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INTRODUCTORY STATEMENT ON THE TOPIC

"MEDICAL CARE IN RURAL AREAS"

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Introductory Statement

Paper presented by Dr. J.A. Díaz Guzmán, Chief Medical Officer of the Division of Rural Health, Ministry of Public Health and Welfare of Venezuela, for the technical discussions to take place during the VIII Meeting of the Directing Council of the Pan American Sanitary Organization, VII Meeting of the Regional Committee of the World Health Organization.

I. Introduction

The Universal Declaration of Human Rights, proclaimed by the United Nations General Assembly, states in Article 22: "Everyone has the right to a standard of living, including food, clothing, housing and medical care, and to social services, adequate for the health and well-being of himself and his family and to security in the event of unemployment, sickness, disability, old age or other lack of livelihood in circumstances beyond his control."

The World Health Organization, for its part, defined health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" and proclaimed it to be "one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition."

The Constitution of this international health organization asserts, moreover, that nutrition, housing, medical care, prevention of accidents, and mental health are just as important as health objectives as eliminating epidemic diseases.

The term "medical care" appears in these statements of principle, not as an end in itself, but rather as one of the means that, through a process of steady and harmonious development, will lead to a noble and lofty objective: the achievement of a living standard capable of ensuring the health of all human beings.

These concepts are in keeping with Dr. Charles A. Winslow's classic definition of public health as "the science and art of preventing disease, prolonging life, and promoting physical health and efficiency through organized community efforts for the sanitation of the environment, the control of community infections, the education of the individual in principles of personal hygiene, the organization of medical and nursing service for the early diagnosis and preventive treatment of disease, and the development of the social machinery which will ensure to every individual in the community a standard of living adequate for the maintenance of health," such benefits being organized so as to guarantee to each citizen his inherent right to health and longevity.

Here again we can see how "medical care" is only one aspect of the over-all program, only one link in the chain, one phase of a complex undertaking.

This introductory statement on "medical care in rural areas" should be accompanied by similar reports on sanitation, nutrition, housing, health education, social welfare, etc. in rural environments. Then, once we have

defined the objectives that should be achieved, through joint action, specific and immediate plans to combat each of the enormous problems confronting rural areas should be proposed to all the Member States of the Pan American Sanitary Organization.

It is this basic concept that led to the preparation of this statement. The policy of integration is reflected throughout this report, in the chapters on training of personnel, medical care programs, problems to be solved, etc. We mean integration in its broadest sense, referring not only to the identity of objectives of both preventive and curative programs, but also to those aspects of local health that are not exclusively medical: nutrition, housing, culture, living standards, etc.

Integration also takes into account the geographic aspect of the problem. By this we mean that we should not lose sight of the obvious interaction and dependency that exist between two apparently opposite environments: urban and rural. If this dependency is easily discernible in the economic, cultural, and social fields, it is even more evident in the field of medicine. It would be unrealistic to hope to have good medical services in rural areas if they do not exist in urban centers; for it is on the urban services that those in rural areas depend for resources that are difficult to obtain in these remote areas.

This interaction between the two environments, on the other hand, can, under certain epidemiological conditions, cause the rural area to become a reservoir for maintaining artificially the annual morbidity and mortality indices of the urban localities. The solution of the epidemiological problems of rural areas is therefore important in consolidating the gains made in urban areas. Consequently, the persons responsible for solving the urban-area problems cannot view with indifference the status of the problems confronting rural areas.

In reaffirming the indivisibility of health problems and the impossibility of isolating the various aspects of public health administration, these considerations lead us to accept, as the sine qua non of better organization of "medical care in rural areas," the coordination and integration, on a more or less extensive regional basis, of the resources and activities that are to be employed in the various urban and rural localities. If the local services are to be coordinated within a unified network of institutions so that the functions of each service are supplemented by those of other services in the same socio-demographic area, the programs that are aimed at structuring public health along regional lines and then consolidating the resulting system of districts seem to be the most logical means of fostering the public health services in rural areas, especially those related to medical care and to preventive and curative programs.

This regional organization will be based on unification with urban

services, thereby ensuring services for rural areas that will be more in keeping with their goals; such a harmony between means and ends is enjoyed by the medical services for urban populations, which are administered by more complex health agencies: health units, health centers, hospitals, etc. Thus the principle of "a single service -- the best -- and a single class -- the patient" will become just as much a reality in rural areas as in urban areas.

Within the unified network of institutions that will be established by the health authorities of regions and districts, the simplest nucleus, or advance guard (whether it be called a "rural health center," "rural medical service," or "rural health post") will become a mere link, incomplete in itself and connected with the higher and more complex organizations in small towns or larger rural localities. In this way the simplest superstructure of the institutional network is created: the urban-rural health district, somewhat similar to what is known in the United States as a "multi-county health department" or "city and county health department."

By uniting the various districts into a larger administrative unit having, as a decentralized organization, certain autonomy with respect to financing and supplies, a health region will emerge. It need not coincide with the states or provinces that exist within the politico-administrative structure of the nation, but depends rather on the financial arrangements concluded between the Federal and regional governments. The administrative seat of the health region will be the most important city of the socio-demographic area covered by the institutional network. Such a city will be the seat also of services like the Regional Central Hospital and the Central Public Health Laboratory, which will deal with the various medical problems, both preventive and curative, that could not be solved in institutions lower down the line.

It is not our intention to give a detailed description of the various entities that will comprise the health districts and regions. We are aware that our principal task is to study specifically the medical care programs in rural health centers.

We feel, however, that the logical planning of medical care in rural health centers depends on the extent to which they achieve a degree of scientific effectiveness and performance that will ensure their coordination with the health centers on a higher level. We therefore cannot fail to describe, though briefly, the system of health districts and regions that are to form a single, organic network of institutions, which will serve as the basis for and provide guidance to all the local public health activities in the rural health centers, with special reference given to preventive and curative medical care.

A description of this system is all the more justified by the fact that, as will be seen later, it has provided us with extremely useful guidance in improving the quality of the medical programs in rural health centers. In none of the chapters, on the training of personnel, medical care programs, and problems to be solved, do we lose sight of the fundamental idea of interrelation and coordination of services on a regional scale, as the most logical means of fostering the development of medical services and of overcoming the difficulties that prevent these services from achieving, in rural areas, the highest scientific standards possible, similar to those of services in urban areas.

II. The Rural Environment

Before going on, we wish to devote a chapter of this paper to defining what we understand by rural areas and to studying the characteristics of such areas that govern the development of the various public health programs, among them medical care.

There is no complete agreement on an exact definition of rural areas. Opinions vary as to the number of inhabitants a locality must have within its limits to be considered urban: Some hold that it is 5,000; others maintain that it is 2,000; and the U. S. Bureau of the Census sets the figure at 2,500. There is disagreement, also, concerning the characteristics of the economic, social, and occupational aspects of rural areas and of their sanitation programs and public services.

Although it is easy to distinguish between extreme examples of urban and rural environments, it is difficult to determine at times whether a locality should be classified as urban or rural when its intermediate characteristics make it similar, in some ways, to one area and, in other ways, to the other. Consequently, some authors, feeling the need to place this intermediate type in a separate group, speak of "semirural areas." We call attention to this fact because it is precisely the existence of this intermediate type of locality that explains the difficulty authors find in distinguishing clearly between urban and rural areas, a distinction easily made, as we have said, in extreme examples. In doubtful cases, the distinction must be made on a conventional and arbitrary basis, usually by comparison with the number of inhabitants living within the limits of the largest locality.

Within our concept of geographical integration as a means of developing public health programs, there is really very little practical value in classifying the intermediate localities in one group or another. It would be more worthwhile to make firsthand studies of the conditions of such localities, which, from one point of view, may appear to be large rural areas and, from another, small urban areas. If the means of communication, the socio-economic level, the medical and educational

resources, and the size and receptiveness of the surrounding and definitively rural population, etc., are favorable, these intermediate localities would be called upon to become more important, differentiated centers of health activity, true headquarters in the district. Unless they do so, and if they remain relatively isolated, with a low socio-economic level, inadequate medical and educational resources, and a small number of receptive rural inhabitants, these intermediate localities, despite their slightly larger concentration of population, can offer nothing that might warrant a vertical reorganization of their local health agencies beyond their being simple rural health posts, on the first upward step in the network of health institutions.

As for the minimum number of inhabitants in a locality that is to be considered urban -- usually the seat of a municipality -- we believe that, in the interests of continental uniformity, the figure given by the U. S. Census Bureau (2,500 inhabitants) should be accepted.

Rural localities may, in general, be described as follows: houses are separated by wide unpopulated areas, which are usually small cultivated fields; in the materials used in their construction and in their sanitation facilities, these houses do not differ widely from those found on the farms and in the hamlets in rural areas; water supply and garbage and excreta disposal are taken care of on an individual basis; domestic animals roam freely about the yards and corrals of the houses and in the open spaces; the major occupation of the inhabitants is connected with agriculture and animal husbandry and, consequently, the economic level is low, since, at least in most Latin American countries, the degree of industrialization in both types of occupations is almost nil.

We are aware that in some countries that are still inadequately industrialized, especially those engaged in the petroleum industry, there are localities that suffer, not only from the disadvantages of the low health and sanitation standards of rural areas, but also from those resulting from overcrowding and from unplanned development. These are the areas that Venezuelan authors call "industrial petroleum areas," but we feel that they should not be considered in a study of rural area problems, inasmuch as their solution is essentially urban.

We are also aware of another side to the picture: that in many Latin American countries there is an ever-increasing number of vast regions, entire states in many cases, in which rural environmental conditions are completely different from those described above. Here there are small densely populated states with good means of communication, where areas considered rural are never more than an hour's drive from the large urban centers, over good highways that are open to traffic the year round. Rural localities are moving steadily toward urbanization, through an increase in their population, higher living standards, the construction of modern and sanitary homes in what were once open spaces between houses.

Inhabitants are no longer so dependent on agriculture and animal husbandry as means of earning their livelihood, or the agriculture and animal husbandry on which they depend are highly industrialized and, consequently, ensure them of larger incomes and a higher living standard.

This type of area, of which the central part of the Aragua and Carabobo States in Venezuela are good examples and which surely exist in almost all the Latin American countries, is the positive exception to the negative rural-environment rule we have described above. They might serve as an example, an ideal to be achieved in the over-all improvement of rural areas; we feel that all rural areas should be like these. But these advanced rural areas cannot be taken as a typical basis for developing the programs we shall propose, since, unfortunately, it will be many years before such conditions will prevail in the Latin American countries.

With these few, though promising, exceptions, the rural areas of Latin America are quite similar to what Stampar described, in his paper presented at the Seventh World Health Assembly, as the socio-economic characteristics of the rural areas of underdeveloped countries: Their inhabitants "live in great poverty, their living conditions are wretched, the conditions of their dwellings are poor, their educational level is low, and their health and educational services are meager."

It is easy to understand the influence that such conditions can have on medical care in rural areas if the higher authorities do not correct them: either the federal government, regional government, or international organizations. Medical and auxiliary personnel will not wish to settle in such localities unless the health organization provides them with an adequate level of subsistence, acceptable lodgings, and working conditions that will ensure a scientific level of performance for the services and professional advancement for the personnel.

Any other approach to the problem would be unrealistic, losing sight of the real roots of the problem. If physicians and auxiliary personnel are forced to remain and work in rural areas without these minimum living and working standards, they will probably do so unwillingly, without really intending to remain there, not feeling a part of an environment they consider hostile and over which, for this very reason, they have no control. In this way, rural areas would receive only inferior services, the exact opposite of our objective. In a later chapter, we shall discuss the solutions that have occurred to us for dealing with this serious problem of lack of personnel in rural areas and their reluctance to remain in such areas.

III. Training of Personnel

It is almost a commonplace in public health to say that the effectiveness of the services depends, in large measure, on the thorough technical training that the personnel entrusted with such services have received and continue to receive.

This fact is nowhere more evident than in the work in rural areas. All the obstacles that stand in the way of high-quality action, the lack of resources, and the lack of collaboration on the part of those people whose health levels are to be raised--all of these problems must be combated by large doses of doctrine, conviction, and faith. However well-planned the programs, however complete and well-conceived the administrative organization of the services, however much the higher authorities endeavor to anticipate details concerning finance, installation, equipment, etc., what really counts in the last analysis is the ability of the physicians and their auxiliary personnel, who are on the scene of action. No work plan, therefore, can be better than the personnel charged with carrying it out. Hence, in a medical care program in rural areas, stress should be placed on the proper training of personnel before and during the time they enter into service. The rural physician, though he alone is responsible for the curative medical work among the population in his care, has an even broader role to play as the local public health administrator. He can be indifferent to nothing in the economic, social,--in fact, the entire life of his community. He is expected to lead the way in the campaign for over-all community improvement, and he must be thoroughly prepared for such a task.

The need to train young physicians who will later assume such responsibilities should be an inducement for the universities and their schools of medicine to overcome all the obstacles that traditionally, in almost all of them, have prevented the introduction of modern teaching methods in keeping with the present-day demands of society and the community. Contrary to the former belief that future practice in rural areas could serve as an excuse for incomplete training, the series of obligations and positive accomplishments that such practice entails should cause those who train the physicians to give them the highest possible level of scientific training. We realize that not all the graduates of our schools of medicine will become rural physicians. However, as the advances achieved in the science of public health make themselves felt within the entire medical practice, it seems safe to assert that a thorough university training in public health and a practice period, however short, in a rural area will always be a guarantee of a solid and well-rounded development, whatever the field of medicine one chooses. Such training would, at least, throw light on the vocation, character, personality, and social awareness of the young physicians, and that in itself

would be extremely valuable.

It is well known that a revision is needed in the basic curricula offered in universities for training physicians in social and public-health medicine. Nevertheless, it is impossible for health authorities to achieve this goal within the desired period, and, until they do, we shall have to attempt to give the young physicians who are to work in our rural services the social and public-health guidance that our universities have been unable to provide.

We believe that Venezuela is meeting with success in its attempts to organize a rational training program, the hierarchy of which is planned according to the various posts to be filled by rural physicians. We shall explain the program in this paper, in the hope that the information will be useful to the other Latin American countries.

The various phases of this training program have been given the following names: Pre-orientation "Internship," Orientation Course for Physicians in Service, Basic Course in Rural Public Health, and Course for Public Health Physicians. These stages are progressive, each one followed by a more or less long interval during which the physician applies, in his place of work, the knowledge acquired in the previous stage and continues to gain experience and credits for the succeeding stages.

The Pre-orientation "Internship" is compulsory for all physicians recently graduated from the university who wish to serve as rural physicians, and is offered while they await the processing of their appointments. At two small teaching centers in suburban localities near Caracas, under the direction of two competent rural physicians, and for a period of not more than two to three weeks, the candidates observe the operation of preventive clinics for prenatal care, nursing babies, school children, etc. At the same time they learn the administrative procedures they will use in their small local public health jurisdiction. Provision is also made for placing the "interns" in contact with the national directors of the Division of Rural Public Health who, in simple terms, explain what is expected of them and what they may expect of their work in rural medical services. The Pre-orientation "Internship" endeavors to do what the university did not do: show the physician something of the feeling he will derive from, and the importance of, his mission in the rural area and awaken in him a social awareness. Whether we achieve this in 100% of the cases matters little, since this is not the last contact we have with the physician. We continue to observe his development as reflected in the reports he transmits regularly, through visits made to him for purposes of supervision, through the contact he is required to maintain with his regional or district superiors.

The physician knows, moreover, that after a short interval (it is hoped not longer than twelve months) he will be called to take the second stage: the Orientation Course for Physicians in Service, which lasts seven weeks and is offered in a more complete center specially organized for this guidance function, The Rural Experimental and Teaching Center of Santa Teresa del Tuy. The fact that it is only two hours from Caracas permits the Division of Rural Health and other divisions of the Ministry to maintain close contact with this important Center. A complete description of the Course appears in Annex I of this paper.

Rural physicians who have done outstanding work and who should therefore be called upon to fill positions of a higher category, on an intermediate level between the regular rural physician and the public health officer, are given the Basic Course in Rural Public Health (sometimes called the Basic Preparatory Course in Public Health). Annex II contains a description of the fifth and last course given so far in this series. As may be seen, it imparts knowledge which, if not complete, is at least sufficient to enable the physician to work, at the intermediate level, in the following fields: Public Health Administration, Statistics, Epidemiology, Sanitation, Tuberculosis, Venereology, Maternal and Child Health, School Health, Health Education, Laboratory, Nutrition, Leprosy, and Malariology and Control of Metoxenous Diseases.

The entire course lasts seventeen weeks and during this time, we feel, its basic objective is achieved: training local public health directors at an intermediate level between the regular rural physician and the public health officer. Two additional objectives of no less importance are also achieved: training a reserve staff of key personnel to meet possible needs in the upper levels, and forming a group that has had vocational orientation and that can provide candidates for future Courses for Public Health Physicians. The acute shortage of this type of personnel and the need for local administrators for the new districts that must be formed point up the importance that these short and intensive training courses, which deal with the basic aspects of local public health work, are to have within our public health organization.

The final stage in the training program is the Course for Public Health Physicians, a discussion of which would go beyond the scope of this paper. All we shall say is that great strides will be taken in public health work in rural areas when physicians, having satisfactorily completed the four stages described above, take their place again in the field. They will then embody the concept of integration, being keenly aware of the undeniably constant dependency between urban and rural areas and of the impossibility of isolating the component parts of public health administration. Their vision will be broad, not narrow like that of people who are accustomed to seek refuge in the privileged urban world and who pretend to ignore the dangers still present in rural areas; these trained physicians

will approach today's problems with a bird's-eye view, not bury their heads in the sand like ostriches.

We should not overlook the need also to organize and maintain programs for the scientific training and improvement of physicians, in their place of work. Some of the ways this could be done are through the regular sending of scientific journals and publications, multigraphed articles of special interest, attendance at regional public health meetings devoted to various problems, lectures by professors and visiting specialists, and the opportunity of presenting interesting cases to these specialists, etc.

A similar training program for auxiliary personnel, before and during the time they are in service, should be organized, for it is important that they be imbued with the same spirit of progress and professional improvement that should inspire physicians.

IV. Medical Care Programs

The medical services provided in rural health centers should be just as much in keeping with their objectives as the services offered to the inhabitants of the more favored urban localities that are served by more complex and differentiated health agencies: health centers, health units, hospitals, etc.

In practice, however, the various national organizations are unable to provide over-all public health services in the same degree, at all levels; and the present lack of all kinds of resources, at the level of the rural health centers, is expected to continue for some time. Therefore, the only way to improve these rural centers is by integrating them with the others in a single interrelated network having a hierarchical arrangement. In this way, laboratory facilities, X rays, public health inspection, etc., which exist in urban centers, would be made available to the rural centers, and, by means of a good ambulance service, curative cases too serious to be dealt with at the undifferentiated level of the rural health centers could be speeded to the urban areas for treatment. Through this system we would achieve the frequently repeated ideal, according to which "no citizen, under any circumstances, should be deprived of the best resources that modern medical science, preventive as well as curative, can provide to prevent suffering, disability, and death."

The simplest rural health center should have the services of at least one physician, one or two nursing auxiliaries, and a person handling medical orders and prescriptions. One of the auxiliaries is usually responsible for childbirth care. The services of an auxiliary in child care may be provided, if it has been possible to organize a child care

center, and in some places there is a manager who is in charge of the school dining room and who should also offer other assistance to the school health service.

This auxiliary personnel will work under the supervision of the best trained staff of the district centers who, at regular intervals, should make supervisory and training visits to the rural health center. At first, the district personnel might provide direct service in connection with special fields, such as tuberculosis, infant health, etc., but later the work in these special fields should be undertaken entirely by the local auxiliary personnel, who should receive training for such work during the first stage. By this we mean that the personnel of the rural health centers should be all-around public health experts and that all problems related to special fields should be solved locally.

As for the curative aspect, the rural health center should provide the following services: general outpatient consultations (medicine, surgery, and pediatrics), home medical care in special cases, and hospitalization. The latter, because of the limitations of personnel and equipment, should be kept to a minimum.

Because of the large variety of services that the rural physician must provide, his time and efforts should be well administered so that the greatest possible good will come from them. Hence, visits to homes should be made only when absolutely necessary, and the physician should try to make the community understand the need for this policy.

With respect to preventive services, the rural health center, as the advance post in the country's network of medico-public-health institutions, should operate as a real local public health service, with all the basic functions that such a role implies.

In this regard, we fully support the views of Dr. Haven Emerson, a leader in the campaign to establish local public health services in the rural areas of the United States. According to Dr. Emerson, we cannot say that we have a national health program or a nation-wide medical care program unless we make specific provisions for the establishment of local public health services for the entire population. The least we can accept as local public health services are the registration and interpretation of biological facts concerning births, diseases, and death; the control of communicable diseases; the control of the physical environment through the science of sanitation; and the use of public health laboratories. Each of these four services requires, in some way, the exercise of the power and authority of the State. Finally, Dr. Emerson has stressed that, in addition through maternal and child health and through the almost limitless resources of health education, we can do much to prevent the numerous conditions of poor health at all ages.

According to Dr. Emerson's theory, there are six basic services that must be provided, if rural health centers are to fulfill their role as true local public health services, even though of the simplest form:

1. Vital statistics: births, mortality, and morbidity.

2. Control of communicable diseases, both epidemic and endemic: tuberculosis, venereal diseases, parasitoses, yaws, leprosy, malaria, etc., to cite the most important. In this category some of the zoonoses are of special importance in rural areas: bovine tuberculosis, brucellosis, rabies, and hydatidosis.

3. Sanitation of the physical environment: water, excreta, garbage, flies, food control.

4. Public health laboratory: for making correct etiological diagnoses of the various diseases and for conducting a truly scientific campaign against them.

5. Maternal and child health: for the specific campaign against maternal and child morbidity and mortality. This category would also include the health care of the school-age child.

6. Health education: As Dr. Emerson asserts, health education has almost limitless resources for the prevention of many conditions of poor health at all ages. Included in health education would be nutrition education.

The degree of emphasis that should be placed on the afore-mentioned activities in local work is determined by the status of the underlying problems at the locality under study, as revealed through the general survey of the population that should precede the organization of all work. Annex III shows the model used in Venezuela as a guide for the preparation of the general medico-geographic survey that is required of all rural physicians.

However, since the status of such problems is not static but dynamic, this general survey should undergo periodic revision, so as to point out the progress achieved and the need for shifts of emphasis. An annual or biannual review of the general demographic indices and of specific indices for each disease will prove useful in this regard. A study of those indices, especially those concerning morbidity, will also be useful in helping us determine which medicines the rural health center should have available for carrying out curative services or which of the various preventive campaigns should receive more attention. The latter refers especially to the seasonal occurrence of the various endemo-epidemic diseases.

In line with these concepts, and not unlike what occurs in urban areas, it is usual to find that, as gains are made in certain spheres of action, new problems arise to take the place of those that have receded in importance. It is in such cases that the ability of the local public health administrator comes to the fore, in tackling the new problems without failing to consolidate previous gains. Thus, as the situation concerning communicable diseases, child mortality, malnutrition, parasitoses, etc., improve, problems relating to mental health and to chronic or degenerative diseases begin to gain in importance.

The great difficulties that he the rural physician encounters in applying public health procedures cause him to rely more than his urban colleague does on the collaboration of each and every member of the communities under his care. Therefore, too much stress cannot be laid on the importance of the work of the rural health centers in connection with community organization and improvement and health education. If well executed, the work will ensure success; if neglected or only partially carried out, it will jeopardize the entire result of the program.

A good recommendation to rural physicians concerning their need to win the confidence and support of their community is that, at the very outset, they try to achieve impressive results, which cannot escape public notice, with respect to a specific public health category (infant mortality, acute diarrheal diseases, smallpox, whooping cough, etc.) by concentrating his efforts and resources on this project until the result becomes evident and public support is gained once and for all.

The collaboration received will be double: on the one hand, that of the district center and, on the other, that of the local community; the rural health center will thus be able to overcome its specific weaknesses and to fulfill properly its role as a true, over-all local public health service, even though in its simplest form.

V. Problems to be Solved

a) Financing: Just as it is with urban programs, financing is the number one problem in operating rural services. The poverty in rural areas only increases the financial difficulties.

Hence, to a large extent, the operation of medical care programs in rural areas is financed through national and regional budgets. It is therefore incumbent on the public health directors to make known to the government executives and to the legislative bodies, which are responsible for preparing their respective budgets, the value of the public health services for which funds must be allotted.

Once a considerable portion of the national general budget of expenditures and of state budgets is earmarked for public health services, there remains the problem of dividing those funds among the various aspects of the public health program. The solution is, theoretically, a relatively simple one: The funds should be used where they will do the most good at the lowest cost. If we apply this principle indiscriminately we will always give preference to urban areas over rural areas and to preventive and sanitation activities over curative activities. But we have seen that both areas are mutually dependent and that it is impossible to isolate the component parts of public health administration.

The development of curative services, moreover, is essential to certain public health programs in which early treatment, as a means of prevention, plays an important role. What is more, the communities demand curative medical care rather than preventive care and sanitation work, for an appreciation of these latter activities by the public must, in most cases, be promoted by the directors of public health. Government authorities are sometimes perplexed by the urgent requests of communities for curative care, on the one hand, and by the advice of the experts who call for sanitation and preventive activities, on the other. Reconciling these views and developing methods for "selling ideas" to the government authorities and to the general public are among the most pressing tasks facing the public health administrators of our countries today.

Where circumstances permit (and unfortunately they do not in most of the rural areas in Latin America) efforts should be made to obtain financial contributions other than those of the national and regional budgets: in some cases from municipal governments and, in others, from private enterprises. Attempts should be made also to extend Compulsory Social Security to those rural areas where it is deemed advisable, inasmuch as this is the most promising method for financing medical services.

The inhabitants themselves should contribute as much as they can toward financing the medical services from which they benefit. Financial contributions are not always possible, but instead collaboration may be given through working on some needed project for which the available funds are inadequate. Construction of a privy in the home is a good example of collaboration in the form of work.

Finally, there is the method of direct payment for services received. This payment should be made by those in a position to do so. A specific policy should be adopted in this regard and made known to all those interested.

The procedure followed in Venezuela of leaving this matter to the discretion of physicians and of affluent patients who, by mutual agreement, decide on the fees for medical care, does not seem to us to be best suited

to a better organization of the services. This freedom to make such personal decisions that is granted to rural physicians is a source of conflicts and troublesome privileges. Nor is it advisable to establish procedures like certificates for the poor as a means of preventing persons who are able to pay for medical services from using the free service, since this system would hinder the extension of preventive services to the entire population. No, we should encourage the adoption of a system that is quite different, more standardized and, perhaps, more complicated, but one that is fairer to everybody. Something similar to the system now being tried in urban hospitals, with the greatest possible participation of social workers, also should be tested in solving this problem confronting rural health centers.

b) Lack of Personnel: This problem is closely connected with the one described above, since physicians and auxiliary personnel are reluctant to accept and remain in positions in rural health centers because of the financial difficulties that these centers face and that make it impossible for them to assure either the physicians or the auxiliary personnel of an adequate living standard.

On the other hand, if the physician is not assured of the facilities and equipment necessary for guaranteeing the satisfactory performance of his duties and for providing a level of comfort and health in keeping with his living standards and professional rank, it is not humanly possible to ask him to remain in a place that offers so few attractions, especially if the prospects are good for his practicing his profession satisfactorily in urban centers. The rural health centers should therefore provide such facilities as adequate premises, equipment, instruments, resources, auxiliary personnel, etc., so that the physician will derive at least a minimum of satisfaction in working there.

With these facilities available, with better vocational guidance that will ensure a rational training program like the one described above, and with the opportunities for professional advancement that are offered by the system available in actual practice, we feel that it will not be difficult to attract and retain well-trained professionals for work in rural areas. We feel, furthermore, that they will carry out their work conscious of the fact that they are fulfilling a duty and at the same time, receiving satisfaction.

No matter what the present conditions of the rural areas, there is an obvious trend toward improvement: better facilities, with each passing day, for educating children; better recreation facilities; better means of communication, with the result that such areas are brought nearer to the urban center; better facilities for the production of foodstuffs, etc.

As Mott and Roemer so correctly assert in their book Rural Health and

Medical Care: "...There are already many psychological and social values in rural life that need only be experienced to be appreciated; ...there are unique satisfactions in doing a needed job and in being a respected leader in the life of a community -- indefinable values found less often in the turmoil and competition of the city."

Once the medical and auxiliary personnel are satisfactorily settled in rural areas, they should be guaranteed a minimum of the benefits of permanence in their positions, a scale of wages, and social security, like the public health personnel in urban centers. We must practice what we preach. The ideals, well-being and social security, and welfare can best be praised when we have them ourselves. Otherwise, we would feel deep inside that our preaching is merely empty words.

c) Need for New Services: The facilities already in existence in the majority of our countries will probably make it possible for the rural health centers to be organized within the work plan by districts that we are proposing, in a variable form.

However, there will always be a good many rural health centers that cannot be incorporated around any district center because they are located beyond the one- to two-and-a half-hour limit that is recommended for the organization by districts. Anything beyond this limit creates difficulties that are at times insurmountable; for, even though sporadic visits from the district center might make for some constructive work, such difficulties would impede the constant two-way flow of services and information that makes the district plan really useful. Therefore, it will be necessary to provide new district centers around which to incorporate the isolated rural health centers. The so-called medical-hospital services ("Medicaturas-Hospitales") are serving this purpose in Venezuela. Here the presence of two, and sometimes three, physicians, a large number of nursing auxiliaries, laboratory services, X rays, etc., permit us to foresee the possibility of improving those services that are lacking in public health nurses and sanitary inspectors. They would thus be included in the category of district center, thereby being able to improve the public health services in their own localities and, at the same time, to extend their benefits to subsidiary rural health centers, the number of which is to be determined in each case.

In addition to creating these new district centers, it will also be necessary to increase the personnel and to improve the services in the existing district centers. A step in this direction would be to have the assistant physicians in the district centers take the Basic Course in Rural Public Health and thus be prepared to offer invaluable collaboration to the medical health directors of those centers.

Even with the creation of new district centers, there will always be a variable percentage of rural health centers which, because of their

isolation, will not be incorporated into public health districts. Although it is hoped that these centers may later be gradually incorporated into the district movement, as long as they remain isolated, their rural physicians should make every effort to develop preventive and curative services, taking into account the limitations that such isolation imposes.

d) The Dispersed Rural Environment: As we have stated several times in this paper, the rural health center, the rural medical services, the rural health post -- whatever the advance post of the national medico-public health institutional network is called in various contries -- is situated in the most important locality of the municipality. Its available resources and the services we have outlined above should, first of all, be made available to the inhabitants living within the limits of that principal locality and to those living in the nearest dispersed rural area. The benefits of the various medical services provided by the rural health center may be extended to these nearby areas with relative facility. Beyond this limit, agencies of the rural health center may be established in the most populated villages of the municipality, staffed by permanent auxiliary personnel and visited by the physician once or twice a week. These rural health substations, called dispensarios foráneos in Venezuela, should also be incorporated into the over-all public health program described above. Efforts should be made to get the greatest possible benefit from the auxiliary personnel assigned to these substations, by giving them adequate training and frequent supervision, with the help of the staff of district centers.

Beyond the important villages and their surrounding areas are the inhabitants of the dispersed rural areas, who do not live in the principal villages themselves but are spread out on ranches, on farms, and in hamlets having very few houses. The importance of this dispersed rural population varies widely from one region to another, even within the same country. How can the protection of our rural health centers be extended to this dispersed rural population? To attempt to achieve it with the personnel of those centers by sending the staff, including the physicians and auxiliary personnel, to the dispersed rural area would be uneconomical. The dispersion of the population and the primitive means of communication would cut down the effectiveness of those physicians and their mobile personnel, with the additional aggravating factor that the rural health center, the focal point of the activities, would be abandonded in the meantime. The only way to give full protection to this dispersed rural population, in a way that is financially feasible, is by using auxiliary personnel who are from the area itself and are therefore familiar with the environment. They would be given basic training in those fields in which we wish to influence and protect the population.

Dr. Víctor Obregón Gavidia, Director of the Rural Experimental Center of Santa Teresa del Tuy, who is at present conducting an interesting experiment with this type of personnel, made the following statement on

2. - In this connection, problems of sanitation, housing, agricultural production, home improvement, general living standards, nutrition, culture, etc., should receive due attention at the same time.

3. - The medical services that are offered in rural areas should be in keeping with their aims to the same extent as the services provided in urban centers are in keeping with theirs. To this end, the rural health centers should be integrated with the urban services, thereby forming a single institutional network in which each service carries out functions that are supplemented by others within the same socio-demographic zone.

4. - The organization of such a single institutional network of both urban and rural services is all the more justified by the constant interaction between the urban and rural areas which, under certain epidemiological conditions, causes the latter to become a reservoir for maintaining the annual indices of the former with loaned morbidity and mortality figures. Inasmuch as public health problems are indivisible, public health administration cannot be broken down into its component parts.

5. - Up to the present time, there has been no agreement as to an exact definition of rural areas. We favor the limit set by the U.S. Census Bureau, according to which a locality must have more than 2,500 inhabitants to be considered urban. In addition, the houses in the locality are separated by wide uninhabited tracts of land; in their construction these houses differ little from those found in the farms and villages of sparsely settled rural areas; the water supply and excreta and garbage disposal services are carried out on an individual basis; and the inhabitants are, for the most part, engaged in agricultural and livestock activities.

6. - We recognize, on the other hand, that there are many exceptions to this general rule in the rural areas of Latin America. That is, there are intermediate localities, which are difficult to classify and for which it would be necessary to establish a practical criterion according to which they could sometimes be placed into the category of district centers of an urban type. Moreover, there are densely populated regions having very good means of communications and a higher socio-economic level; in these cases the rural area takes on suburban characteristics.

7. - The medical and auxiliary personnel who are to work in the rural health centers should be as well trained to carry out their duties as those in urban health centers. Therefore, the program to be studied for providing medical care services in rural health centers should give special attention to the adequate training of personnel before and during their period of service. A rational training system with levels corresponding to the various posts the rural physicians will fill, similar to the one described in this paper, should be considered for all the Latin American countries.

8. - In the simplest rural health centers, which are the advance posts in the national medico-public-health network, over-all medical care programs, both curative and preventive, should be developed. As for the curative aspect, such programs should include general outpatient consultations on medicine, surgery and pediatrics; home care in special cases; and hospitalization in the most exceptional cases. Everything else should be referred to the district curative centers, where better service would probably be available, through a good ambulance system. As to the preventive aspect, the rural health centers should provide the following six basic services: vital statistics, infecto-contagious disease campaigns, environmental sanitation, public health laboratory, maternal and child health, and health education.

9. - A general medico-public-health survey should be carried out beforehand in each locality where a rural health center is to be established, to serve as a guide in determining the relative importance of each problem and the emphasis to be placed on each aspect of the program. The periodic revision of such surveys and the annual study of the general demographic indices and of specific indices for each disease will determine any shift of emphasis required in the programs already under way.

10. - The great difficulties faced by the rural physician force him to depend, to a greater extent than does his urban colleague, on the collaboration of each and every member of the community in his care. Hence, it is impossible to overemphasize the importance of the activities carried out in rural health centers in relation to community organization and improvement and to health education.

11. - Just as it is in urban programs, financing is the number one problem to be solved if the services of rural health centers are to be carried out successfuly. Although, to a large extent, the centers depend on allotments from the national and regional budgets, other sources should not be overlooked: municipalities, private enterprises, and the possible extension of Compulsory Social Security. A serious study should be made in order to regulate payment for services received by those persons who are able to pay for them. This would refer only to curative care, inasmuch as there should be no obstacles whatever to the universal application of preventive procedures.

12. - If the program planning takes into account suitable buildings and equipment for the services and adequate housing and salaries for the physician and auxiliary personnel, in addition to the afore-mentioned requirements concerning training and opportunities for advancement before and during the period of service, it will not be difficult to attract and hold well-trained professionals for work in the rural areas. This is all the more true in view of the undeniable general trend toward improvement in the Latin American rural areas and because, in spite of everything, rural living has spiritual values that make it compare favorably with the

hazardous and competitive life in the cities. The public health personnel in rural areas should be assured also of a minimum of stability, career service, and social welfare that is guaranteed to the personnel of urban centers.

13. In order to incorporate into the single institutional network of services those rural health centers that are relatively isolated as compared with urban district centers, it will be necessary to improve the services in some of the larger rural or smaller urban centers, so as to place them in the category of district centers, even though of the simplest type. These larger rural health centers, which must become differentiated into true district centers, will already have, among other advantages, greater resources and a higher socio-economic level; therefore, all that has to be done is to supplement the deficiencies in order for them to become district centers.

14. Beyond the limits of the localities where the rural health centers operate, in the smaller villages, on farms and scattered ranches, lives the rural population, which is called the dispersed population, and whose relative importance varies greatly from one region to another, even within the same country. This dispersed population should also be protected by the medical services of the rural health centers, which will have available special auxiliary personnel for such purposes: visiting rural workers whose functions will not be related exclusively to public health but will be directed also toward improving housing, agricultural and livestock production, and the home, and toward protecting foodstuffs and instructing in their proper consumption.

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ORIENTATION COURSE FOR RURAL PHYSICIANS IN SERVICE

I. Origin and Objectives

This course replaces the former three-month course for foreign rural physicians at the Rural Experimental Center of Santa Teresa del Tuy.

In view of the limited number of foreign rural physicians in the service of the Department, most of whom, furthermore, have completed the course at Santa Teresa, it was deemed advisable to extend an invitation to all rural physicians already in service to receive this general orientation on public health work in rural medical services. This includes not only those foreign physicians who have not already taken the course but also the Venezuelans who have begun their work in the rural medical services without the minimum knowledge of public health required to work successfully in the over-all activities that should be carried out in the said basic public health agencies.

Consequently, the fundamental objective of these courses will be the basic orientation that the Department feels the rural physicians should have concerning public health and its various aspects: curative, preventive, sanitation, social medicine, etc. Within the concept and purposes of incorporating the rural medical services within the over-all public health work which is being conducted by the Division of Rural Health, the teaching activities are considered truly fundamental.

Our teaching system is considered to be articulated, on the one hand, with university training and, on the other, with the advanced specialized courses in public health in their general aspect --hygiene, for example-- or in some of the related specialized subjects.

Within the near future, we hope to offer the services of our teaching centers at Santa Teresa, Antímano, Macarao, and Baruta to the Hygiene and Social Medicine Department of the Central University, to provide a kind of "internship" for the students of that Department who may, in this way, begin their public health orientation at a university level. Immediately thereafter, and with the recently graduated physician who is to work in the rural medical services, we hope to continue the orientation activities that have been carried on since July 1954 at Macarao and Baruta with those who have recently graduated from the university and have enrolled in our services.

This short two-week "internship" providing general orientation at Baruta or Macarao should be supplemented with a slightly more complete, though short, course for the physician who is already in service. This is the seven-week course now given at Santa Teresa.

The final stages of our training system are the following: the Basic Course in Rural Public Health, which lasts seventeen weeks and is given in Caracas under the direct supervision of the Division of Rural Health and with the active collaboration of almost all the specialized divisions. This course is attended by those rural physicians who have done outstanding work and who should be trained to occupy directing positions in a slightly higher category, at intermediate levels between the rural physician and the public health officers: they are the directors of the so-called "Type C Health Districts." The training program concludes with the Course for Public Health Physicians, the final specialized field of the public health career, which is presented in its general aspect or with a course in one of the related specialized subjects: Child Care and Pediatrics, Phthisiology, Neuropsychiatry, Nutrition, etc.

Within this concept of training, completion of the first three stages is compulsory if the physician is to specialized in any of the subjects mentioned above. The new rural physicians have nicknamed the first three courses "kindergarten," "grammar school," and "high school." The "doctorate" would be granted upon completion of the specialized course: the Course for Public Health Physicians or for Hospital Directors, in its general aspect, or in connection with one of the related specialized subjects.

II. Duration, Stages, and "Internship"

The course lasts seven weeks and is divided into two stages of three weeks each, with one additional week for pediatric practice with the Division of Child Health.

The first stage might be called "general and theoretical-practical;" the second, "special and principally informative."

For the first stage, the students are divided into three groups each having no more than four students, in order to facilitate the practical instruction. The instruction is rotated for the three groups, as shown in the attached

schedules: during the second week the students of Group A will follow the schedule of Group B; Group B, that of Group C; and Group C, that of Group A, and so on successively, so that all of them receive the same practical instruction. As for the theoretical classes, they are held jointly for the three groups, as may be noted.

In the second stage, which also lasts three weeks, the students receive special supplementary information, as follows:

During the first week (the fourth week of the course, in strict chronological order), the students are examined on the subjects taken during the first stage and hear lectures on nutrition, health education, planning activities by districts, special campaigns, etc.

During the second week (fifth of the course) the students go to Caracas to receive instruction directly from the Division of Sanitary Engeneering on all matters concerning sanitation. In view of the special importance of this aspect of the work in rural areas, it has been deemed advisable to devote an entire week to this subject.

During the third week (sixth of the course) the students go to Maracay for direct instruction under the Division of Malariology on all matters concerning malaria control and the campaign against metoxenous diseases.

In view of the importance of this subject also, it has been deemed necessary to devote an entire week to this subject.

During the additional week devoted to practice in pediatrics, the students go to Caracas where, at the Children's Hospital, they receive a week of intensive and essentially practical instruction, under the direction of the Division of Child Health and of the Department of Child Care and Pediatrics, which is headed by Professor Pastor Oropeza. This decision was taken when it became known that over 45% of the work carried out in curative medicine in the rural medical services is in pediatrics.

Briefly, each student receives:

9 theoretical classes in public health administration.
9 theoretical classes in biostatistics and 6 hours of practice.
9 theoretical classes in epidemiology.
6 theoretical-practical hours in prenatal consultation.
5 theoretic-practical hours in child health.
5 theoretic-practical hours in school health.
2 theoretic-practical hours in preschool health.
2 theoretic-practical hours in venerology.
6 theoretic-practical hours in curative consultation.
6 theoretic-practical hours in home visits.

In addition, practical demonstrations are given on the operation of the following services:

Nutrition Unit:
- Child Care Station
- Dining Rooms for Expectant Mothers
- Dining Rooms for Preschool-age Children
- School Dining Rooms

Kindergarten
Nursery
Archives of the Center
Sanitary Inspection
Laboratory
Rural Medical Services of the Health District
Secondary Network for Tuberculosis
Films on Health Education and Supervision of Midwives

There are also three additional weeks on:

Sanitation, with the Division of Sanitary Engineering.
Malaria Control and Campaign against Metoxenous Diseases, with the Division of Malariology.
Practice in Pediatrics, with the Division of Child Health and the Department of Child Care and Pediatrics, headed by Professor Pastor Oropeza.

III. SCHEDULE OF THE FIRST STAGE

"Internship" of Rural Physicians. Group A

	MORNING		AFTERNOON	
MONDAY:	8:00 to 9:30	Public Health Administration		
	9:30 to 10:00	Recess	2:30 to 3:30	Epidemiology
	10:00 to 11:00	Nutrition	3:30 to 5:30	Sanitary Inspection. Control of Retail Food Stores.
	11:00 to 12:00	Biostatistics		
TUESDAY:	8:00 to 9:00	Reports of the medical center		
	9:00 to 12:00	Santa Teresa Rural Medical Center. Curative Consultation	2:30 to 3:30	School Health
			3:30 to 5:30	School Consultation
WEDNESDAY:	8:00 to 9:30	Public Health Administration		
	9:30 to 10:00	Recess	2:30 to 3:30	Epidemiology
	10:00 to 11:00	Biostatistics	3:30 to 5:30	Laboratory
	11:00 to 12:00	School Dining Room		
THURSDAY	8:00 to 9:00	Reports of the medical centers		
	9:00 to 12:00	Santa Teresa Rural Medical Center. Curative Consultation	2:30 to 3:30	Prenatal Hygiene
			3:30 to 5:30	Prenatal Consultation
FRIDAY:	8:00 to 9:30	Public Health Administration		
	9:30 to 10:00	Recess	2:30 to 3:30	Epidemiology
	10:00 to 11:00	Biostatistics	3:30 to 5:30	School Consultation
	11:00 to 12:00	Supervision of Midwives		
SATURDAY:	8:00 to 10:00	Statistical Exercises		
	10:00 to 12:00	Films on Health Education		

This schedule is valid for Group A during the first week of the "internship." During the second week, this group will follow the schedule for Group B, and during the third week, the schedule for Group C.

III. SCHEDULE OF THE FIRST STAGE

"Internship" of Rural Physicians. Group B

	MORNING		AFTERNOON	
MONDAY:	8:00 to 9:30	Public Health Administration	2:30 to 3:30	Epidemiology
	9:30 to 10:00	Recess	3:30 to 5:30	Child Consultation
	10:00 to 11:00	Periodical Posters		
	11:00 to 12:00	Biostatistics		
TUESDAY:	8:00 to 9:00	Archives	2:30 to 3:30	Milk Station
	9:00 to 12:00	Visit to the Home	3:30 to 5:30	Archives of the Medical Center
WEDNESDAY:	8:00 to 9:30	Public Health Administration		
	9:30 to 10:00	Recess	2:30 to 3:30	Epidemiology
	10:00 to 11:00	Biostatistics	3:30 to 5:30	Preschool Consultation
	11:00 to 12:00	Nursery		
THURSDAY:	8:00 to 9:00	Archives	2:30 to 3:30	Child Health
	9:00 to 12:00	Visits to the Home	3:30 to 5:30	Child Consultation
FRIDAY:	8:00 to 9:30	Public Health Administration		
	9:30 to 10:00	Recess	2:30 to 3:30	Epidemiology
	10:00 to 11:00	Biostatistics	3:30 to 5:30	Venereology Consultation
	11:00 to 12:00	Kindergarten		
SATURDAY:	8:00 to 10:00	Statistical Exercises		
	10:00 to 12:00	Films on Health Education		

This schedule is valid for Group B during the first week of the "internship." During the second week the group will follow the schedule for Group C, and during the third, the schedule for Group A.

III. SCHEDULE OF THE FIRST STAGE

"Internship" of Rural Physicians. Group C

	MORNING		AFTERNOON		
MONDAY:	8:00 to 9:30	Public Health Administration	2:30 to 3:30	Epidemiology
	9:30 to 10:00	Recess	3:30 to 5:30	Laboratory
	10:00 to 11:00	Housing		
	11:00 to 12:00			
TUESDAY:	8:00 to 12:00	Santa Lucía Medical Center	2:30 to 3:30	Prenatal Hygiene
			3:30 to 5:30	Prenatal Consultation
WEDNESDAY:	8:00 to 9:30	Public Health Administration		
	9:30 to 10:00	Recess	2:30 to 3:30	Epidemiology
	10:00 to 11:00	Biostatistics	3:30 to 5:30	Health Certificates
	11:00 to 12:00	Sanitary Inspection		
THURSDAY:	8:00 to 12:00	Yare Medical Center	2:30 to 5:30	Ocumare Health Unit and Secondary Network
FRIDAY:	8:00 to 9:30	Public Health Administration		
	9:30 to 10:00	Recess	2:30 to 3:30	Epidemiology
	10:00 to 11:00	Biostatistics	3:30 to 5:30	Sanitary Inspection
	11:00 to 12:00	Laboratory		
SATURDAY:	8:00 to 10:00	Statistical Exercises		
	10:00 to 12:00	Films on Health Education		

This schedule is valid for Group C during the first week of the "internship." During the second week the group will follow the schedule for Group A, and during the third week, the schedule for Group B.

FIFTH BASIC COURSE IN RURAL PUBLIC HEALTH

First Stage: 17 January to 5 March 1955

MORNING		GROUP A		AFTERNOON
MONDAY:	7:30 to 10:30	Dispensary Practice: 3 in each Antituberculosis Dispensary	2:00 to 4:00	Practical Work in Tuberculosis, with Dr. Pérez Lozano, at the National School of Nurses
	11:00 to 12:00	Tuberculosis Bacteriology: Entire Group at the Tuberculosis Institute, with Mr. Velasco	4:30 to 5:30	Nutrition: 7 Mondays. With Drs. Bengoa, Castillo Plaza, Liendo, etc., at the Nutrition Institute.
TUESDAY:	8:00 to 9:00	Seminars on Statistics, with Dr. Príncipe, at the Tuberculosis Institute.	2:00 to 4:00	Practice and theoretical classes on Prenatal Consultation, with Dr. Viso Pittaluga, at the Child Care Institute
	9:00 to 10:30	Theoretical classes, with Dr. Baldó, at the Tuberculosis Institute (tuberculosis and pneumology)	4:30 to 5:30	Classes and seminars on Epidemiology, at the Epidemiology Division, with Drs. Osuna and Curiel
	10:30 to 11:00	Recess		
	11:00 to 12:00	Theoretical and practical classes, with Drs. Valladares, Lozano, Díaz Guzmán, or Urdaneta, at the Tuberculosis Institute		
WEDNESDAY:	8:00 to 12:00	Theoretical and practical classes in Pediatrics at the Children's Hospital, with Drs. Oropeza, Vizcarrondo, Figueroa, or Urdaneta	2:00 to 4:00	Practice in radioscopy and radiography, with Dr. at the "Simon Bolivar" Sanatorium
			4:30 to 5:30	Public Health Administration, at the Institute of Health, with Dr. Arreaza
THURSDAY:		Same as Monday	2:00 to 4:00	Practical work in Tuberculosis, with Dr. Pérez Lozano, at the National School of Nurses
			4:30 to 5:30	Practice and theoretical classes in Venereology, at the Venereology Division, with Drs. Alarcón, Medina, etc.

FIFTH BASIC COURSE IN RURAL PUBLIC HEALTH - First Stage - (Continued)

MORNING		GROUP A	AFTERNOON	
	8:00 to 9:00	Classes in School Health and Health Education, with Drs. Ortega, Alegría, and Demetrio Castillo	2:00 to 4:00	Practice and theoretical classes, on Child Health, at the Child Care Institute, with Drs. Oropeza and Vizcarrondo
FRIDAY:	9:00 to 12:00	Same as Tuesday	4:30 to 5:30	Vital Statistics, at the Division of Epidemiology, with Dr. Curiel and Mr. De Shelly
	8:00 to 10:00	Clinical meeting at the "José Gregorio Hernández" Sanatorium		
SATURDAY:	10:30 to 12:00	Class in Laboratory Practice at the Division of Laboratories		

FIFTH BASIC COURSE IN RURAL PUBLIC HEALTH
First Stage: 17 January to 5 March 1955

MORNING		GROUP B		AFTERNOON
MONDAY:	7:30 to 10:30	Dispensary Practice: 3 in each Antituberculosis Dispensary	2:00 to 4:00	Practical work in Tuberculosis, with Dr. Urdaneta, at the Antímano Demonstration Center
	11:00 to 12:00	Pathological Anatomy. Entire Group at the Tuberculosis Institute, with Professor Lamanna	4:30 to 5:30	Nutrition: 7 Mondays. With Drs. Bengoa, Castillo Plaza, Liendo, etc., at the Nutrition Institute
TUESDAY:	8:00 to 9:00	Seminars on Statistics, with Dr. Príncipe, at the Tuberculosis Institute	2:00 to 4:00	Practical work in Child Health, with Dr. Urdaneta, at the Antímano Demonstration Center
	9:00 to 10:30	Theoretical classes, with Dr. Baldó, at the Tuberculosis Institute (tuberculosis and pneumology)	4:30 to 5:30	Classes and Seminars on Epidemiology, at the Epidemiology Division, with Drs. Curiel, Osuna, etc.
	10:30 to 11:00	Recess		
	11:00 to 12:00	Theoretical and practical classes with Drs. Valladares, Lozano, Díaz Guzmán, or Urdaneta, at the Tuberculosis Institute		
WEDNESDAY:	8:00 to 12:00	Theoretical and practical classes in Pediatrics, at the Children's Hospital, with Drs. Oropeza, Vizcarrondo, Figueroa, or Urdaneta	2:00 to 4:00	Practice in radioscopy and radiography, with Dr. Lozano Gómez, at the "José Gregorio Hernández" Sanatorium
			4:30 to 5:30	Public Health Administration, at the Institute of Health, with Dr. Arreaza
THURSDAY:		Same as Monday	2:00 to 4:00	Practical work in Tuberculosis, with Dr. Urdaneta, at the Antímano Demonstration Center
			4:30 to 5:30	Practice and theoretical classes in Venereology, with Drs. Alarcón, Medina, etc., at the Venereology Division

FIFTH BASIC COURSE IN RURAL PUBLIC HEALTH - First Stage - (Continued)

MORNING		GROUP B		AFTERNOON
FRIDAY:	8:00 to 9:00	Classes in School Health and Health Education, with Drs. Ortega, Alegría, and Demetrio Castillo	2:00 to 4:00	Practice and theoretical classes in Child Health, with Dr. Urdaneta, at the Antímano Demonstration Center
			4:30 to 5:30	Vital Statistics at the Division of Epidemiology, with Dr. Curiel and Mr. De Shelly
	9:00 to 12:00	The same as Tuesday		
SATURDAY:	8:00 to 10:00	Clinical meeting at the "José Gregorio Hernández" Sanatorium		
	10:30 to 12:00	Class in Laboratory Practice at the Laboratory Division		

NOTE: During the second stage, from 7 March to 23 April, inclusive, students in Group A will follow the schedule for Group B; and those of Group B, that for Group A. The only change for both groups is that, on Monday afternoons, from 4:30 to 5:30, seven Mondays are devoted to leprosy instead of to nutrition as in the first stage.

Each stage lasts seven weeks.

Examinations will take place during the 14th week, from Monday, 18 April to Saturday, 23 April.

The 15th and 16th weeks, between Monday, 25 April and Saturday, 7 May, inclusive, will be devoted to sanitation, under the direction of the Division of Sanitary Engineering, and to a two-and-a-half-day visit to the Rural Experimental Center of Santa Teresa del Tuy.

The 17th and final week, between Monday the 9th and Saturday the 14th of May, inclusive, will be devoted entirely to malariology and the control of metoxenous diseases, under the direction of the Division of Malariology. Briefly each group will have:

28 mornings for practical tuberculosis-dispensary work.
14 theoretical-practical classes in pathological anatomy of Tuberculosis.
14 theoretical-practical classes in tuberculosis bacteriology.
28 theoretical classes in tuberculosis and pneumology, with Dr. Baldó. Of these, some will be devoted to necessary additional lectures on child health.
28 theoretical-practical classes in tuberculosis, with Drs. Valladares, Lozano, or Díaz Guzmán. Some of these will be devoted to lectures on Child Health by Dr. Urdaneta.
14 practical classes in radioscopy and radiography, with Drs. Lozano Gómez or
14 practical sessions on tuberculosis, with Dr. Urdaneta, at the Antímano Demonstration Center.
14 practical sessions on tuberculosis, with Dr. Pérez Lozano, at the National School of Nurses.
14 clinical sessions on tuberculosis at the "José Gregorio Hernández" Sanatorium.
14 laboratory classes and practical sessions in the Laboratory Division.
7 classes and practical sessions in prenatal consultation, with Dr. Viso Pittaluga, at the National Institute of Child Care.

7 theoretical-practical sessions on child health, with Drs. Oropeza and Vizcarrondo, at the National Institute of Child Care.

14 theoretical-practical sessions on child health, with Dr. Urdaneta, at the Antímano Demonstration Center.

14 theoretical-practical sessions on pediatrics at the Children's Hospital, with Drs. Oropeza, Vizcarrondo, Figueroa, or Urdaneta.

7 theoretical-practical classes in nutrition at the National Institute of Nutrition.

7 theoretical-practical classes in leprosy at the Division of Leprosy.

14 seminars or classes in epidemiology at the Epidemiology Division.

14 classes in vital statistics at the Statistics Division.

14 seminars on statistics, with Dr. Príncipe.

14 classes in public health administration, with Dr. Arreaza Guzmán.

14 theoretical-practical classes in venereology at the Venereology Division.

8 classes and practice sessions in school health, with Drs. Ortega and Alegría.

6 classes in health education, with Drs. Demetrio Castillo and Jiménez Arráiz.

1-1/2 weeks of theory and practice in sanitation at the Division of Sanitary Engineering.

2-1/2 days of visits to the Rural Experimental Center of Santa Teresa del Tuy.

1 entire week of theory and practice in malariology and control of metoxenous diseases at the Division of Malariology.

322 work sessions or classes lasting fourteen weeks of two stages, with three additional weeks for an intensive course that includes:

1. Tuberculosis: clinic, bacteriology, pathological anatomy, immunology, and administration. Pneumology.

2. Maternal and Child Health: Child-care and pediatric clinics, administration.

3. Venereology: clinic and administration.

4. Epidemiology: theory and administration.

5. Statistics: theory and problems.

6. Laboratory: theory and practice.

7. Public Health Administration: seminars.

8. Nutrition: theoretical studies.

9. Leprosy: theory and practice.

10. Sanitation: theory and practice

11. Malariology and Control of Metoxenous Diseases: theory and practice.

12. School Health and Health Education: theory and practice.

DIRECTORY OF SERVICES

Dispensary Nº 1. Calle Colombia, 15, Catia. Tel. 90239

Dispensary Nº 2. Esquina de Delicias, San Juan. Tel. 84152

Dispensary Nº 3. Pinto a Miseria, Sta. Rosalía. Tel. 82959

Dispensary Nº 4. Avenida México, Frente al Hotel Savoy, Candelaria. Tel. 50030

"Simón Bolívar" Sanatorium. El Algodonal, Antímano. Tels. 24212-24138-24123-24124

Tuberculosis Institute. El Algodonal, Antímano. Tels. 24212-24138-24123-24124

Children's Sanatorium. El Algodonal, Antímano. Tel. 23605

Children's Hospital. Detrás del Hospital Vargas, San José. Tel. 52121

"José Gregorio Hernández" Sanatorium, Cotiza. Tel. 56649

Teaching Center, National School of Nurses, Cotiza. Tel. 51162

Division of Laboratories, Cruz de la Vega a Palo Grande, 223. Tels. 87279-85011

Institute of Nutrition, Esquina de El Carmen, San Juan. Tel. 96648

Institute of Child Care, Dos Pilitas a Portillo. Tel. 85323

Antímano Demonstration Center, Urbanización "Guzmán Blanco," Dispensario Leopoldo Aguerrevere, Antímano. Tel. 82

Division of Epidemiology and Vital Statistics, 7th floor, Edificio Sur, Avenida Bolívar. Tel. 93167

Personnel Training Section (Dr. A. Arreaza Guzmán), Institute of Health, University City. Tel. 59524

Institute of Venereology, Manduca a Ferrenquín. Tel. 55231

Division of Sanitary Engineering, 6th floor, Edificio Sur. Avenida Bolívar. Tel. 85603

Division of Leprosy. Cuartel San Carlos a Dos Pilitas, 4. Tel. 96885

Division of Rural Public Health, 6th floor, Edificio Sur, Avenida Bolívar. Tel. 96884

INFORMATION BULLETIN FOR STUDENTS AND PROFESSORS OF THE BASIC COURSE ON RURAL PUBLIC HEALTH

Second Stage and the Entire Course to be Extended for One Week

Participants are advised that, since the week of 4 to 9 April, inclusive, is Holy Week, it is necessary to suspend all teaching activities during those days; moreover, inasmuch as the second stage of the program lasts seven weeks, it is necessary to extend the duration of the second stage to Saturday, 30 April, inclusive.

Examinations will be held during the week from Monday the 5th to Saturday the 30th of April, inclusive.

Therefore, the two weeks devoted to saniation and to the "internship" at the Rural Experimental Center of Santa Teresa del Tuy will be extended to the period from Monday the 2nd to Saturday the 14th of May, inclusive.

The final week, devoted to malariology, will be that of Monday the 16th to Saturday the 21st of May, inclusive.

As was planned, the over-all program will last seventeen work weeks, since Holy Week is not considered a work week.

GEOGRAPHIC SURVEY OF MEDICO-PUBLIC HEALTH CONDITIONS IN VENEZUELA

General Survey on Social Geography by:

Municipality:

District:

State:

General Survey on Social Geography

State
District
Municipality
City
Towns
Villages
Communities
Dispersed population

I. GEOGRAPHICAL CHARACTERISTICS

A. Geographical location, boundaries, area.

1. Geographical coordinates.
2. Altitude above sea level.
3. Boundaries
4. Areas in hectares for towns and in kilometers for municipalities.
5. Distance to the district, state, and national capitals.
6. Distance to other cities or places with which the locality is connected.

B. Data on the physiographic features of the area in which the medical center is located.

1. Topography.
   Brief outline of the general characteristics of the region (plains, valleys, mountains, highlands, lake and river regions, etc.) mentioning by name the principal geographic features.

2. Geological Characteristics.
   a. General description of the orographic system to which the region belongs.
   b. Origin and characteristics of the land on which the towns and surrounding areas are situated.
   c. Type of soil (clayey, siliceous, clayey-siliceous, calcareous, sandy, etc.).
   d. Degree of soil permeability in the town and surrounding area.
   e. Extent of underground water, depth at such accessible sites, as cisterns, bore wells, wells, etc.

3. Hydrography
   a. Hydrographic basin to which the municipality belongs. Rivers, streams, falls, springs, lagoons, thermal springs, marshes, or other temporary or permanent water deposits, and their distance from the town.
   b. Floods that occur in the region; their origin, whether owing to rains, rising river levels, obstruction of natural drains, time of occurence, affected area, etc.

4. Metereological Data
   a. Temperature, variation between day and night, monthly and yearly averages, maximum and minimum.
   b. Rain, seasons and pluviometric rate.
   c. Prevailing winds, frequency, intensity, direction, etc.
   d. Atmospheric pressure.
   e. Relative humidity (annual averages).
   The Metereological Stations of the Ministry of Agriculture and Livestock, or of Malariology, if located within the region, will be able to furnish these data.

In the event that no precise data are available field impressions should be obtained personally on the subjects mentioned above concerning the climate.

II. POPULATION CENSUS

A. Inhabitants

1. According to the latest national census:
   a. Towns.
   b. Outlying districts or villages.
   c. Dispersed population.

2. Municipality and percentage relation to the population of the state and of the district.

B. Population distribution.

1. Sex.
2. Age group.
3. Marital status.
4. Cultural status.
5. Health groups (infants, preschool age, school age, young adults).

C. Area of influence of medical health center

1. Considered either as a populated nucleus or as area of dispersed population not forming a distinct nucleus (villages and rural localities) to ascertain the distribution characteristics and whether the population centers around a given point: railway station, school, national or police post, factory, mine, etc.

2. Migrations, stable population; brief report on the existence of migratory movements, time of year in which they occur, origin and destination, causes for such movements (coffee harvest), volume, and repercussions on the life of the locality.

Ethnography

A. General data on native population and racial composition.

1. Indians.
2. Negroes.
3. Whites.
4. Mestizos.

B. Geographic distribution of the population, according to ethnic origin, within the locality and surrounding areas.

Historical Data

A. Foundation of the town

1. Documents.
2. Legends.

B. Leading figures in the town.

Brief description of their contribution, including that of deceased members.

III. PUBLIC ADMINISTRATION AND MEDICO-PUBLIC HEALTH SERVICES

A. Public Income and Expenditures.

1. Itemized budget of receipts and expenditures of the state, municipality, township, etc. Percentage devoted to public health and welfare.

B. Public Health Legislation.

Report on public health provisions contained in state laws or municipal ordinances:

State Constitution.
Police code.
Tax laws.
City cleaning ordinances, etc.

C. Public Buildings.

1. Sanitary conditions with respect to water supply, waste disposal, room capacity, ventilation, illumination, medical care, etc.

2. Construction materials: walls, floors, roofing. Suggestions for improvement, etc.

D. Public Services.

1. Potable water supply.
   a. Water conduit, if any. Ownership: public or private.
   b. Water source: method of cachment, conduction, storage, and distribution. Opinion on sanitary conditions of the water and possibility of contamination.

c. Record of chemico-biological test of water and results.
d. If possible, figures per capita and per day consumption, indicating whether dry seasons decrease consumption.
e. Houses serviced by conduit and number of public supply lines.
f. Cost of water service, duration of supply; information on private suppliers, transportation, prices, etc.
g. Purification process or treatment used for consumption.
h. Home water-storage deposits, commonest type: comments, type of filter (stones, etc.).
i. Other water sources of the locality (stream, well, cistern, pump, windmill, Jaguelles dam, canal); comments on the possibilities of contamination.
j. In the case of supply from river waters, information on condition of water, passage of river through inhabited areas, course through agricultural or livestock areas, and danger of contamination above supply points (sewage outlets, bathing places, laundries, fords, etc.). Distance of the river from the town, and means of conveying the water.
k. Comments on improvements in the water supply system, both immediate and long-range.

2. Sewage
a. Disposal system available to the locality (sewage, latrines, pits, surface disposal, etc.)
b. Data on the total number of houses with latrines, conditions; campaigns carried out in the locality to improve excreta disposal system. Resistance to the use of latrines, etc.
c. Comments on immediate and future improvements that could be made in the disposal of excreta in the locality.

3. Urban and home cleaning
a. Existence of the above service; whether it is undertaken by private parties.
b. Garbage disposal, site of dump, final treatment, etc.
c. Street sweeping, time, frequency; cleanliness of the town, etc.
d. Comments and plans for improvement.

4. Slaughterhouse
   a. Location, sanitary conditions, washing facilities, protection against flies, sanitary services.
   b. Levies paid, cost of transportation, price of livestock on the hoof, licenses for slaughtering at homes, etc.
   c. Slaughter control (ante and post mortem), diseases frequently found in the livestock of the region.
   d. Comments and plans for improvement.

5. Markets
   a. Location and sanitary conditions, sanitary services.
   b. Comments and plans for improvement.

6. Cemeteries.
   Location and distance from the town, type of land, proximity to dwellings and water outlets, etc.

E. Education and Culture

1. Public education
   a. General educational level, illiteracy.
   b. School population.
   c. Enrollment and average school attendance.
   d. Number of schools, location, type (federal, state, municipal, private, graded, ungraded, agricultural school, school of arts and trades, etc.).
   e. Teachers, graduates, their number, respective salaries, age, performance, collaboration with the medical centers, etc.
   f. School buildings, their sanitary conditions, appropriateness of school equipment for the locality.
   g. School organizations in the locality (Parent-Teachers Associations, Friends of the School, Cooperative Teaching Center, School Red Cross, Periodical Poster, School Library, School Museum, etc.; assistance offered by the medical center)
   h. Teachers' compliance with requirement for health certificate.
   i. School dining rooms, school garment rooms, children's health colonies, etc., closest to the locality.
   j. Date of opening and duration of school year, school schedule.
   k. School attendance; causes for absenteeism and dropouts.
   l. Average age of children when they enroll and leave school.

2. Libraries and Cultural Centers.
   a. Inventory of present and former groups in the locality (reading rooms, music circles, cultural societies, etc.).
   b. Comments and plans for establishment.

3. Press, newspapers.
   a. Local press.
   b. Newspapers received by the locality; delay, reception, etc.
   c. News correspondents in the locality; comments in this regard.
4. Students in the locality who are taking courses in state or federal capitals; if so, what courses.

F. Medical Public Health Services

1. List of the welfare institutions existing in the locality.
   a. Official.
   b. Private.

2. Location of medico-public health institutions nearest the locality; means of transportation to the various institutions; distances, and costs.

3. Hospital existing in the locality; characteristics, number of beds, monthly average of patients, costs, and financing, etc.

4. Rural Medical Center
   a. Date of installation and background.
   b. Present personnel and budget.
   c. Organization.
   d. Work schedule.
   e. Present planning and description of the principal activities.
   f. Premises, conditions, and, if possible, a sketch of its location and plan.
   g. Place of origin and means of transportation for persons visiting the medical center.
   h. Extent to which the medical center meets the needs of the town and surrounding area.
   i. Other physicians in the locality; their relations with the medical center.

5. Quackery
   Its extent, reception among the inhabitants, their tendency to consult physicians or quacks.

6. Pharmacies
   Dispensing of medicines; whether it meets the needs of the locality; person in charge (accredited pharmacist, licensed pharmacist, etc.); cost of medications.

7. Dentists
   If there are no dentists in the locality, person attending the population; where located.

8. Midwives
   Authorized and unauthorized persons who serve as such; system of supervision, etc.

IV. SOCIAL DATA

A. Urbanization

1. Aspect and general description of the town and villages, aspect and layout of the streets and public parks.

2. Development of the community; whether in a decadent phase or, because of its location and economic status, promises a normal development in the future.

3. House census, their number in the vicinity, number of tenants per house, number of persons per dwelling.

B. Family Data

1. Customs, reactions, superstitions, etc.

2. Information on employment of minors.

3. Information on vagrancy and mendicancy.

4. Information on abandonment of children.

5. Typical dress.

6. Shoes: type, percentage of the population using different types; price; local manufacture; etc.

C. Housing

1. Typical housing.
   a. In the populated center.
   b. In the surrounding area and villages.
   c. In dispersed dwellings.
2. Materials used in the various types of dwellings, wall, roof, floors.
3. Ownership of houses.
4. Typical furniture, bed, hammock.
5. Sanitary conditions of the dwelling; comments.

D. Professionals and Salaries.

1. Barbers, tailors, carpenters, shoemakers, masons.
2. Average salary (by job, day, month).
3. Annual unemployment.

E. Recreation.

1. Habitual use of free time by the population; moving pictures, trips, sports, cock fights, etc.
2. Music, folklore, and popular dances.

F. Nutrition

1. Usual nutrition of children during the first year of life to 30 months of age.
2. Age at which weaning begins.
3. Usual adult nutrition, principal foods.
4. Names of the typical foods of the region, usual manner in which they are prepared, number of meals per day.
5. Origin of the various food products.
6. Retail prices of the different food products consumed in the locality.
7. Milk, its consumption, price, quality, distribution, etc.
8. Nutritional condition of the population in general.
9. Census of commercial establishments, their general characteristics.

G. Decimal Metric System
   Use by the population, other types of measures used, comments.

H. Prostitution.

1. Census of prostitutes.
2. Health control.
3. Opinion on care at time of treatment.

I. Concubinage
   Extent.

J. Religion
1. Diocese to which the region belongs.
2. Churches, their sanitary condition.
3. Patron Saint festivals, Catholic spirit.

K. Toxicomanias
   Alcohol, "Chimó," tobacco; their importance as a health problem.

V. ECONOMIC DATA

A. Minerals.

1. Mining, value, etc.
2. Health conditions, etc.
3. Mineral products, asbestos, plaster.

B. Agriculture.

1. Principal crops, area cultivated, system of farming, time of harvest.
2. Wages, payment systems.
3. Distribution of the land.
4. Landed estates.
5. Value of the properties.
6. Irrigation system.
7. Local consumption, exportation markets, prices, freight, etc.
8. Forest exploitation; charcoal or lumber; economic value.
9. Reforestation, comments.
10. Flora of the locality, medicinal plants, dye plants, etc.

C. Livestock

1. Livestock census, species raised, quality, areas for livestock with natural and artificial pastures, fenced areas.
2. Markets, sales prices, cost of freight and transportation.
3. Epizootic diseases in the locality among the different types of livestock.
4. Agency of the Ministry of Agriculture and Livestock nearest the locality.
5. Fauna.

D. Industries

Principal local industries, data and comments.

E. Commerce

Nearest banking agencies, information on farm credit facilities; rural funds.

F. Electricity and Power.

1. Public lighting, permanent or occasional, cost per Kilowatt.
2. Natural sources of energy; system used; private ownership.
3. Voltage.

G. Hotels.

Prices, accomodations, etc.

H. Means of Communication.

1. Highways, characteristics, possibility of year-round travel.
2. Rail and airways, schedules.
3. River navigation.
4. Recommended routes for reaching the locality, prices, lodging, etc.
5. Telegraph office.
6. Telephone system.
7. Neighboring roads, conditions.
8. Means of transportation between neighboring towns, prices, facilities, duration of trip, etc.
9. Other information on the region's travel facilities.

VI. DEMOGRAPHIC DATA

A. Birthrate.

1. Birth figures for the last 10 years.
2. Marriage figures for the last 10 years.

B. Mortality.

Figures for the last 5 years.

C. Stillbirths.

1. Principal causes.
2. Child mortality (under one year)
   a. Known causes.
   b. Unknown causes
   c. Five principal causes of death.

3. Mortality (over one year)
   a. Known causes
   b. Unknown causes.
   c. Five principal causes of death.

VII. NOSOGRAPHY

A. Prevailing diseases in the region.

1. Local characteristics of each.
2. Comments.

Typhoid fever
Dysenteries
Malaria
Hookworm disease, and other helminthiases
Smallpox
Leprosy
Diphtheria
Chagas' Disease
Bilharziasis
Infant tetanus and others
Diarrhea and entiritis
Pneumonia
Syphilis
Yaws
Carate
Ulcers
Tuberculosis
Puerperal septicemia
Deficiency diseases
Blenorrhagia
Diseases of the nervous system
Suicide and accidents
Myiasis, leishmaniasis, recurrent fever, and other diseases that occur frequently in the region.

SUMMARY

Conclusions and Public Health Plan.

For a sector, directed toward applicable control measures in accordance with the above outline. Educational and health aspects of the problem.

BIBLIOGRAPHY

Bibliographic data and other information may be requested from the Rural Physicians Section, Ministry of Public Health and Social Welfare, Caracas.

It is recommended that the following be attached to each chapter, or wherever possible.

a) Photographs
b) Maps
c) Sketches
d) Etc.