## SPECIAL ARTICLE

## The teaching of leprosy in the university\*

## T FURTADO

Department of Dermatology, Faculty of Medicine, Federal University of Minas Gerais, Brazil

Firstly we would like to extend our sincere thanks for the honourable invitation from Dr Sergio Tarle to participate in the 6th Brazilian Congress of Leprosy, with the theme 'The Teaching of Leprosy in the University', and to say that many other colleagues, including many of those present here, could certainly perform this significant task better.

We think the choice of the theme could not be more appropriate and felicitous. The modern university is undergoing a significant transformation. Its objectives are being extended when the services to community are added to the indisoluble duality of teaching and research. As a consequence of this fact it is necessary to modify academic programmes, adjust the ultimate objectives of research, and turn to the needs of the community.

This approach will necessitate leaving the old and untouchable ivory tower. It overtakes the traditional concerns of producing knowledge and of training higher level professionals, and makes the compromise necessary to answer the problems of society.

In the area of health this change implies an understanding of the multidisciplinary character of the majority of health issues. The idea must be established that preservation of health and prevention of disease does not depend exclusively on the doctor. In fact there are economic, social and cultural aspects involved, such as economic development, sanitary conditions, elimination of misery, of hunger, of ignorance, and the establishment of social justice, to assume equality of the rights of the man in accordance with the Letter of Assembly of the United Nations from San Francisco, 1948, of which we are signatories. So, the causes of disease and death can be combated, such as malnutrition, inadequate housing, unsanitary environment, and difficulties of access to education and health services.

In this context, the active participation of the community is necessary in discussions by health groups during the development of public health programmes.

It is necessary for the modern university to associate itself with the execution of objectives of the Declaration of Almar Atar from 1978, of which 160 member-countries of the World Health Organization (WHO) are signatories, to assure 'Health for all peoples in the year 2000'. Undoubtedly, there are common areas between the university and the health services in the promotion of the extension of primary care to the population.

<sup>\*</sup> Editorial Note: This article has been translated from Portugese by Professor C W Picanco-Diniz in Oxford. It appeared in Anais Brasileiros de Dermatologia, 62 (Suppl. No. 1) 223–300, 1987 and we are indebted to the Editor for permission to reprint.

Leprosy is a social disease, not just a disease with a diagnosis and therapy. It is necessary to try to involve with the same energy, the different factors of the population's health: social, economic and psychological, in the fight against leprosy. In Davey's words: 'the problem of leprosy is entangled in a dense atmosphere of ignorance, fear, myth and superstition, that often reduces the possibility of early diagnosis and effective therapy.' Furthermore, prejudice is inclined to be a strong influence, e.g. the poor concept the patient has of himself and of his place is society, which reduces the possibility of recovery. It is common that the patient is unable to recover his personal identity and his self-respect. However, a change in attitude towards the leprosy patient has occurred more recently.

The problem of the prejudice towards the leprosy patient deserves a short comment here. It was the theme of the PhD Thesis of the Professor Domingos Granida Jr., whom fate took away prematurely, and with whom I had a modest collaboration. The leprosy patient may or may not be accepted by the people, because there are many clinical forms with different visual appearances. On the other hand, patients with other diseases, such as leishmaniasis with nasal lesions, may be mistakenly identified as leprosy patients. Further, the refusal of patients to accept that they have leprosy, also hinders the removal of prejudice. We think that the liberation from the millenia of prejudice depends less on changing the disease's name, than in changing of the point of view previously mentioned. The ultimate objective is of assuring assistance to the leprosy patient through the public health services, the universities services, as well as to educate the population through a programme of public health education by different means of communication. It would be a priority in the first and middle schools because young people are more 'accepting' than older people. This programme could use video-cassettes, films, slides and posters as well as lectures to different communities.

Leprosy has been a scourge of mankind for about 1000 years. Since the discovery of the bacillus by Hansen in 1874 until the present, there have been many additions to the knowledge and control of this endemic disease. However, there remain many obscure points about the disease and its infectious agent, and there is no vaccine for its definitive prevention, although there is much research in this area with promising results, e.g. Convit *et al* and Stanford.

At the moment, in accordance with the recommendations from the World Health Organization (WHO), the control of this endemic disease must be centralized for both the detection of early cases and for multidrug therapy. However, the recommendations may be based on incorrect estimates; of the 5.3 millions reported cases a better estimate may be about double this number. In Brazil the number of reported cases is 218,845 and it is therefore a high endemic area: 1.7/1000 inhabitants. Recently a Master's Thesis from Dr Oswaldo Macedo Cuntijo completed under my supervision, showed that the control of the leprosy patient is inadequate, because 67.5% of the reported cases had not been submitted to a periodic check up. Only 2.7% of the persons who were in contact with contagious leprosy patients were subsequently examined and recorded. The advanced clinical stage was detected more commonly (76%) than the initial clinical stage. Many factors have been pointed to as explanations for failure in the fight against leprosy. In the project to implement the multidrug therapy, Oliveira et al. suggest the following reasons: 1, the high level of dissatisfaction amongst active professionals in the health area; 2, no standard laboratory diagnosis; and 3, the poor regard of leprosy patients for modern leprosy therapy. Finally, they call attention to inadequacies, both quantitative and qualitative, in human resources. The latter point of view has also been singled out in a report from WHO 1985, as one of the reasons for the difficulties of implementing multidrug therapy.

The application of scientific knowledge in the fight against leprosy is a most useful and efficient area. In this, the university with its research centres, is a natural place for the development of such knowledge. It is necessary to renew our academic programmes with regard to leprosy in the universities and to discuss and analyse the results.

With the objective of determining the actual situation of the teaching of leprosy, we sent questionnaires to the teachers of dermatology in the 76 schools of medicine throughout Brazil. The

detailed presentation of the answers will be matter for another article. However, a few conclusions can be reported here:

- 1 The teaching occurs normally in dermatology out-patient departments.
- 2 The teaching in the out-patients department occurs during the first presentation of cases, as with other diseases.
- 3 There is a little difference in the frequency of the teaching in dermatology as opposed to general hospitals.
- 4 The teaching of the prevention of the deformities and disabilities is inadequate.
- 5 Practical teaching occurs in all schools, as with the integrated programme of dermatology teaching.
- 6 There is evaluation of the teaching in about two-thirds of the schools of medicine.
- 7 In post-graduate studies (intern doctor) there are the same trends as in the undergraduate studies.
- 8 In the post-graduate studies for Master and Doctoral degrees, there is the specific subject 'Hansenology'.

Two remarks are worth making. There is a clear tendency to avoid prejudice towards the leprosy patient in medical care and teaching. However, the quantitative data shows that we advance very little in the control of the disease. What could we do to adapt the academic programmes in the education of human resources to the diagnosis, therapy and control of leprosy?

McDougall, the editor of *Leprosy Review*, in an article entitled 'The Medical Student and Leprosy', affirms that the same situation exists in all countries, and suggests working with undergraduate students, because they are more easily motivated than the others, on the problems of public health. He emphasizes the experience of basic training in leprosy with medical students from Egypt, India and Nigeria. These students have been able to develop positive attitudes about the clinical approach to leprosy. We think that that experience could be extended to other health areas (nursing, social service, sociology, psychology, physiotherapy and occupational therapy), to form multidisciplinary groups working in the hospitals and out-patient departments of the universities, as well as in the public and private units of the health services.

In the countries where leprosy is endemic, the health group could be formed around the central figure of the general practitioner, who will make the diagnosis, determine the therapy, and treat the majority of cases. If there are difficulties and complications, the general doctor could call on specialists (dermatologist, neurologist, psychologist and occupational therapist) The social worker will have the significant task of preventing a high decree of absenteeism in therapy.

The constant work of the general practitioner in private out-patient departments and surgeries in detecting incipient cases, as has been recommended by the master Francisco Edvardo Rabello, will have a strong influence in the control of leprosy. The careful dermatological examination, associated with investigations of any neurological changes, will be made periodically in order to detect leprosy in domestic contacts, and in children of school age. It is important that these activities be extended to all regions of the country by the doctors of the public or private health services.

The specialists in leprosy will make the master plan, and coordinate and administer the services of health care.

In the same context, we would emphasize the necessity to include especially the subject of leprosy in post-graduate studies of dermatology, tropical diseases and clinical medicine. The other specialists previously mentioned would be taught the issues relevant to each discipline. Updated training courses will be carried out in programmes, so making for a continuous education.

This proposal could be established in the short and medium term, with the changes in the assistance model to complement the system of integrated health services. In this system, the health care services are unified in an hierarchy, and located with adequate mechanisms for the first and subsequent referrals. In fact, it is essential for the success of public health reform that the schools of medicine promote the integration of the teacher with the health care services. It is not possible to divorce the training of professionals in schools from the system of developing health care.

## 262 T Furtado

In conclusion our proposals may be summarized as follows:

To decentralize the primary care that is carried out presently by the sanitary dermatology services and leprosy services, to the general out-patient departments of the public and private health services and the schools of medicine.

- 2 To give a central position to the general practitioner in the primary services.
- 3 To emphasize the teaching for students in the schools of medicine.
- 4 To emphasize the detection of early cases and vigilance over the people who come into contact with contagious leprosy patients.
- 5 To implement the multidisciplinary health groups centred on the general practioner.
- 6 The dermatologist and other specialists will be consulted in the event of complications or difficulties in diagnosis.
- 7 The master plan for the coordination and administration of the health care services will be made by specialists in leprosy and public health.
- 8 The development of the human resources for the multidisciplinary health group will be made by the different sectors of the university, especially the schools of medicine with the participation of the National Institute of Social Assistance and Precaution as well as the Secretaries of State and Town Councils of Health.
- 9 A programme of public health education for the population will be made by the Ministry of Health in collaboration with the universities.
- 10 Prejudice, as a social and cultural phenomenon, will be combated in this context. We are 'in debt' as far as leprosy is concerned and the balance needs to be redressed. Society expects of every health professional that they be competent and compassionate.