The Problem of Leprosy

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It is estimated that there are nearly 10,000,000 leprosy cases in the world, although only about 2,000,000 cases are treated regularly. The problem of disability from Leprosy has been receiving special attention in recent years. Apart from the human aspect, patients with disabilities present an economic problem. Further deformities arising as a result of leprosy are one of the main causes of prejudice against leprosy which presents a social problem.

With my 13 years of experience in the leprosy field as a Staff Nurse, my attempt is to present an appraisal of the situation as it exists today in an effort to find how nurses could tackle this humane problem.

Implications of Leprosy

The seriousness of endemicity of leprosy in relation to other diseases cannot be judged solely by the number of patients or by prevalence rates. But this has to be evaluated from the disability it causes, and the social, economic and medical problems that come in the wake of its long duration in the human sufferers.

The long duration of the disease (especially in lepromatous cases), the frequency and persistence of disabilities, the normal life span of patients with benign forms of leprosy and perhaps with the lepromatous form who are not subjects of complications and the high cost and not-easily-available reconstructive surgery gives to leprosy a special position among diseases.

The prejudice against the disease is another major factor that must be added to the above in order to obtain a proper picture of the human, social and economic impact of leprosy. No other disease causes such an unfortunate and unjustifiable reaction in the community and so much distress and unhappiness to the patients and their families as does leprosy.

Present Knowledge

M. leprae has not yet been cultivated in Vitro. Neither has the infective bacillus been transmitted experimentally and reproduced in laboratory animals although in recent years limited local multiplication of M. leprae in inoculated animals has been obtained. Lepromatous and borderline cases are the most infectious cases. Tuberculoid in reaction cases passes through temporary phases of infections.

Leprosy according to the present knowledge has a long incubation period of 5 to 15 years. Leprosy may occur at any age and in all strata of human society.

Environmental or associated factors such as lack of personal hygiene and overcrowding seem to be contributing factors in the spread of this disease.

Diagnosis

By means of dermatological and neurological examinations, diagnosis of early leprosy cases can be made with certainty even in the absence of positive bacteriological findings. It is important to test sensation in the skin patches with reference to temperature, pain and light touch and also in the peripheral part of the extremities, and examine for thickening of the peripheral and great auricular nerves as well as cutaneous nerves proximal to skin lesions. This is done because the interference with sensation in skin lesions and the thickening of nerves are peculiar to leprosy and do not occur in any other cutaneous diseases.

Bacteriological examination should also be done where possible and this will confirm the diagnosis of lepromatous, borderline and Tuberculoid in reaction cases and tell us whether the particular case is infectious or not. It should be kept in mind that diagnosis of Tuberculoid and indeterminate cases can be established clinically in spite of negative bacteriological findings.

When diagnosis is not possible with these examinations, a biopsy from the suspected skin patch is required which may assist in making a diagnosis in suspicious cases. Leprosy can easily be diagnosed in a large percentage of instances by clinical examination alone.

Classification

Leprosy cases are classified as: (1) Maculo anaesthetic, (2) Tuberculoid, (3) Pure neuritic, (4) Borderline, (5) Indeterminate and (6) Lepromatous.

The first three of these generally belong to the non-infectious (non lepromatous) category of leprosy, the sixth belongs to the infectious (lepromatous) group, while the fourth and fifth are generally considered infectious (intermediate). For practical purposes it is safe to bring the borderline cases under the infectious group.

Treatment

It is well recognised that Diamino Diphenyl Sulphone (D.S.S.—sulphone) is the drug of choice for treatment of leprosy. This drug is effective and it is very easy to administer and at a low cost. The essence of this treatment lies in its slow induction. The drug should be started in small doses, increased by smaller doses at intervals of 2 to 4 weeks, reaching the maximum dose in 4 to 6 months. The treatment must be continued on a maintenance dose in lepromatous and borderline patients for a long period, even after they become bacilli negative while in the non-lepromatous cases, it can be stopped after the disease becomes arrested. In the majority of cases it requires 3 to 5 years of continuous treatment to render the infectious case non-infectious.

Patients who are prone to frequent complications called 'reaction' might have developed it owing to irregular treatment or taking large doses of the drug. If regularity of treatment at least of infectious cases is not obtained, leprosy control projects cannot succeed. However, it has been found very difficult to keep patients under regular treatment for many years. These are due to lack of health education and long dura-

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