Public Health and Chronic Disease

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DURING the past 10 years the responsibility of State and local health departments to participate in control of the chronic diseases has been adequately established. During this period private physicians also have recognized their responsibilities to the chronically ill, and have made many notable contributions to early treatment and rehabilitation in order to lessen the severity of complications.

The most encouraging phenomenon during the decade of progress now ending has been the way in which private physicians and public health workers have accepted the fact that no definite means for preventing many of the chronic, noninfectious diseases has yet been developed. Instead of being discouraged or dismayed by this fact, teams of private physicians and health officers have turned to the practical task of extending activities and services designed to prevent or minimize disability in chronically ill patients and to prevent premature death.

A tremendous long-range research program has also been organized in this country, aimed at unmasking such secrets as the causes of cardiovascular diseases, cancer, and mental illness.

No one over 40 is free from some degree of disability caused by either an inherited weak link in the chain of organ systems or by the ravages of premature but otherwise to-be-expected physiological decline.

As Dr. Enrico Greppi, president of the International Gerontological Society, said at the fourth congress of the society, held in Merano, Italy (July 1957), "Old age can be considered a disease consisting of deficiencies and illnesses." Dr. Greppi estimated the average age of onset of this "disease" to be 45.

Since every individual then has a built-in "time bomb," which must cause his eventual destruction, it would seem futile to attempt to prolong "life" indefinitely, if by "life" we mean the mere act of existence. Instead, we should accept the physiological and theological premise that mortal life is meant to end and concentrate our primary attention on the prevention or postponement of disability. We should aim at maintaining as long as possible a productive state of adjustment to a necessarily imperfect existence.

This concept or approach to the problem of chronic illness frees us from the stultifying inhibitions unwittingly imposed upon us by perfectionists. Many types of cancer and heart disease are admittedly still incurable, but this should not slow down our efforts aimed at early detection of such diseases. We can help many by such work; we can help no one by refusing to undertake such work. Our duty is clear.

We can move ahead against the chronic diseases one by one now. We can move ahead now against that complex of chronic diseases loosely lumped under the heading "aging." We can apply now what we know about secondary prevention and rehabilitation, at the same time that scientists are pursuing their research into the fundamental nature of chronic diseases.

We are aware of the difficulties experienced by public health workers in State and local health departments in launching new programs. They are often handicapped by lack of funds, by lack of personnel, and by a lack of understanding of their problems on the part of the public, legislatures, and occasionally even physicians.

However, judging by the progress already

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made in chonic disease control these handicaps can be overcome, perhaps slowly, but they can be overcome. That is the important thing.

The $3 million increase in general health grants-in-aid to States, made available by Congress for distribution by the Public Health Service, is encouraging evidence that public recognition of the importance of the chronic disease problem has broadened. With these funds, health departments can begin demonstrating to the public the value of secondary prevention and rehabilitation. Once soundly conceived local projects are developed with Federal and State assistance, local citizens themselves will accept the responsibility for seeing that such projects are continued.

What types of projects can be started? Following are several examples that already are underway in certain States:

1. In one large midwestern city a substantial local appropriation recently was made to improve diagnostic facilities for children with rheumatic fever and to provide a mechanism for the antibiotic, prophylactic treatment of the disease to prevent the development of rheumatic heart disease.

2. In a large eastern State, the State health department has obtained chronic disease funds for local distribution. These funds, plus Federal funds, are being used to stimulate and partially support for 3-year periods a host of locally conceived projects such as screening programs in hospitals, establishment of rehabilitation services, development of home care or home nursing programs, diabetes detection, and alcoholism clinics.

3. In California, a local health officer is cooperating with the local welfare department and medical society in providing certain preventive medical services for persons who apply for old-age assistance. He is applying a modification of an old adage: "A penny for prevention is worth ten dollars for cure."

The list of such projects is almost endless: glaucoma detection, meals-on-wheels for homebound oldsters, nutrition consultation for the chronically ill, and cytological screening examinations for cervical cancer.

We are aware that no matter how badly a local public health service is needed, no matter how logical the service may appear to be, and no matter how tangible the benefits from such a service are, the service will not be accepted overnight. Adequate education must prepare for the introduction of such programs. The skeletons of many worthwhile local chronic disease projects litter the public health trail—the skeletons of projects which were offered to local people who were psychologically unprepared to accept them.

There is one worthwhile activity that State and local health officers can engage in which will tend to prepare people for new local chronic disease projects. It is an activity that is sometimes neglected in our haste to get projects underway. I refer to the need to determine on a communitywide basis the types of illness which exist and the quantitative and qualitative importance of these illnesses. Although it is widely recognized that the diagnosis and treatment of persons afflicted with a noninfectious disease is the primary responsibility of private physicians, nevertheless private physicians do not have the means at their command to determine public health priorities for a community.

It is true that the advice of local and State public health councils and advisory committees, in which private physicians play an important role, must be sought in establishing public health priorities. Still, the data collection and analysis upon which the establishment of priorities depends must be accomplished by the State or local agency designated to do this job, namely, State and local health departments.

Should a local health department determine, as a result of a community health analysis, that heart disease is the number one health problem in the community, then it would not only be logical but essential for the local health officer to present the problem of heart disease as he sees it, in all of its ramifications, to the local medical society. The health officer at that time can pledge the assistance of his staff to the local medical society in developing or administering any project they may agree upon.

Although the diagnosis and treatment of the patient with a noninfectious disease continues, as always, to be the primary responsibility of private physicians, the diagnosis and treatment of "community illnesses" continues, as always,

to be the primary responsibility of local health departments. This responsibility includes collection of significant data needed for public education leading to public acceptance of important new local health services.

The Public Health Service is proud to be able to work with State and local health departments in making the vital transition from the control of infectious diseases to the control of noninfectious diseases and accidents.

FDA Screening for Unsafe Food Additives

Chemicals used in food processing must be proved safe by the industry before they can be sold for use in foods, under an amendment of the food and drug law enacted September 6, 1958.

Previously, the Food and Drug Administration had to prove such a chemical unsafe after the food was on the market and then bring court action to stop its sale.

Under the new law, which takes effect in March 1959, the manufacturer or promoter of the new additive must test it for safety in animals and submit test results to the Food and Drug Administration. If that agency is satisfied, it will issue a regulation specifying the conditions necessary for use. Those adversely affected by an FDA order may petition for a public hearing. An order emerging from such a hearing is subject to court review.

In addition to chemicals intentionally added to food, the law covers substances which may be expected to become components of a food or to affect its characteristics and which are not generally recognized as safe for their intended use.

For substances in use before January 1, 1958, and not generally recognized by experts as safe, industry has been given 18 months to present safety data in the absence of adverse evidence.

The law further prohibits additive use that would promote deception of the consumer or result in adulteration or misbranding. The amount of the additive fixed for use by FDA regulation will not be higher than the level required to accomplish the chemical's purpose.

The Food, Drug, and Cosmetic Act, enacted in 1938, when there were relatively few chemical food additives, required the Food and Drug Administration to discover the use of "poisonous or deleterious" additives in processed foods and to prove them injurious before action could be taken to protect the consumer. Since then, knowledge of food processing chemicals and the number of additives have advanced considerably. Testing of new additives by the Food and Drug Administration, normally requiring at least 2 years, became unrealistic in the face of a flood of new products both in use and under consideration.

Another aspect of the 1938 law was that any amount of toxicity sufficed to disqualify any chemical which could not be shown to be "required in production" or "unavoidable under good manufacturing practice." This was also unrealistic. Now the Food and Drug Administration evaluation of the safety of an additive requires considering among other factors the conditions of use, amounts used, and other related additives which may be used. As a result, many useful chemicals will be permitted if they are safe when used properly.