# The Arthritides and Public Health in Europe

"Public Health Aspects of Chronic Rheumatoid Arthritis and Related Diseases" was the subject of a conference of technical experts of the European Region, World Health Organization. The conference, held in Rome in November 1963, bears on public health programing in the United States because it was focused on the rheumatic diseases which, in the past, have not been considered in relation to their prevalence or potential for causing disability and crippling.

Participants from 17 of the 30 member nations of the European Region discussed the importance of epidemiologic data obtained from population surveys and other sources, the organization of special services for diagnosing and treating these diseases and specific methods of management and rehabilitation, and training requirements for physicians and paramedical specialists dealing with the rheumatic disorders.

#### **Epidemiology**

Natural remission and the complications of standardizing diagnostic criteria make the arthritides difficult to study epidemiologically. However, many countries have obtained estimates of prevalence by one means or another. The techniques employed usually account for differences in results, although there are sufficient exceptions to justify careful pursuit of epidemiologic data in selected areas by competently trained investigators.

In practice, rough prevalence rates are adequate. It can be predicted that in a population study approximately 5 of every 100 persons will be detected as having rheumatoid arthritis and 5 per 1,000 will need some medical care.

Dr. Margaret H. Edwards, associate chief for arthritis, Diabetes and Arthritis Program, Public Health Service, attended the conference as an observer and prepared this report on the highlights of the discussions.

Etiologic aspects of rheumatoid arthritis have not been greatly clarified by careful epidemiologic studies except for demonstrating negative relationships to serologic abnormalities, genetic predisposition, and certain climatic variables. Continued investigations in these areas seem justifiable only if the study is carefully planned to elicit specific information related to definite, measurable factors.

More useful for public health purposes would be studies to determine the need of persons with arthritis for health services, particularly of a preventive nature, the usefulness of early casefinding in postponing crippling, and social and economic impacts of rheumatic disorders on population groups. Examination of information from conventional sources such as hospital, clinic, and outpatient records, pension and insurance programs, and physicians' records was suggested before proceeding to design prospective studies, since this type of data is less costly to obtain.

In countries where reporting of arthritis is compulsory, useful information on incidence as well as prevalence is emerging. In addition, prompt and continuing care, essential to the prevention of crippling, has been facilitated.

Diagnostic criteria used in population studies of rheumatoid arthritis are becoming more subject to control, standardization, and rating. Radiological and serologic criteria to be used in studying rheumatoid arthritis and osteoarthritis are also subject to careful standardization. Competent investigators are currently standardizing measurements of the lupus erythematosus factor, serum uric acid levels, and radiological changes in ankylosing spondylitis.

#### Organization and Provision of Services

Specialized services for the treatment of arthritis and related disorders have existed in most European countries for many years. The oldest programs are in nations that have had state-supported health insurance programs for

the longest periods of time. Special rheumatic disease hospitals, outpatient treatment centers, spas, day-care and rehabilitation centers, and special sections in general hospitals form a network of services available to all. Referral is through private physicians or through routine health examinations at places of employment. In some countries rheumatological services are organized through the ministry of health, with supervision and control vested in an institute of higher learning and research; in others they are administered through separate programs headed by a joint commission or board on which sit representatives of numerous official, voluntary, and private agencies.

In most European countries, ministries or boards of health regulate the services in hospitals and treatment centers, while state-sponsored insurance programs provide payments to physicians and other purveyors of health services. Thus there is often a separation between the

#### **Conference Working Reports**

In preparation for the technical conference, a questionnaire was sent to member states of the European Region requesting information on the organization and provision of services for the prevention and treatment of chronic rheumatic disease, number of specialized facilities and personnel engaged in treatment, and sources of data on the incidence and prevalence of rhematoid arthritis and related disorders. Answers from 24 countries reflected considerable variation in the pattern, quality, and adequacy of services. An analysis of replies to the questionnaires, as well as copies of the following working papers are available in limited numbers from the European Regional Office, World Health Organization, 8 Scherfigsvej, Copenhagen, Denmark.

Compiled by J. H. Kellgren, United Kingdom, and T. Tzonchev, Bulgaria: Chronic Rheumatic Diseases as a Public Health Problem in Europe: Analysis of replies to a questionnaire sent to the member states of the region.

W. P. D. Logan, Geneva: Epidemiological Studies of Rheumatoid Arthritis.

Veikko A. I. Laine, Finland: The Rehabilitation of Patients with Rheumatoid Arthritis and Related Diseases.

- T. J. Geffen, United Kingdom: Hospital Statistics. A. I. Nesterov, U.S.S.R.: On a System of Rheumatic Disease Control—Organization and Methods.
- G. Delbarre, France: Medico-Social Problems of Rheumatoid Diseases.

persons responsible for the operation of health facilities and those concerned with their utilization.

Organizations of physicians specializing in the treatment of rheumatic disorders in all countries support the International League against Rheumatism (La Ligue Internationale contre le Rhumatisme) which has its European head-quarters in Paris. The league tries to coordinate and document all activities relating to the many problems of rheumatic disorders. It maintains a liaison with the World Health Organization as well as with other international organizations.

In treating rheumatic diseases, European practitioners make wide use of inpatient care in general hospitals, spas, or in special centers to permit accurate diagnosis, planned management, and education of the patient regarding the nature of his disease and its control. With the aid of specialized auxiliary health personnel and through social, vocational, and welfare services available from other official and voluntary sources, plans are made for the prevention of disability, early readaptation of the patient to his environment, and continuation of care. Health services for rheumatic fever and other rheumatic disorders are often combined.

At present, ideal drugs and treatment modalities for alleviating symptoms, reducing incapacity, and controlling progression of the arthritides have not been defined, with the possible exception of gout. Many European physicians choose antimalarial drugs and the salicylates to initiate treatment in rheumatoid arthritis. Gold salts, phenylbutazone, and the steroid hormones are reserved for special indications. Heat, balanced rest and exercise, and other physical medicine measures are used extensively at spas and bathing resorts or in medically directed settings.

### **Specialized Training**

Rheumatology is a certifiable medical specialty in some European countries, a subspecialty of internal medicine in others and, in a few countries, it is combined with cardiology. Periods of training required vary from 3 months to 10 years, with 8 years of postdoctoral preparation considered basic. Few countries have

adequate numbers of qualified specialists to treat rheumatic disorders or to provide consultation: a ratio of 1 specialist per 100,000 population is considered desirable.

Short postgraduate training courses have proved useful in countries where they are applied systematically. International exchange fellowships and training opportunities are likewise extremely beneficial if properly prepared candidates are selected.

Auxiliary health professionals require careful basic and postgraduate training to carry out treatment objectives for patients with

rheumatic disorders. At present, criteria vary for the classification of auxiliary health professionals, particularly those who apply the various physical modalities of treatment. Present categories of paramedical personnel are kinesiotherapists, ergotherapists, functional therapists, balneotherapists, rehabilitationists, teachers of remedial exercises, and physical and occupational therapists. Standardization of nomenclature and qualifications for training auxiliary health professionals is thought to be desirable. Modification of training programs related to the rheumatic diseases was also suggested.

## Arthritis Survey in Sudbury, Mass.

Sudbury, Mass., has become a testing laboratory for arthritis and related diseases.

Between January 20 and the end of April 1964, all residents over the age of 15 were asked to take a 15-minute test to provide data for a Public Health Service study of rheumatoid arthritis, gouty arthritis, and diabetes mellitus. The Diabetes and Arthritis Field Research Section, Brighton, Mass., of the PHS Division of Chronic Diseases, is administering the study.

If this urban community of 10,000 near Boston achieves 100 percent participation, more than 6,000 adult citizens will have taken simple blood tests for sugar, uric acid, and rheumatoid factor during the 3-month test period. Subsequently, 15 percent will be invited to return on a sample basis. Borderline cases will be asked to have a followup test annually.

Information from the Sudbury study will be used statistically by the Public Health Service, but individual results will be kept confidential. Participants with actual diseases will be referred to their family physician.