

TRAINING AND USE OF AUXILIARY HEALTH WORKERS IN LATIN AMERICA¹

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The author presents a study on the preparation and utilization of auxiliary health workers in Latin America, with special reference to their place in the public health team and the need to assign them specific responsibilities in such a way as to complement, without substituting, the work of the other team members.

In examining the training and use of auxiliary health workers in Latin America, it should be borne in mind that the problem cannot be tackled on the basis of a universal formula applicable to all Latin American countries. Discussion should only relate to basic principles that may make it easier to form an attitude toward this complex problem and to shape long-term policies accordingly. Different geographic, economic, social, educational, and health conditions call for specific approaches adapted to the needs and possibilities of each country. In practice, of course, the exchange of experience and cautious application of successful solutions may always prove useful.

I. SOME GENERAL REMARKS

The Position of Auxiliaries among Health Workers

Health workers are customarily divided into three categories: professionals, technicians, and auxiliaries. Historically, these took shape as medicine became specialized and as health services expanded, and the

apprenticeship system was used at first to make up for lack of formal education. Later the development of medicine as a science and a profession brought about the need for organized training, which in most cases started as relatively short courses and then stretched into the curricula of professional schools.

Auxiliary health workers should participate in health-promotion or disease-control activities with *clearly defined functions and responsibilities*. From this it follows that they by no means serve a temporary purpose that will cease to exist as soon as there are enough professionals, but rather comprise a very important category of health worker—perhaps just as important as the other two. In present-day health services theirs is becoming a distinct occupation that affords a permanent career.

There are cases, however, in which auxiliary health workers function as substitutes for professionals and technicians. This situation should indeed be transitory, disappearing when there are enough professional and technical workers properly distributed.

Briefly, auxiliary health workers may serve:

1. As *members* of health teams consisting of professional, technical, and auxiliary health workers. In such groups, each category has a specific task to perform, which is clearly defined both in scope and in responsibility.

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2. As *substitutes* for certain professional and technical workers, in which case they carry out work that calls for a degree of competence (which they do not possess) and of responsibility (which is beyond their knowledge and skill). This fact should be kept in mind in considering the problem of training and using auxiliary health workers.

While in the first case the auxiliary health worker is a natural part of the teamwork applied to complex problems of health and disease, in the second he is making up for a scarcity of uneven distribution of professionals and technicians. In the Latin American countries, those auxiliaries—the vast majority—who are in the first situation are indispensable to the health services; those who are in the second should be there temporarily and exceptionally. In this connection it should be said that in some of the countries the existence of groups of auxiliary health workers with a substituting function results not from an actual shortage of professionals and technicians but from uneven distribution. The distribution of health workers in general, it seems pertinent to note here, is of the utmost importance to the problems of training and using auxiliaries.

If there is a place for the auxiliary health worker in the modern health service—and there will undoubtedly be one in the future also—he must receive an adequate position within the wide range of health workers; he must have a permanent, attractive career, not a lowly temporary job. Consider the titles of these workers. They always contain the word “auxiliary”: nursing auxiliary, auxiliary technician, medical auxiliary, and so forth. In the last hundred years medical functions have become completely diversified, and this has resulted in the creation of various medical and paramedical professions and of various specialties and superspecialties within each of them. At the same time teamwork has become essential to present-day multiprofessional and multispecialized medical practice. Each team has numerous positions: leadership, highly trained, trained, semitrained, and auxiliary. But, the auxi-

liary positions too are often held by highly trained workers—a fact nobody seems to emphasize—in which cases the title “auxiliary” is avoided. And rightly so, for it is discriminatory and arouses a feeling of inferiority. A glance at the synonyms of the word “auxiliary”—subsidiary, accessory, subservient, adjuvant, none of them attractive to anybody—makes this feeling easy to understand. Yet an entire group of health workers, and the most numerous one at that (to make the paradox even greater), has been labeled “auxiliary” by modern medicine, although in accordance with the principles of teamwork this group has clearly defined functions, carries out tasks requiring certain qualifications, and, most important of all, shares responsibility with other members of the team. Something should therefore be done to eliminate the pejorative word from their titles, if only for reasons of elementary psychology. After all, every health worker belongs to a given field and any differences between them should be based on their professional skill, not on discriminatory titles. Quite apart from whether or not the division of health workers into three categories—professionals, technicians, and auxiliaries—is the most fortunate one, I think a better title is needed for auxiliary health workers, and this would surely be easy for the Latin American countries, with their rich vocabularies.

Auxiliary Health Workers and National Health Planning

The problem of auxiliary health workers should be tackled within the national health plan. Consequently, their training and use should be an integral part of the development of health personnel in general. Within a planned approach the following steps should be taken:

1. Determine the country's health problems and the means and organizational forms to be used in dealing with them.
2. Delineate the role of each category of auxi-

liary health workers and its position in the health system.

3. Conduct a census of the total health personnel, and auxiliary health workers in particular, to determine their number, the amount of basic and technical training they have, how they are used, and other matters necessary for planning their future training and use. Such a census provides the basis for continuing estimates of all categories of health workers.

4. Draw up an annual plan of needs and teaching (setting up schools, curricula, and so on) for auxiliary health workers (and all other categories), bearing in mind also the possibilities of employment.

5. Put into effect regulations laying down basic principles, functions, positions, and standards for the training and use of auxiliary health workers.

The time and money needed to train and employ professional health workers and, even more important, the distribution of tasks within the health team create a permanent need for auxiliary health workers of various kinds. Obviously, it is economically and technically unsound to assign professionally trained and experienced health workers to work that can be performed *satisfactorily* by health workers at a lower level of training. Specific examples may be found in such activities as the eradication and control of mass diseases, environmental sanitation campaigns, and screening in mass medical care activities. If to these are added all those special instances in which auxiliary health workers substitute for professionals, it becomes obvious that the problem of auxiliary health workers is a top-priority problem and should be a continuing concern of the Latin American countries.

II. REMARKS ON THE TRAINING OF AUXILIARY HEALTH WORKERS

Although the training of auxiliary health workers should be approached in accordance with each country's specific needs and conditions, it may be useful to discuss some general principles. But before starting the discussion, the following questions should be answered: What categories of auxiliary health workers should be planned on for the

health services of the Latin American countries? The answer is not difficult: those in nursing, sanitation, dentistry, statistics, laboratory techniques, and the like. It is in fact not easy to list all the categories needed, but one thing seems certain: in view of the number of physicians and medical schools in the Latin American countries, and the present and potential output, there is no need to plan for "medical assistants" of the type found as substitutes for physicians in many developing countries where there is a great shortage of physicians, or even for health workers of the "feldsher" type used in the Soviet Union in the period following the Revolution.

The main reason for the shortage of physicians in almost all the Latin American countries lies in their uneven distribution, which could be mitigated to a great extent by such measures, among others, as better pay for physicians working in remote areas, the building of health centers with living quarters for physicians, a rotation system, compulsory services in rural areas, and pension privileges. Furthermore, some of the existing Latin American medical schools are capable of enlarging their student bodies, which in a very short time would lead to a considerable increase in physicians. While this view appears valid for the medical field in all the Latin American countries, there is probably no other field in which auxiliaries are not needed *in addition to* professionals. From this standpoint, and taking into account living conditions and needs in the Latin American countries, the following questions appear to require clarification.

Single-Purpose or Multipurpose Auxiliary Health Workers?

In planning the training, the first decision to be made is whether the auxiliary personnel in a given category should perform one function or several. The decision depends on various factors. First of all, the type and consequently the training of workers are

determined by circumstances and requirements that vary not only from country to country but also from region to region of a single country. To mention just one example: a nursing auxiliary in a hospital, as a member of a hospital team, most certainly needs training quite different from that of a nursing auxiliary working alone, with sporadic supervision by the physician or professional nurse, in a small health unit somewhere in a remote rural area. Similarly, an auxiliary working on rural sanitation needs training quite different from that given to someone responsible for particular sanitation activities in a city. Multipurpose training has the advantage of providing the trainee with more complete knowledge in a broader field, opening wider horizons, and offering more employment opportunities. On the other hand, single-purpose training has its advantages, too: being narrower, it goes deeper, providing a certain specific skill that often amounts to a degree of professional knowledge. But in this case the opportunities for employment and use are limited.

One more factor should be considered: the length of training. If there are enough time and enough money to provide more than a year (perhaps even two) of training, then a multipurpose teaching program may appropriately be considered. If there is an urgent need for a large number of auxiliary health workers, or if for economic reasons the courses are less than a year long, multipurpose training is only rarely possible.

Of course, the answer to the question also depends on the purpose for which the auxiliary is being trained. If, for instance, the health service needs auxiliaries to work in a laboratory for the detection of schistosomiasis, there is no necessity for the candidates to go through a multipurpose course in laboratory techniques; they can get along with mastering the technique for the detection of schistosomiasis.

Another approach, justifiable in certain instances, may be for all the candidates to

be given a general multipurpose training during the first phase of the course and then, in the second phase, to specialize and become single-purpose auxiliaries. Here is an example from the field of nursing:

<i>First phase (6 months)</i>	<i>Second phase (6 months)</i>
Nursing	Hospital nursing Mental health Public health nursing Maternal and child health etc.

This system requires at least one year of training.

In the Latin American countries, the needs are so urgent and the number of untrained auxiliary personnel so large that the training of single-purpose auxiliary health workers deserves first consideration. But the other solutions mentioned should not be ignored; they will surely prove useful in particular situations in certain countries or in a certain region of a country.

Training Programs

The point of departure in setting up training programs is that auxiliaries constitute a group of health workers that have to carry out certain clearly defined activities with full understanding and competence. The auxiliary health worker must not be a robot, able to perform certain tasks skillfully but mechanically. The teaching programs should therefore be based on the following principles:

1. Integrated medicine, which approaches and tries to solve each health problem in its social, preventive, and curative aspects.
2. Teamwork, in which each member performs a clearly defined function and takes full responsibility for it.

The most common, and also the greatest, mistake in planning teaching programs for auxiliary health workers is to make them nothing but miniatures of the courses for professionals in the same field. They should

actually be (1) adapted to the specific nature and actual conditions of the auxiliaries' future work, and (2) related to aspects of local health problems.

Apart from purely technical matters, the training should promote (1) a sense of responsibility, (2) a sense of proper human relations, and (3) ethical behavior. Without these qualities it is hard to imagine health workers in general, and auxiliaries in particular, functioning successfully.

Without discussing individual subjects, the inclusion of which should be flexible and based on the local situation, one thing is quite certain: every teaching program should give a prominent place to health education, because this is the first and most important function of any health worker, especially in Latin America.

Length of Training

One year seems to be the advisable minimum and two years the maximum length of training. Of course, emergency needs, lack of funds, or some specific conditions or purposes may in exceptional cases justify longer or shorter programs. There is one more possibility not to be overlooked: should there be well-grounded reasons, the training can be carried out in shorter periods of two to three months or more, with breaks during which the workers may carry on their regular duties in the health service. A one- to two-year program can thus be stretched over four, five, or more years, in which case the teaching program should be adapted to such a periodic, prolonged training. What is, however, quite certain is that in the Latin American countries the length of training too should be subject to wide variations.

Training Methods

The first point to be emphasized is the advantage of organized courses over in-service training, which for the most part is carried out in an unorganized fashion with-

out enough attention and care on the part of instructors or supervisors. Learning by doing, seeing, and hearing is the aim of the correct application of any training method.

In organized training it is customary to allot 30 per cent of the teaching time to theory, 20 per cent to practice, and 50 per cent to field training. The theoretical part comprises lectures, seminars, discussions, and other forms of transmitting knowledge from the teacher to the pupil. The practical part embraces laboratory work, demonstrations, and other work, usually performed in special training laboratories, demonstration rooms, or demonstration areas and primarily designed to develop certain manual skills. Field training usually follows the theoretical-practical part; it is a system of organized practical experience carried out in public health institutions, under constant guidance and supervision from competent teachers and instructors.

It is a mistake to think that the training of auxiliary health workers should be merely practical and conducted on the "learning by doing" principle. Training that makes auxiliary health workers blind instruments in the hands of professionals is essentially wrong. The trainees must be given enough theoretical knowledge to understand what they are doing and why. This is one of the main requisites for their success.

The use of any given training method depends on the number of trainees. Classes of not more than 20 trainees and groups of not more than four or five in practical demonstrations are considered the most appropriate. Active participation is possible only when the training group is small.

One more very important factor should be mentioned. Very often methods and equipment are used in training that the trainees will never be able to apply in their future work. Training methods, facilities, and equipment should correspond to the trainees' future tasks and to the possibilities of the health service. This does not mean

that audiovisual and other modern teaching aids may not be employed.

The provision of books, manuals, notes on lectures and seminars, and other written material is very important. All written material should fit the teaching program and be written in such a way as to serve the auxiliary health workers as guides to their future work. For the World Health Organization and the Pan American Health Organization, the provision of written material (and of audiovisual aids as well) is a matter of great interest and even greater possibilities.

Examinations and Certificates

Although the trainees' progress should be checked continuously throughout the course, a final examination is very important. It gives the whole course a specific character and value. At the thought of examinations (those during the course and the final one) trainees learn more, try to distinguish themselves, and have a feeling that their training is something important and serious. Practical, oral, and written examinations should be given. It may sometimes be useful also to check the candidate's knowledge by tests, periodic oral or written reports, diaries, etc. It is advisable to have a prominent representative of the health service present at the final examination as an observer.

After passing the final examination, the trainee should receive a certificate whose content and form make it a document he can be proud of, one that shows him he has entered upon a publicly recognized and important career. The certificate also serves for the registration of auxiliary health workers.

Place of Training

Auxiliaries should be trained in an environment and under conditions that are the same as, or similar to, those they will meet in their future work, but only if the locality can provide (1) adequate health services and

health institutions suitable for training and (2) competent teachers.

There is ample proof that the training of auxiliary health workers in big cities and highly developed medical centers does not produce the desired results, for two reasons: (1) the very facilities, equipment, training methods, and atmosphere of this environment often fail to offer the trainee the particular knowledge and skill essential to his work in a less developed milieu, and (2) the effect of such an environment on a trainee from a remote, underdeveloped area is very often negative—he does not return to the environment he came from and was meant to work in.

Though residential training is more expensive, it is much to be preferred to non-residential training. Among its advantages are the opportunities it affords for maintaining discipline; for inculcating habits of everyday living and especially of hygiene (the health worker's life should be a model for the people among whom he works); for fostering a sense of teamwork and good human relations; and for promoting extra-curricular activities such as sports, dancing, and music.

It is absolutely wrong to make the training of auxiliary health workers a permanent responsibility of professional schools (schools of public health, of medicine, of nursing). The training of auxiliary health workers can only be a sporadic, transitory function of professional schools. The training imparted by such schools is, as a rule, too academic—just the reverse of what is wanted in the training of auxiliary health workers, which is meant to reflect the practical needs of health services. The function of these and similar institutions in the present connection is to educate the teaching staff for schools for auxiliary health workers.

One final question is: Should training be handled in permanent schools or in *ad hoc* courses? A system of schools has great advantages. It makes much easier the formation of a small body of full-time teachers—

two or three—as a nucleus for a staff of part-time teachers recruited from among local health workers. A faculty of this kind can have a sense of full responsibility for the teaching program, and this gives the school a certain stability. With a school, it is easier to transmit experience from one year to the next, from one group of trainees to another. Moreover, as a permanent institution a school gives the trainee an impression of security and confidence. But the question of which system to apply should be answered by each Latin American country individually, according to its needs and possibilities.

Selection of Trainees

The first principle to be noted is that of local recruitment. It is best that candidates come from the environment in which they will work. There are many cultural, psychological, and educational reasons in favor of this. Experience has revealed many failures when boys and girls brought up and educated in an urban environment had to face the health and social problems of rural areas. Inability to adapt to a new milieu is particularly frequent with young people. Furthermore, a young and inexperienced health worker coming from outside is not easily accepted by a community.

The minimum educational requirement is considered to be five or six years of primary school and the maximum, primary school plus two to three years of secondary school. More schooling is not advisable because those whose general educational background is too high are not likely to be pleased with the auxiliary-level career and might be encouraged to enter professional schools. There will be no difficulty anywhere in Latin America in recruiting trainees whose education ranges from primary school to three years of secondary school. Just what the general educational requirements should be depends on specific local conditions and the category of auxiliaries being recruited.

Age is another factor in the selection of candidates. A flexible approach is needed. Experience has shown that the optimum recruitment age is from 18 to 30. But this raises a problem. What are young people to do between the time they finish primary school (or two to three years of secondary school) and the age of 18? This problem should receive due consideration.

In selecting candidates for training in auxiliary health activities, special attention should be paid to the workers who are already employed but have no formal training. There are over 100,000 of them in the Latin American countries. This group should be given priority in the selection of candidates. Excellent examples might be mentioned of educational interchange between newly recruited and already employed auxiliary health workers in some countries.

The people in charge of selection are in duty bound to tell each candidate quite clearly and openly about all the advantages and disadvantages of their future career. If the candidate knows what he is going to be doing, there will be fewer dropouts during training and fewer unhappy and disillusioned people afterward.

Attention should also be paid to the candidates' character, social consciousness, interest in the work, motivation, knowledge of local dialect, and other qualities—including health and physical condition, which may be of extreme importance in their future work (strenuous field activities, night work, the handling of equipment, and so on). In this connection, it might be of value to consider probationary in-service work for those wanting to take up the career of auxiliary health worker. Organized work of this kind, lasting one to two years (or less) and carried out under the supervision and guidance of experienced professional, technical, or even auxiliary health workers, may offer valuable information about the candidate's character, while he himself may get a clear picture of what is expected of

him in his future work. The mutual advantages of such a checking system should not be underrated.

In-Service Training and Refresher Courses

For any health worker, learning should be a continuous process that starts in the classroom and goes on throughout his active life. This may be particularly true for health workers on the auxiliary level. Enthusiasm and the ambition to acquire new knowledge should be fostered in auxiliary health workers throughout their active life. This principle can be applied by means of continuous in-service training, refresher courses, or a system of in-service rotation.

Auxiliaries work under the constant supervision of professionals of the same or similar categories. In-service training is an integral part of supervision and, consequently, is one of the supervisor's responsibilities. For example, if a supervisor notices that the worker does not sterilize the hypodermic syringe properly, he should draw his attention to it and at the same time *teach* him how to perform this task in the future. By applying this working principle, supervision is gradually transformed into a system of continuous in-service training.

Health practices and techniques are steadily improving. Knowledge of these improvements can best be spread through the system of refresher courses organized according to actual needs, not in terms of any established intervals. Such refresher courses should be conducted primarily by the schools for auxiliary health workers, only exceptionally by other institutions (hospitals, institutes of hygiene, health centers). The refresher courses need not last longer than a week or two. The program should be carefully planned and directed toward a clearly defined goal, with emphasis on practical work, demonstrations, group discussions, and seminars. A certain amount of time should be allotted to free

discussion of current problems and experience from the field, which would help the participants to widen their knowledge and the teachers to evaluate the results of their programs and methods.

Some countries have permanent training systems based on the rotation principle, under which, after the necessary orientation, workers from the field are sent to work in institutions and those from institutions go to work in the field. The results have been strikingly good. Workers coming from rural areas into urban health institutions have a chance to learn about new medical advances and to enjoy the cultural advantages of the town; those sent to rural areas have a chance to acquaint themselves with rural health problems and with certain realities that, in their urban institutions, often seem remote and incomprehensible to them. Such exchanges should be well planned, and for auxiliary health workers should be limited to one to three months.

There are also other ways of teaching and learning—specially written books, manuals, meetings, journals designed for individual categories of auxiliaries, and so on. These are all quite common among professionals, but unfortunately are rarely used with auxiliaries.

Selection and Training of Teachers

Besides possessing all the qualities any other teacher needs—good character, strong personality, enthusiasm for teaching, technical competence in the subjects he teaches, understanding of the environment for which the students are being trained, and so forth—the teacher in a school for auxiliary health workers should be familiar with the specific jobs his pupils will be performing.

The faculties of schools for auxiliary health workers should be made up of local health workers, professional and auxiliary, who possess these qualities and who also have some field experience. As has been said,

each school should have at least two or three full-time teachers for basic subjects and a number of part-time teachers for specific subjects. The director should be a professional in the same category; it would be a mistake to appoint to the post a doctor who would serve part-time.

The Latin American countries have enough qualified professional health workers to staff schools for auxiliary health workers. But if they are to teach successfully they need special training in addition to their professional education and work experience. All categories should therefore attend special courses, lasting from a couple of weeks to several months, held either at a reputable school of the same kind or at schools of public health. It is precisely here that the schools of public health could be most helpful—in training teachers, not auxiliary workers as some of them are doing. Again, consideration should be given to continuous training in the form of refresher courses, technical meetings, visiting exchanges, publications, and so on.

This brings us to a key question: Who should be responsible for the training of auxiliary health workers? A WHO document³ gives the following reply: "All health auxiliaries should be selected and trained under regulations, statutory or otherwise, of the health *administration*, so that the practical aspects of their work may be stressed from the beginning." If this principle is accepted, it would be useful from the organizational standpoint to set up special divisions responsible for the training of auxiliary health workers in the national or district health administrations; besides planning and supervising, they could also develop and improve the training of this important category of health workers.

The Use of Auxiliary Health Workers

It is necessary to call to mind the health problems (ignorance, poor environmental

conditions, endemic diseases, tuberculosis, infant mortality, and problems connected with rapid urbanization) and some of the principles (the responsibility of the State for the people's health, regionalization of health institutions, integration of medicine, preventive aspects in health services) on which the existing health services in Latin American countries are based. While there can be no doubt about the problems, there can be noticed only the first steps toward applying the principles. The best general picture of the organization of health services in this part of the world can be obtained from a PAHO document:⁴

The usual pattern is for preventive to be separated from curative services and for coordination with teaching institutions to be lacking. In the field of medical care there is no correlation between the activities of ministries of health and those of the social security services. In many instances, the institutions and services are unnecessarily duplicated. . . In Latin America the health services, regardless of their organization and their function, do not cover the entire geographic area of the countries or the entire population. In the latter's "scattered rural areas"—where dwellings are not close enough together to form communities and there are no social relationships between the people—there is a complete absence of health services or they can be said to hardly exist. Where the rural population is concentrated in communities with 500 or more inhabitants, medical care is usually sporadic or intermittent, and is not supported by preventive measures and health promotion activities. The population does not take part in health work nor is it motivated to do so; it is purely passive. In the urban areas there is a greater concentration of resources. Nevertheless, there are instances where the demand for medical care outstrips the available means, a fact which is aggravated by lack of coordination between the agencies responsible for preventive and health promotion activities.

The impression is, however, that all the Latin American countries, regardless of the pattern of health organization, are making certain efforts to provide their peoples with basic health protection and medical care

³ *Wld Hlth Org. Tech. Rep. Ser.* 109:10, 1956.

⁴ Abraham Horwitz, *Health Trends in the Americas*, Washington, D. C., Pan American Health Organization, 1965, pp. 30-31 (Miscellaneous Publication 79).

through a system of regionalized health services. This is the guiding principle of health administrations in most Latin American countries in their noble effort to improve the health of their peoples.

But they are faced with many difficulties. They are frustrated not only by difficult economic and social conditions, but also by inadequately developed health services based on an almost exclusive concern with curative medicine and on the use of methods unequal to coping with health problems that require large-scale action.

The health administrations are trying, to a greater or lesser degree, to carry out health work in the field through the system of health centers, which together with hospitals are the main source of health services. While in some areas the establishment of health centers has already given good results, elsewhere it is still in its infancy. However, reports and publications by leading Latin American health workers give the impression that the concept of health centers is generally accepted as the basis for future health and medical care organization in the countries of the Hemisphere.

On one hand, there is a pronounced trend toward conducting all health services by means of an integrated system of health centers; on the other, there is a tendency for individual health activities to be carried out by separate, administratively independent services and institutions. There are completely independent services in charge of certain specific tasks (malaria control, maternal and child health, control of some vectors, and so on) that work through their own units, unrelated to the general public

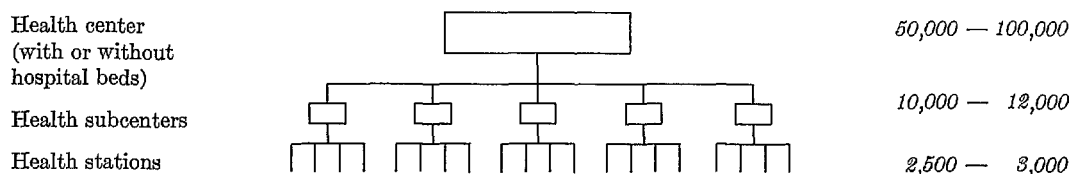
health services. Precisely because the number of health workers is limited and means are modest, the establishment of independent health organizations should be avoided and all health activity should be channeled through the public health administration and its services and institutions. This is important not only for unified planning and coordination but also for economical use of the available personnel and material resources. The extent to which separate, independent activities complicate the picture and hamper the planning of personnel and training requirements need hardly be mentioned.

Without a thorough knowledge of the political, economic, health, and other conditions, without being fully informed about the public administration system (on which, after all, public health administration depends), I tentatively propose the scheme shown below. This scheme, which is based on the data available and on my own impressions, is intended as a point of departure for discussion of how auxiliary health workers should be used in the Latin American countries.

The health center with its subcenters and stations constitutes, from the standpoint of health administration, the single unit responsible for the total health of the people of a certain region. Its activities should be based on the principles of integrated medicine. The center should approach all health problems—no matter whether they relate to the individual, the family, or the community as a whole—from the curative, preventive, and social aspects. It may again be pointed out here that teamwork is

Institution

Number of persons served



the basic method for carrying out all health activities within a health center and its subcenters.

If we try to distribute professional and auxiliary health workers in this framework and in accordance with a realistic view of the personnel and material possibilities of the Latin American countries, we shall not be far wrong if we plan for general and specialized professionals at the health center level, with auxiliary workers as their assistants on the teams; for general professionals (general practitioners and nurses) on the subcenter level, assisted by auxiliary workers, again as members of teams; and for auxiliary workers alone, with definite responsibilities for basic health care, on the health station level. In this connection it should be stressed that a health subcenter with health stations attached to it should function as an integrated health unit, in fact as an integrated health team (a doctor, a nurse, and six or seven auxiliaries). Such a system of health organization makes possible continuous supervision of the auxiliaries' work and referrals of cases from the lower to the higher level.

Remote rural areas with scattered small communities, lacking health institutions and communications, present a considerable problem in the organization of health services. Providing basic care to the total population of such areas is one of the hardest problems of health services. For the time being, from the personnel and economic point of view, the only realistic solution appears to depend on (1) rational use of locally recruited and trained multipurpose auxiliary health workers, and (2) the building of small health units that contain, besides the consulting room, two or three beds for serious emergency cases (awaiting transportation to health institutions at a higher level) and living quarters for the health worker.

There is one important question, among many others, that my scheme suggests: Is the

proposed organizational pattern realistic for Latin America? If it is not today, it will be tomorrow. What is essential is (1) that a certain concept of health organization be accepted and developed gradually as the economic and personnel situation permits, and (2) that the training and recruitment of the various categories of health workers be planned and carried out accordingly.

How such a health service can use auxiliary health workers to the best advantage is a question of real importance in connection with the training and use of auxiliaries. The answer depends in the first instance on the attitude of professional health workers toward them and only in part on the way in which the health services are organized. If the professional workers are of the opinion that auxiliaries are "a danger to professionals," are "the result of temporary needs," are "doing professionals out of jobs because they are paid less," and so on, then sooner or later the whole system of training and using auxiliary health workers will fail. Efforts should therefore be made to develop in professionals a proper attitude toward auxiliaries and their role in modern health services. The auxiliary health worker must not be considered a mere tool in the hands of professionals, who often do not know how to use it. Many medical and other schools give great attention to the question of auxiliary health workers throughout their curricula. Some even have special courses to teach future professionals what the function of auxiliaries is and how they should be used. The question appears to deserve more thorough consideration.

In conclusion, if the career of auxiliary health worker is to become a permanent one, it poses a series of basic problems. Outstanding among them are these: (1) the establishment of rules for setting up categories of workers, and for their training and use; (2) the definition of their status, promotion rights, pay, and other prerogatives; and (3) recognition of their social

status, including the invention of appropriate titles for the various types of workers.

Summary

The training and utilization of auxiliary health workers cannot be tackled on the basis of a universal formula applicable to all Latin American countries. Different geographic, economic, social, educational, and health conditions call for specific approaches adjusted to the needs and possibilities of each country.

The auxiliary health workers represent a special category of health workers of a permanent career, with precisely defined tasks and responsibilities. Auxiliary health workers as substitutes for individual categories of professional and technical health workers should be considered as a transitory measure to meet exceptional needs.

The problem of training and utilizing auxiliary health workers should be dealt with as an integral part of the national health plan.

The training programs for auxiliary health workers should be: (a) drawn up on the principle of teamwork and of integrated

medicine which approaches each health problem from the social, preventive, and curative aspects; and (b) adjusted to the specific nature and actual conditions of the auxiliaries' future work.

The teaching programs should also comprise such elements as will develop in the trainee (a) a sense of responsibility, (b) a sense of proper human relations, and (c) ethical behavior.

One year should be the minimum and two years the maximum length of training. Among the methods of training, practical field work in health institutions, under the permanent guidance and supervision of competent teachers, should be applied. The trainees should be recruited locally. Primary school should be considered as the minimum, and primary school plus two to three years of secondary school as the maximum of general education. The recruitment age for auxiliary health workers should be between 18 and 30 years of age. Through a continuous system of in-service training and through refresher courses, the learning should become a life-long task of auxiliary health workers.