility on its own, and that doctors were probably being given a role which did not suit them and consequently, which made them feel guilty.

CONSOLIDATED REPORT OF THE DISCUSSION GROUPS

The two parts into which item B had been subdivided were considered in separate meetings of the Discussion Groups. The partial reports that came out of those discussions are summarized below:

The interrelation between the education and health sectors in Latin America reflects a wide range of experiences and situations from country to country at the present time, and even from region to region in a single country. For that reason it is not possible to generalize. Nevertheless, it can be affirmed that, with rare exceptions, educators in the health sciences have participated little in the planning of services and, on the other hand, the directives of the services have had little or nothing to do with the planning of educational programs.

Although there is no doubt about the need for joint study of a social problem which is closely linked to the functions of the personnel of both sectors, it is nevertheless true that in most countries the governmental planning bodies at the central level, the health planning bodies and the education bodies have not developed the necessary points of contact.

An effective relationship between the education and health sectors to deal with national needs based on community demands requires coordination at the highest level which generates well-defined policies and later establishes coordination machinery at different levels, including eventually the operational level.

The diversity of completely independent bodies and institutions within a single sector is a real obstacle to the establishment of a sectoral policy. This fact, in the view of many of the participants, makes the development and operation of joint programming based on joint planning a utopian dream. This is even more difficult if it is borne in mind that there is sometimes no coordination at the level of the ministries of education and health.
It was agreed that any attempt at joint planning for the development of coordinated activities must take account of the political, economic and social aspects of each country, as a basis for setting up machinery for interrelationships which were adapted to the real situation in each case and fitted the activities into the country's overall development plans and not only those of the health and education sectors.

Coordination may be established through the formulation of high level policies. Nevertheless, failure was due to the lack of machinery to implement them and, very often, the lack of knowledge of the personnel involved in the process.

One of the groups discussed the concept of integration in teaching and service, and it concluded that although it was desirable to aim at integration, there were at the present time a number of conditioning factors which limited those possibilities; therefore, in the actual situation of most countries, it is more realistic to establish mechanisms of collaboration aiming at gradually increasing coordination between the two sectors. Within the limits imposed by conditions in each country, the services should be considered as the fundamental axis for the training of human resources, and the institutions should draw up their plans and decide on coordination strategies around that central concept. That carried with it the need to accept such coordination as the generator of a real process, the outcome of joint effort, and not only as a combination of efforts to carry on activities or the joint use of human resources.

In connection with the attempts of the educational sector, particularly the universities, to train personnel capable of working closely with others in health programs, it was recognized that the efforts had been limited and had not produced the desired result. One of the Groups referred to various experiments which had been carried out towards the end of the 1960's aiming at making the training of professionals in faculties or institutes of health sciences uniform. These experiments had failed largely because the training process was centered on the doctor. All the courses had been centered on medicine, instead of considering health as a whole and as an axis around which the integration of activities and their subsequent programming was to come about.

Nevertheless, it was recognized that it is possible to achieve coordinated planning of the training of different types of human resources, provided that the special characteristics of each country and of the regions in which the training process and professional activities were to be carried on, together with the factors and conditions that generated priority health problems, were borne in mind. Particular importance was attached to the need to define functions clearly enough to determine those points on which the coordination of educational activities could be achieved.
Stress was laid on the difficulties preventing the proper distribution of human resources in the countries, for training as well as for use. In that connection, attention was drawn to the need to deal with the problems arising out of the lack of financial incentives, of even the most rudimentary facilities for providing a basic service of acceptable quality, and to the lack of openings for progress in studies. In that connection, the participation of professional staff in the training of students in rural areas was considered to be a possible incentive as long as support mechanisms was provided by the service and the education sectors. Comments were made on the disadvantages of establishing health programs that depended exclusively on the universities. It was considered important that when local conditions required a university hospital to be maintained, it should be incorporated into the network of services and help by its activities to raise the level of care and of teaching for the system as a whole.

The Groups emphasized that, despite the efforts of various universities to incorporate their personnel at different levels in the service, there were difficulties which sometimes originated in the universities and sometimes in the educational institutions themselves, thus preventing the broad use of common resources.

In order to promote the proper interrelationship at the operational level that would ensure the incorporation of teacher and student in the services, it is important that such personnel should have a positive attitude which should be based on an in-depth knowledge of the process; otherwise, no proper relationship with the community was possible. There was no doubt that if students were to be incorporated in the service programs, particularly if that was to take place from the outset of their training, the curricula would have to be revised, and the university must be prepared for that eventuality. The Groups considered the importance, in some countries, of the universities having places for a given number of students and their responsibility for fixing quotas, in view of the increase in student demand for the capacity of the State to absorb the trained personnel and for the different models of professional practice. In that connection there was agreement that the problem was not exclusively a university problem and that several sectors should participate in its analysis, with substantial allowance for the political, socioeconomic and educational factors involved in the problem.

The discussion of this situation led the Groups to consider that universities should reformulate their role, in the light of the changing situations in the countries. Not to rethink its mission might lead the university to operate against the needs of the society it served. Once its purpose had been reformulated, the university might be in a position to make sound plans for its future development, plans in which the problem of student enrollment should be envisaged with the greatest possible objectiveness.
As to the role to be played by the university in integrating teaching and service, it was recognized that there were no grounds for fearing any unfavorable effect of autonomy as such, as there were too many negative factors generated by people, institutions or organizations in different sectors, which could not in any way be laid at the door of autonomy.

VII. ITEM C: MECHANISMS FOR A PRODUCTIVE INTERRELATIONSHIP

This item was taken up in plenary session with Dr. Andrés A. Santas as Moderator. The speaker was Dr. Henry van Zile Hyde and Dr. Ernani Braga made the comments.

Statement by Dr. van Zile Hyde

He opened his statement by emphasizing the need to consider the strategy to be followed to secure effective coordination mechanisms between the education and service sides of the health service. With that end in view, a working paper had been distributed to the participants in the hope that it would be carefully analyzed by the discussion groups, all of whose suggestions for improvement in any way would be recognized. The document had been prepared in consultation with various organizations including WHO, UNESCO, the World Medical Association, the International Council of Nurses and the International Office of Education.

He recalled that the present Seminar would be followed by five others to be held in different regions of the world, which would also consider the document mentioned. It would finally be submitted to the World Conference planned for 1980 for its consideration. He pointed out that teaching-service integration was now evoking a great deal of interest. As an example, he said that a ministerial meeting at the consultative level was about to be held in Teheran on the services and development of health manpower. He also drew attention to the fact that WHO had formulated a plan for the development of human resources, at the central and regional levels, to cover the period 1979-1984. Great success was expected from this plan.

He underlined that the Seminar would have an influence of capital importance on the subsequent seminars. To facilitate discussion on the subject, he listed possible mechanisms and principles relating to interrelationships, which are summarized below:

Mechanisms: (a) the informal character of such mechanisms, based on good will, which had been used in many places, had proved useful but was always inherently risky because of its dependence on individuals;
As to the principles that should govern those interrelationships, he suggested the following: (a) there must be a clearly perceived necessity for them if they are to be established; (b) mechanisms must be formally established through concrete action, taken on the decision of a competent authority or by agreement between two or more organizations; (c) all the parties interested in the task to be carried out should participate actively in the operation of the mechanisms; (d) the function, scope and limits of the procedures established should be clearly defined; (e) there must be a delegation of the necessary authority to ensure the solution of any conflict, secure the support required, and achieve the goal that had been set; (f) there must be a leadership, preferably within the institutions, capable of maintaining interest in the task; and (g) there must be staff and financial resources, under the control of the body concerned, to complete the work. He concluded by urging the discussion groups to review these suggestions, make any amendments, additions or deletions they considered necessary, since, as had already been indicated, the views of this Seminar would be of key importance for the successful operation of the subsequent one and of the World Conference.

Comments by Dr. Braga

Dr. Braga remarked that the entry on the international scene of the World Federation of Medical Education was most opportune, for that body represented a new inspiration, particularly at the local level, which would help to introduce the changes required in the training for work in the health sector.

He recalled that, 30 years earlier, in a convention, UNESCO had recognized the responsibility of WHO as a guiding body in the training of health personnel, without diminishing the obligations or prerogatives of UNESCO in questions of general education and scientific research. It was regrettable that in many places, at the national level, training procedures had not been associated with procedures for use of such personnel.

He then mentioned some of the obstacles which prevented effective coordination, including inter alia, bureaucratic structures, traditions and the resistance of individuals to work in collaboration, for there was still the prejudice that one agency or one person should objectively analyze the work of others.
He went on to mention the types and basic principles laid down by Dr. Hyde, with which he agreed. He emphasized the importance of what he called "teaching and service partners" for the utilization of predetermined and well-defined areas with a view to preparing health manpower of different kinds and different disciplines. He pointed out that it was most important for coordination not to mean command, for joint work not to degenerate into domination by some of the others and for leadership not to become authoritarian control. He underlined the need to protect the separate identity of the organizations involved, whatever the mechanisms adopted.

Lastly, he drew attention to the need to involve students in the establishment and implementation of this strategy, since they had an important role to play, as had the teaching staff.

CONSOLIDATED REPORT OF THE DISCUSSION GROUPS

Like the previous items, item C was discussed in separate meetings of the groups, on whose partial reports the following Consolidated Report is based:

Effective interrelationships imply the existence of motivation and favorable attitudes on the part of those who were responsible for putting them into operation; but that could not be achieved merely by willingness. Although the establishment of personal contacts and frequent meetings of multi-institutional groups made it possible to exchange experience and views and to generate an attitude that was conducive to teamwork, there must be realistic planning, based on concrete definitions of policies. From the experience of different coordination models in different regions of the world it was possible to conclude that the relationships between education, service and the historical social and economic conditions peculiar to each country or region should not be ignored when coordinated action was being planned and implemented. On the other hand, the situation became complicated when instead of a single service institution being involved, different service institutions that were independent of each other came into play, as was the case in quite a number of countries. In this new area, it was not a question of bipartite coordination but an action with different participants which made interrelationship something that was much more complex, but not necessarily less desirable.

It was pointed out that before establishing intersectoral coordination, it was necessary to consolidate within a single sector. That type of coordination was very necessary in the health sector if the delivery
of services was to be improved. Besides coordination between government agencies, coordination between those agencies and the private sector must also be dealt with. There were examples of the progress achieved thanks to coordination of that kind, but such efforts must be intensified in order to make real impact on the development of services.

It was most advisable for the regionalization of education to go hand in hand with that of the health services. It was difficult to coordinate the regionalized system of services with the education sector if this sector does not have similar characteristics. The Group noted that regionalization of education had not been achieved in most countries and in the few cases where it had been attempted, there were different models for it, depending on the country concerned. The view was expressed that if coordination was to be effective, the criteria for the regionalization of the training system should be similar to those used for the regionalization of the services.

The regionalization of teaching and service would also facilitate the development of programs of continuing education for the staff of both sectors, and continuing education should be developed as a joint effort. Regionalization would also make it possible to develop postgraduate programs, which should also be approached jointly.

In order to establish effective coordination, various obstacles had to be eliminated, including those related to the deficiencies seen in the training of doctors, which were epidemiological or sociological in character. The former were due to the fact that health problems could not be seen properly during the training process, which was based essentially on highly complex hospital care, which was not representative of the other levels of care, or of course of the prevailing pathology and the state of health of the community. The latter stemmed from the fallacy of considering the training process as the determining factor in professional behavior. It was agreed, in this context, that medical practice was the dominant factor in this behavior and that the changes in the educational process would have no meaning when it was carried on independently of that reality.

The approaches that had been adopted at successive stages to remedy these defects can be summed up as follows:

(a) introduction of preventive and social medicine throughout the entire program of studies;

(b) development of "laboratory communities" for demonstration purposes;

(c) programs of community medicine to cover larger population groups than the above-mentioned "laboratories".
It was recognized that these approaches are still insufficient, both in terms of their representativeness of the health situation and in terms of their capacity to promote the necessary changes in the pattern of medical practice. Lastly, regionalization of teaching and service was recognized as the essential strategy, with the process of training being imposed on the entire network of services, with ample coverage at all levels, the training process having to adjust itself in proportional terms to the profile of the utilization of services by the community itself.

Activities in ambulatory care institutions should predominate over experience in the hospital setting. The specialty hospitals should be included in the system but used mainly to guarantee the availability of highly trained teaching staff and for postgraduate training.

Some disadvantages in putting such a proposal into practice were pointed out. One was the multiplicity of institutions operating in the health sector, which indicated the need to establish inter-institutional coordination with methods that would make it possible to define the schemes of regionalization and formulate plans for the integration of teaching and service. Another was the lack of information for proper planning, a lack that would have to be remedied by joint action of the educational and service institutions, through the promotion of socio-epidemiological research that would reveal the real health needs of the populations and the patterns of the utilization of services.

One of the Groups recognized the importance of using models such as the one used by Kerr White and his associates in the international study of the utilization of services, which, based on an epidemiological approach, would make a more suitable distribution of teaching and services possible.

It was suggested, on the other hand, that it would be advisable to apply the same methodology with data from the community itself; it would thus be possible to establish logistics for the operation of both processes (education and service), based on the demand and distribution of the available institutions, and would preclude any undesirable interference.

It was agreed to recommend that the capacity of the teaching system itself should be adjusted to the availability of the services, and that the proportionate distribution of activities should be respected at the different levels of care.

The practicability of implementing these coordination procedures in a regionalized health system would depend on a significant change in the role of the traditional educational process, which would now have to be devoted primarily to:
(a) the planning of the teaching-apprenticeship process jointly with the service institution;

(b) the development of institutional methods adjusted to the new situations, with emphasis on self-education;

(c) continuing education to train professionals of the services and guide the teaching process at their level;

(d) the development of more refined systems of evaluation, both of training and of the services themselves;

(e) postgraduate education and stimulation of biomedical and socioepidemiological research.

It was stated that the adoption of these innovations was incompatible with the flexnerian model which has been the traditional one. It is therefore necessary to design new curricula, closely related to the service programs, in which the theoretical components and knowledge of what are called the basic sciences should be incorporated side by side with practical experience of the handling of community health activities and individual care activities.

As health care is the right of every human being, the extension of health care coverage must have high priority. In this context, primary care is of primary importance; but appropriate methods must also be worked out to guarantee that any individual may have access to other levels of attention, depending on his special needs. It was recalled that in many countries primary care could not be provided by doctors; it was therefore necessary to determine the tasks to be carried and then define the functions to be assigned to other categories of personnel.

The existence of different levels of care implied some degree of participation by the community in the planning and operation of the services; but for such a participation to be real and effective the community should be properly organized, aware of its real health needs and able to take part in the discussions and decisions relating to its own problems.

The participation of the community in the delivery of health services will help significantly to improve the utilization of such services. Through local committees, the population can help to define the type of service and the personnel required for the programs. Health education, which is of primary importance if coordination is to be achieved, must be stimulated so that the community should learn to help itself, instead of having decisions taken for it. The community should help to identify its own needs and to develop activities to meet them.
VIII. ITEM D. PLAN OF ACTION

This important topic was discussed at two simultaneous meetings of two Discussion Groups, which were held in the morning of Friday 23 February. In order to facilitate the deliberation, the working paper entitled "Strategy for Action" was distributed, in addition to the questions on this topic that were included in the general questionnaire. The Strategy for Action contained the draft declaration to be submitted to the World Conference; Dr. van Zile Hyde had referred to both documents in his statement. The text of the draft declaration is to be found in Annex II. Summaries of the partial reports of the Discussion Groups are to be found below.

Group I

This Group was composed of the members of Discussion Groups I and II which had met separately during the preceding days.

Taking as a basis for discussion the above-mentioned document, the Group reached the following conclusions and recommendations. First, since the aspects called "Basic Considerations," "Health and Education" and "Present Situation" (items 1, 2 and 3 of the document) had been sufficiently discussed at the previous meetings, it began immediately to consider item 4, entitled "Action."

There was agreement that items 4.1, 4.2 and 4.3 could be considered general principles and not suggestions for action.

Item 4.4 gave rise to a very animated debate. Some members considered that in countries with federal constitutions it was more difficult to introduce national health plans, and also to train manpower to carry out such plans. In the Group's opinion, it was very difficult to produce concrete results without real power and without financial resources. It therefore recommended that the need to provide the national health system with power and funds to enable it to carry out any plans that were drawn up should be included in the document.

With regard to point 2.6, it was recalled that coordination mechanisms should be based on the existing governmental structures.

The aspect relating to information, mentioned in the first paragraph of item 4.7 was considered to be extremely important, since it is impossible to formulate health programs in the absence of proper information. Attention was called to the fact that the information available up to now in most of the countries related to morbidity and mortality, but not to sociological questions and even less to evaluation of the efficiency and the use of the services offered to the community. It was
considered that the information should include both the service and the educational sector. A joint evaluation of the capacity and efficiency of the personnel of the educational and service institutions in accordance with criteria and objectives established by both sectors and the community was recommended. It was felt that the text of item 4.8 was to some extent a repetition of item 4.4 and that the two could therefore be combined.

Item 4.9 led to lengthy discussion. It was pointed out that the first part was covered by item 4.7. There was a great deal of discussion about the following sentence, and the majority reached the conclusion that creating departments of community medicine in institutions with a flexnerian curriculum did not solve the problem and that it seemed more logical to establish curricula in which the community approach would be included all through the course. In the last part of the text, the emphasis should be on action, and it should stress that service to the community should be reflected in political and strategic change both for the faculty of medicine and for the health service.

The Group suggested that items 4.10, 4.11 and 4.12 should be condensed and included in item 4.7, to which they were closely related.

Group II

Consisting of the members of the former Group III.

Taking the discussions held during the previous few days, the Group considered that it was not desirable to formulate detailed proposals for action with uniform characteristics for all countries. It was considered more productive to establish general lines of action which would permit the countries to formulate suitable programs and strategies, in accordance with the possible real stocks in each of them.

The Group expressed the view that a preliminary stage of consciousness-raising and popularization of the concepts discussed at the Seminar was absolutely necessary and that it should include the largest possible number of persons from the service and education sectors, since, in the last analysis, they were the ones who would have to carry out any action that was decided upon on the basis of the Seminar’s conclusions. Due account was taken of experience with the previous meetings, in which managerial level staff participated, meetings which had not produced satisfactory results when efforts were made to implement the recommendations precisely because those who were responsible for carrying out the tasks that were recommended had not participated in the discussion stage. The following were suggested as strategies to be used during that stage:
1. Holding of meetings with multisectoral and multidisciplinary personnel to discuss the needs for coordination and the methods suggested to achieve it;

2. Dissemination of ample and reliable information on the experiences of the different countries in that respect, covering not only the successes but also the failures.

It was pointed out that the international organizations sponsoring such action could play a more productive role if they also supported local activities rather than acting as bodies that dictated lines of action for the countries to follow. The advisory and consultant work which was carried out with this idea in mind would probably be more successful, as was shown by recent experience in Latin American countries.

Among those supporting activities, the following might be considered:

1. Advice on organizing specific types of seminars and local meetings mentioned above;

2. Support for local or regional associations of faculties of medicine and for training centers for health personnel in activities conducive to the proposed coordination;

3. Maintaining a continuous flow of information to the participants in international meetings.

It was recommended also that in each country the social security and other institutions providing health services should be incorporated in any coordinated effort that was attempted. The integration of coordination committees comprising representatives of all the sectors mentioned is a very suitable method.

The Group recommended that the structures of the offices of human resources in the ministries of health should be strengthened, with international collaboration in countries that required it, as an important instrument for establishing coordination between the service and education institutions.

Lastly, it was suggested that the general lines of action sketched out above might serve to enable the countries represented to establish Strategies of Action containing a program conducive to the establishment of the interinstitutional coordination that had been proposed.
# ANNEX I

## LIST OF PARTICIPANTS

1. **Medical Education**

<table>
<thead>
<tr>
<th>Name</th>
<th>Country</th>
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<tbody>
<tr>
<td>Miguel Barrios</td>
<td>Mexico</td>
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<tr>
<td>Ernani Braga</td>
<td>Brazil</td>
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<tr>
<td>John A. D. Cooper</td>
<td>United States of America</td>
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<td>Thomas H. Hunter</td>
<td>United States of America</td>
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<td>Pedro Iturbe</td>
<td>Venezuela</td>
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<td>Carlos A. Moros Ghersi</td>
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<td>Carlos Mosquera</td>
<td>Ecuador</td>
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<td>Fernando Porturas</td>
<td>Peru</td>
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<tr>
<td>Horacio Rodríguez Castells</td>
<td>Argentina</td>
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<td>Guillermo Rueda Montaña</td>
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<td>Jorge E. Ruíz Guzmán</td>
<td>Bolivia</td>
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<td>Kennett L. Standard</td>
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<td>Jan W. Steiner</td>
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<td>Carmen Velasco</td>
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<td>Rodolfo V. Young</td>
<td>Panama</td>
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2. **Universities**

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<tr>
<td>Robin Badgley</td>
<td>Canada</td>
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<td>Jesús Méndez</td>
<td>Venezuela</td>
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<td>Efrén E. del Pozo</td>
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<td>Rafael Velasco F.</td>
<td>Mexico</td>
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3. **Ministries of Education**

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<tr>
<td>Elizabeth de Caldera</td>
<td>Venezuela</td>
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<td>Carlos Marcilio de Souza</td>
<td>Brazil</td>
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4. **Ministries of Health**

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<tr>
<td>Ramón Casanova Arzola</td>
<td>Cuba</td>
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<td>Luis Fernando Duque</td>
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<td>Pedro Guedez Lima</td>
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<td>Jorge Haddad</td>
<td>Honduras</td>
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<td>Germán Jiménez Rozo</td>
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<td>José Laguna</td>
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<td>Luis Moncada</td>
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### ANNEX I

#### 5. Social Security

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<tr>
<td>Nildo Aguiar</td>
<td>Brazil</td>
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<td>Carlos Arguedes</td>
<td>Costa Rica</td>
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<td>Augusto Mercado</td>
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<td>Tulio Monroy Pittaluga</td>
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<td>Inés Rivas de Hinojosa</td>
<td>Venezuela</td>
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#### 6. World Health Organization and Pan American Health Organization

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<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Jorge Castellanos</td>
<td>PAHO/Washington, D.C.</td>
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<tr>
<td>José Roberto Ferreira</td>
<td>PAHO/Washington, D.C.</td>
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<tr>
<td>Thomas Pulop</td>
<td>WHO/Geneva</td>
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<td>María Isabel Rodríguez</td>
<td>PAHO/Caracas</td>
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<tr>
<td>(Co-rapporteur)</td>
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#### 7. FNEM and FEPAFEM

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<tr>
<td>Julio Ceitlín</td>
<td>FEPAFEM/Caracas</td>
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<td>Luis Manuel Manzanilla</td>
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<tr>
<td>Andrés Santas (President)</td>
<td>WFME/Buenos Aires</td>
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<tr>
<td>Henry van Zile Hyde</td>
<td>WFME/Washington, D.C.</td>
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#### 8. Other Organizations

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<tr>
<td>E. Croft Long</td>
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<td>Rafael Glower Valdivieso</td>
<td>Inter American Development Bank, Venezuela</td>
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<tr>
<td>Barbara Lee</td>
<td>W. K. Kellogg Foundation, USA</td>
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<td>Leonardo Szpirman</td>
<td>University of Neguev, Israel</td>
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<td>Federico Vela</td>
<td>Inter American Development Bank, Venezuela</td>
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#### 9. Secretariat

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<tr>
<td>Ovidio Beltrán</td>
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<td>Lucille S. Block</td>
<td>WFME, USA</td>
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<td>Tibaldo Garrido</td>
<td>AVEFAN, Venezuela</td>
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<tr>
<td>Carlos Luis Gonzáles (General Rapporteur)</td>
<td>APEFAM, Venezuela</td>
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<tr>
<td>Carlos González Auvert</td>
<td>FEPAFEM, Venezuela</td>
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<tr>
<td>Miguel Angel Pérez</td>
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