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EDITORIALS

Editorials are written by members of the Editorial Board, and occasionally by guest editorial writers at the invitation of the Editor, and opinions expressed are those of the writers.

Retrospect and Prospect A Second Look

When the editor asked me to write an editorial in preparation for the forthcoming Ninth International Leprosy Congress, I gladly acquiesced. I accepted this invitation, because, not only have I been present at every International Leprosy Congress since the resuscitation of these international meetings after the Strasbourg Conference in 1923, but also I have been closely connected with the International Leprosy Association as a founder member, General Secretary, Vice President and, as now privileged, President.

I entitled this editorial "Retrospect and Prospect," the same title I used over a year ago¹ for it is of interest to take a backward look and endeavor to assess the future with some degree of accuracy. I cannot help, and perhaps it is a sign of increasing age, recalling past events, first reminding myself of the stalwarts of the past and secondly remembering the early struggles and ad-

versities in endeavoring to make available a sulfone drug that would be cheap, within the reach of the poorest, easy to administer, and relatively nontoxic.

This goal, I think we can say, has been reached, for, in the intelligent administration of the parent sulfone, diaminodiphenyl sulfone, we have a drug that, in the great majority of instances, will bring a patient to a stage of noninfectivity and therefore stamp out the source of infection.

In addition to this, it has been shown by our work in a rural leprosy center, that if a dosage of 50 mgm. DDS or its proportionate equivalent, is given to every man, woman and child above the age of four, leprosy can be controlled completely. In the village of Vadathorasalur no new leprosy case has arisen in the last year, and all cases, except one, have become negative. To achieve such a result requires careful organization, which may be difficult to undertake, but at least it has been shown that under favorable circumstances, leprosy is an entirely preventable disease, and that this prophylactic approach is cheap, easy to administer, and efficient in its result. In an

¹ COCHRANE, R. G. Retrospect and Prospect. Jubilee year of International Leprosy Association, 1931-1966. *Internat. J. Leprosy* **34** (1966) 427-429. (Editorial)

appendix to this editorial (publication expected in *THE JOURNAL*, No. 3), I have summarized the survey results of Vadathorasalur village and its harijan colony.

In casting our minds back to the early days when effective treatment was not available, we must be grateful that the sulfone drugs were discovered. Had this not been the case the outlook for world leprosy would have been tragic indeed. The full story of the introduction of sulfones is of interest, but cannot be related here because it would occupy too much space. It might be useful, however, briefly to outline steps that brought the relatively safe drug to the millions who suffer from leprosy.

The story starts with experimental work by Feldman and Hinshaw,² who treated tuberculosis in mice with a sulfone drug. Unfortunately, while the treatment was very successful as far as the tuberculosis was concerned, the mice died. The drug therefore was placed on the laboratory shelf for some considerable time. In the early 1940's, workers in America, particularly Feldman *et al.*,³ and Faget *et al.*⁴ began their studies on sulfones and introduced a sulfone derivative, Promin. The results were so outstanding, after the disappointment of chaulmoogra treatment, that this sulfone derivative was hailed as a miracle drug.

While today we accept DDS as the most effective remedy for leprosy, its application must be carefully undertaken; otherwise disappointment is inevitable. When it is applied with understanding of the disease and with a knowledge of its principles, it is not too optimistic to state that leprosy is not only a curable disease but also entirely preventable.

I am well aware of the early days of the

chaulmoogra era, when extravagant claims were made for the injection of chaulmoogra (*hydnocarpus*) oil and its derivatives. Travers in Malaya, Rogers in India, and Mitsuda in Japan all published most impressive before-and-after photographs and raised great hopes. In fact at that time, 40 years ago, the slogan was "cure the early case, render the infective case noninfective, and in 30 years leprosy will be eliminated from the British Empire." In these days of the very rightful independence of world nations, the most that can be said is that the British Empire is being eliminated—not leprosy!

If we had been as assiduous in the study of leprosy as countries were in struggling for independence, perhaps we would be nearer our goal—the elimination of leprosy—from those areas in which it is still a menace. Leprosy is an insidious foe. It is an enemy that disrupts families, causes misery, and challenges the souls of men. In our quest for its elimination, there must be no complacency, but a solid determination to apply the technics and know-how already possessed. If this is systematically, enthusiastically and intelligently applied, the campaign will be won. The appeal therefore is to the doctor, leprosy worker, administrator, technician, and paramedical worker to redouble their efforts to control leprosy.

What I am about to say may be considered wishful thinking, but I am convinced that if prophylactic sulfones were given, leprosy as a serious public health menace would cease to exist. The problem is not that we do not have the tools, but that we do not have the personnel or the administrative set-up to achieve this objective. In this regard, it was suggested to me by a competent senior leprologist that, as with quinine, DDS should be available at every postoffice in India, so as to ensure its widespread distribution and thus control the disease. It would be impossible, however, to exercise supervision over such a widespread distribution. Although this might seem to be a good suggestion, in actual fact DDS is too potent a drug to use in such a widespread and uncontrolled way. It would solve the problem of the "black market" in DDS, but again, without careful

² FELDMAN, W. H. and HINSHAW, H. C. Effect of sulfapyridine on experimental tuberculosis in the guinea-pig. *Proc. Staff Meet. Mayo Clin.* **14** (1939) 174-176.

³ FELDMAN, W. H., HINSHAW, H. C. and MOSES, H. E. Effect of promin (sodium salt of p,p'-diaminodiphenyl-sulfone-N-didextrose sulfate) on experimental tuberculosis. Preliminary report. *Proc. Staff Meet. Mayo Clin.* **15** (1940) 695-699.

⁴ FAGET, G. H., POGGE, R. C., JOHANSEN, F. A., DINAN, J. F., PREJEAN, B. M. and ECCLES, C. G. The Promin treatment of leprosy. A progress report. *Publ. Hlth. Rep.* **58** (1943) 1729-1741. (*Reprinted in Internat. J. Leprosy* **34** (1966) 298-310.)

supervision, the damage that would be done would not be commensurate with the good results the drug would produce.

In view of the forthcoming International Leprosy Congress in September it is well to remind those who are attending the assembly and those who study reports after the meeting that, as we are on the brink not

only of controlling leprosy, but eliminating it, the Congress will meet in an atmosphere pregnant with hope. I am sure that when the Congress again convenes in another five years we shall be encouraged in the hope that the objective of all our work will be near attainment.

—R. G. COCHRANE