

# THE ROLE OF THE LOCAL PUBLIC HEALTH NURSE IN HANSEN'S DISEASE CONTROL

L. DOROTHY CARROLL, Senior Nurse Officer\*

The role that local public health nurses will play in Hansen's disease control programs will depend on a variety of factors. These include the extent of the problem in the area, the health department's control program, and the attitude of the entire health department staff toward the disease. The history of handling recognized cases in the local area, local facilities for diagnosis, care and follow-up, and the interest and attitudes of local private physicians will also be important factors. The degree of the professional staff's understanding of the various ramifications of the disease - particularly the impact the diagnosis will have on the patient, the family, and the community - will play an important part in determining the nurses' functions and effectiveness.

The local public health nurse may do much or little toward an understanding of the epidemiology of the disease in the area, and if the disease is endemic, toward its eventual eradication. She can function at her highest level only if she is a well-informed member of a well-informed community team which has definite, clear-cut objectives and an understanding of the role each team member plays in working toward these objectives.

Nursing responsibilities in a Hansen's disease control program are no different from those in any other communicable disease control program. They include case finding, epidemiologic investigation, nursing care, and education. To carry out her functions effectively, the public health nurse must have a working knowledge of the epidemiology and clinical manifestations of the disease, the period of communicability, currently accepted treatment, and the State and local regulations pertaining to control. Intimate knowledge of local, State, and Federal resources for the care of Hansen's disease patients is necessary. A real understanding of what the disease may mean psychologically, economically, and socially to the patient and his family, and an understanding of her own emotional attitude toward the disease

are essential for the nurse to function effectively in a control program.

A public health nurse working in a local area where Hansen's disease is an endemic problem should be Hansen's disease conscious. Knowing what to suspect and how to confirm her suspicions are her major responsibilities prior to the establishment of a diagnosis of Hansen's disease. Every suspicious case should be carefully followed until the disease is definitely ruled out or definitely diagnosed. A patient with a history of suggestive symptoms and/or lesions should receive a medical examination and supervision. If the patient does not have his own physician, the health officer should be consulted as to whether or not the examination should be carried out in any one of the routine health department clinics or whether the patient should be referred to a special clinic set up for this purpose.

In planning clinic sessions and the attendance of the patient at a clinic, two principles should always be kept in mind: (1) That the patient is a person with a potentially serious problem who may or may not understand the implications of a diagnosis of Hansen's disease. (2) That the management of the first examination he receives may determine whether or not he remains under supervision, and if a diagnosis is established whether he and his family accept and carry out the physician's recommendations.

Preparation of the patient for examination will help him to participate in a positive way and may determine to a large extent his "cooperativeness" in future contacts. Provision should be made for privacy in the dressing room, the examining room, and during the patient-physician interview. The patient should completely undress and be adequately draped. An examination table placed in good light is essential. The nurse should understand that an adequate examination includes nose and throat examination, a complete physical inspection of all skin areas for lesions, bacteriological

\*Executive Office.

examination of any suspicious lesions, and a neurological examination. The physician should be provided with the necessary equipment. Before the patient leaves the clinic, he should have an opportunity to talk over his condition with either the physician or the nurse. At this time arrangements should be made for the next follow-up examination, if indicated.

If the patient is to return for future diagnostic examinations, it would seem important for the public health nurse to become better acquainted with his family and his home situation. If it seems indicated, she should start to build a sound working relationship with the family in whatever way seems desirable. This may well take the form of helping the family solve other health, social, or economic problems by referring them to the agency set up for this purpose in the community.

Hansen's disease has been described by Dr. Fite (1) as a "fiercely chronic disease." Until the factors influencing transmission are determined, isolation of the patient with active disease, and concurrent disinfection, are the safest measures for control.

If the presence of active disease is established,

it usually means that the right to maintain active control in planning one's life is taken away. Treatment generally requires a long period of isolation, usually many miles from the patient's home and family. No specific permanent cure has been developed, although new chemotherapeutic agents, the sulphones, show promising results in arresting the disease and in eliminating complications and intercurrent infections (2). Regulations regarding quarantine restrict activity and cause frustration and resentment.

The disease is dreaded, and fear, expressed or concealed, seems to be a universal concomitant. When active disease is discovered, the understanding and support the patient is given at the time he is advised of his diagnosis are extremely important factors in determining the frame of mind he develops. Future problems may be avoided if time is taken to explain to him the nature of the illness, the treatment plan as it applies to his individual circumstances, and the help available to him in dealing with his problems.

The nurse may play an important part in helping the patient and his family in their psychological and emotional acceptance of the disease and its



Occupational therapy is used at Carville National Leprosarium to help prevent a feeling of idleness and frustration among the patients during their confinement.

*Photo courtesy of U. S. Marine Hospital, Carville, La.*

treatment. What she tells the patient and her attitude toward the patient as a person may play a big part, not only in his acceptance of his illness and the long indefinite period of separation, but also in his attitude toward other professional individuals who will work with him in the future. The patient's ability to accept and adjust to the disease will depend upon the strength of his personality at the time of the onset of symptoms and of diagnosis of the disease. The emotionally unstable or maladjusted person will have difficulty in coping with the problems and adjustments as the disease develops. The mature, emotionally stable individual probably will be better able to accept more easily the confinement, changes, and separation from family and home.

The effects of the disease upon the personality are probably numerous. Anxiety and fearfulness, depression, preoccupation with self, fatigue, hypersensitivity to the stigma of the disease, and feelings of persecution may occur at any stage. Loss of social and economic security, separation from and possible rejection by family and friends, the fear of physical damage, and the social and personal consequences of isolation may result in a bitter, hostile individual. Patients who are demanding and uncooperative may be wrestling with deep-seated emotional problems.

If indicated, the nurse will help the family make arrangements for hospitalization of the patient and secure adequate care for him prior to hospitalization. The process of enabling the patient to accept the diagnosis can be furthered by helping him to make preparations for entering the hospital and by informing him of the advantages of hospital care and the general plan of hospital living. The family's reactions and attitudes toward the patient's disease may have a decided effect upon this process. The members of the family as well as the patient need to be informed regarding the disease and the advantages of hospitalization. They should be made aware of their part in helping the patient to accept his illness and the necessarily long period of separation and hospitalization. Hansen's disease places a heavy burden on the patient and his family, and the strain on interpersonal relationships may be exceedingly great. If the patient is the head of the family, the standards and patterns of living may be jeopardized and a plan for supporting the family must be developed.

Contacts of patients with active Hansen's disease, that is, intimate and household contacts,

should remain under medical and nursing supervision indefinitely. The nurse may have many opportunities in follow-up visits to strengthen family and patient attitudes that may greatly influence their future welfare and well-being.

If the local health officer is notified when the patient is discharged or released for a visit at home, the public health nurse can help plan for the patient's care and comfort and the family's protection. In order to give intelligent service, she must be provided with authoritative information on the clinical status, the patient's condition at time of discharge, the prognosis, treatment, and recommendation for medical supervision. It will be impossible for her to give sound assistance without this information.

In the past, one of the major problems in working with cases and with household and intimate contacts has been the desire of the patient and his family to become and to remain "lost". When they are found, their resentment and hostility to official agency personnel is expressed over and over again in a variety of ways. Many of the patients admitted to the U. S. Marine Hospital at Carville, La., change their names. Following admission and/or discharge of the patient, the families move, leaving no forwarding address. Family physicians treating patients at home are reported to be reluctant to report cases diagnosed because they are afraid of the social and economic hazards that might occur if a case is investigated by official health agency personnel.

The experience of patients and their families when a case has developed has been interpreted by them as "persecution and social ostracism". Although some of the experiences as related by the patient and his family may be exaggerated as they are retold, there have been enough instances of unwarranted publicity and unintelligent handling to point up the need for health department personnel to scrutinize the policies, methods, and record systems used in working with suspected or diagnosed Hansen's disease patients.

If the patients and their families are treated humanely and sympathetically; if medical records and reports are handled as confidential information; and if common sense is applied in evaluating the individual situations in planning care, treatment, and follow-up, the control of Hansen's disease in endemic areas will be greatly facilitated.

#### REFERENCES

1. Fite, George L.: Leprosy, Its Detection and

Management. Postgraduate Medicine. 4: (1947).

2. Johanson, Fredrick, and Erickson, Paul: Leprosy Current Status of Therapy. J.A.M.A. 144: 12 (1950).

3. Agrino, Henrique: A Study of the Psychology of Leprosy. Archives of the States of Mineiras,

Brazil. 8: 231 (1948).

4. Cochrane, R. C.: Practical Textbook of Leprosy. Oxford University Press. London, New York. (1947).

5. Cazenavette, L. L.: Mental Aspects of Leprosy. J.A.M.A. 89: 1496-1500 (1927).

## BOVINE TUBERCULOSIS IN THE UNITED STATES

JAMES H. STEELE, Veterinary Director\*

Tuberculosis in cattle has continued to decline, except during World War II, since the inauguration of the Federal control program known as the Accredited Herd Plan of Bovine Tuberculosis Eradication in 1917. In 1917 it was officially estimated that 5 percent of the cattle of the Nation were infected with most of the animal infection concentrated in the Northeast and Midwest dairy States. In some of the older dairy sections, 50 to 100 percent of the cattle were infected. By 1934 the infection rate had dropped to 1.1 percent and by November 1940 all the counties of the United States had become modified accredited areas with less than one-half of 1 percent of the cattle reacting. It was estimated that less than 0.4 percent of the dairy cows and 0.05 percent of the beef cattle were infected in 1940.

The U. S. Department of Agriculture, Bureau of Animal Industry, reports that for the 12-month period ending June 30, 1950 there were more than 9,000,000 cattle tested of which 0.19 percent or 17,733 were reactors. This is practically the same percentage found during the past two years but lower than 1945 - 1947 when the rate rose to over 0.2 percent.

The Meat Inspection Division of the Bureau of Animal Industry reports all cases of animal tuberculosis to the Federal and State tuberculosis control officials. This enables these officials to locate centers of infection especially in those areas where little testing is being done. Even though only 25 percent of the cattle found to be tuberculous can be traced to the farm of origin, during the past year, according to reports of the Meat Inspection Division, State officials were



Animal which showed a positive reaction to a tuberculin test. Note tubercular lesion under left eye.

*Photo courtesy of  
Georgia Department of Agriculture.*

able to locate 300 additional tuberculin reactors on farms from which infected animals had gone to market. Most local health departments have cooperated by reporting cases of bovine tuberculosis when they are found in animals slaughtered under their supervision. All local health authorities should be concerned with this problem and the follow-up of infected cases. This is especially true in regard to milk producing herds. It is recommended that all local health departments report evidence of animal tuberculosis to the State health agency for transmittal to the State livestock sanitary board or State veterinarian.

Beginning January 1, 1951, the requirements of Accredited Herd Plan will prescribe that all animals except range animals be tested once every 6 years in order to be reaccredited as tubercu-

\*Chief, Veterinary Public Health Services.