In three recent numbers of *Leprosy Review*, under the broad covering title "Leprosy in Society," Olaf K. Skinsnes has discussed social and medical factors responsible for the age-long stigma that has been attached to leprosy. In the Western world there has been a tendency to attribute that social opprobrium to concepts developed during the formative years of life from reading or hearsay of certain references in the Scriptures.

In the light of long experience with leprosy in the Orient, Skinsnes has gone more deeply into the background of the stigma that has been so long and unfortunately amalgamated into concepts of the disease. His analysis of factors that might be concerned has convinced him that the opprobrium is based fundamentally on a combination of inherent

social and medical characteristics to a far greater extent that the attention given leprosy in biblical writings, even though the latter have indeed influenced the mental picture of the disease in Western cultures. He has shown, with abundant documentation, that the specific abhorrence was in existence in the far East, and probably also in the near East and biblical lands, before the well-known scriptural writings were extant or in a position to influence the views of society. He notes too that the opprobrium continues to exist in large populations in parts of the world quite unfamiliar with the scriptural texts.

His analysis of Chinese concepts of leprosy, concepts developed, to be sure, over the course of centuries, indicated early Chinese recognition of a pathologic entity characterized, among other things, by the following features: extensive nodular lesions of the skin, particularly the face; ulceration of some lesions, especially on the soles of the feet; paralyses in the extremities; anesthesia of lesions; loss of eyebrows and hair; deformity and flattening of the nose; involvement of the eyes, with frequent ultimate blindness; hoarseness of the voice; changes in pigmentation of the skin; and some loss in capacity for perspiration. This summation, which omits many collateral confusing elements, may well be an oversimplification, built, as it is, on modern interpretation of ancient medical writings. But the fact remains that in ancient times, in that part of the world, a concept prevailed of a disease with the characteristics of what is recognized as leprosy specifically today.

In historical perspective, with recognition of the original priestly domination of medicine in all peoples, it is not difficult to see how this pathologic assemblage came to be associated in the popular mind with defilement, uncleanness, punishable sin, and other stigmata to which the victims of leprosy, through no fault of their own, have long been subject.

In further analysis of the biblical connotation, Skinsnes attempts to show that it is not so much that biblical reference to the disease led to its abhorrence, as that an earlier, and indeed long existent abhorrence led to biblical reference that furthered the opprobrium. In his words, "it would appear that the translators of the Septuagint, as translators are wont, sought for some Greek equivalent that would most closely approach and so best define the Hebrew abhorrence of defilement, and of 'tsar'ath' as expressive of such defilement. Leprosy [i.e., the Greek lepra], because of society's reaction to it, apparently was the best equivalent and was used."

With these facts in mind, as a physician and pathologist himself, Skinsnes has reexamined, in modern context, the medical and pathologic factors, as distinct from sociologic influences, that might have led to the widely existent social opprobrium that made the victims of leprosy outcasts of society. Factors that seemed to him to be most pertinent in a disease were (a) external manifestations. (b) a progressive trend toward crippling and deformity, (c) an insidious onset, and (d)

striking chronicity with long course before fatal termination. Correlated factors seemed to be (a) high endemicity without epidemic explosion, (b) common association with a low community standard of living, and (c) apparent incurability.

In Skinsnes' view the disease complex thus postulated in theory, reflects in fact the modern picture of leprosy. As he noted, the pathologic bases for this disease pattern are steadily more clearly understood. Among specific factors in the pattern he included the relatively long generation time of the inciting agent, its relatively low immunogenicity, and the apparent ability of the agent to resist digestion by host cells. As Skinsnes views it, the elements of this pattern furnish points of attack on the disease both as a medical and as a social problem. His thesis, in his own words, is as follows:

"Since the opprobrium attached to leprosy has been largely emotional in origin and expression, it would seem to be more effective to eschew the emotional and seek the rational in counterattack. Acceptance of the history of leprosy and society's reaction to it for the unpleasant fact that it is, paves the way for attempted understanding and refutation of the misconceptions. It is more important and effective to understand the misconceptions than to hide from them. Indeed, even in the West it is impossible to hide from them, for literature is too replete with the disastrous and odious connotations."

"Leprosy is unique. It is unique in the peculiarly intense reaction it has called forth in diverse societies. It is also unique in the immunopathologic complex that gives it its identity. Perhaps one may find a relationship between these areas of uniqueness that will be explanatory."

Skinsnes' remedy for the present social stigmatization lies in an unremitting primary campaign against the disease as a pathologic complex. The last paragraph of his series of articles is well worth quoting:

"Recent, real and continuing, advances in the treatment of leprosy are also the most potent therapy for its social pathology. They break the pattern of both the social pathology and medical pathology of the disease for they promise relief from the chronicity and deforming effects of the disease, and perhaps, in time, from the disease itself with consequent negation of the whole disease pattern which has so disturbed society. It makes possible the replacing of the picture of divine, irrevocable retribution with that of an understood disease subject to management and control."

This prospect of remedial success inevitably calls to mind medicine's attack on certain other diseases that have had at least some element of associated social stigma. Tuberculosis, or consumption, to use an older term, is one such. Over a long period of time the tuberculosis that "seemed to run in families" led in the minds of sensitive people to some feeling of disgrace. Such words as "consumption" and

"tuberculosis" were avoided if possible. Reference was made to the disease more euphemistically as "lung trouble" or "weak lungs." To be sure, it was glamorized too, e.g., in English novels of the early 19th century and in Italian opera. This could happen because of its freedom, as a rule, from external manifestations. But, in general, consumption was removed from view. Patients were sent to distant sanatoria, for their own sakes primarily, to be sure, but also to the subconscious relief of their families from the social implications inherent in their presence. The sufferers themselves, if they recovered, generally preferred not to return home, but to remain close to the place where they had been treated, and thus there came into being small, but prospering communities of ex-tuberculous or still tuberculous persons, not wholly unlike the leprosy villages of today, where the disease, past or present, created a common bond.

All that now seems past. Thanks to a generally raised standard of living, steadily improving public health practice, and specific medical therapy, tuberculosis has been lowered from first place to a point far down the list as a cause of death. Its one-time social stigma now seems almost an absurdity. The recognition of a specific etiologic agent that might attack anybody, replacing the concept of a hereditary taint, did much to remove the former shame, and the powerful chemotherapeutic drugs of today have eliminated the element of terror that used to follow the diagnosis in an individual case.

For some who are given to reflection, there is an element of nostalgia in the romantic past of tuberculous disease. In reminiscence, thirty years after he wrote *The Magic Mountain*, Thomas Mann almost regretfully, and a little wryly, noted that the old-time communities and sanatoria for the tuberculous, such as the one high in the Alps that he described, have since become fashionable sports resorts, frequented by enthusiasts in bursting health.

Other parallels with leprosy could be described. The cancerophobia widely prevalent today has some elements of similarity. There can be no question that a direct social attack, such as that promoted so long and so successfully in the pages of the Carville Star, can remove the stigma that goes with a name. But in the long run leprosy in all its attributes is a medical problem. Removal of the stigma will do much for the morale of patients, but much less for eradication of the disease. Increasing success in the treatment of leprosy as a medical problem will, it is to be hoped, sometime exterminate the disease and wipe out the stigma at the same time.

Leprosy, however it may be viewed by the public, is not repulsive to physicians. Surgeons and pathologic anatomists encounter destructive, putrid, and malodorous lesions of the thoracic and abdominal cavities that are far more offensive than anything found in leprosy except the truly terrible deformity that lepromatous disease may cause in the human face. But even the latter, as witness some of the "before and after" illustrations occasionally published, is amenable to treatment.

What is really to be regretted, as far as the medical practice and the ultimate conquest of leprosy are concerned, is the relative unpopularity of leprosy as a choice for professional specialization. This is a matter of mere practicality. In most communities of the West, if not in the East, leprosy is so infrequent as not to appeal to young physicians with ambition, talent and special skill. A wealth of material for study and the intriguing leads furnished by collateral science, not to mention the emoluments of a heavy and successful practice, direct them to specialization in cancer, heart disease, acute infections, endocrinology, and a dozen other subjects.

Leprosy practice and research could well use more of that talent and skill. It will inevitably obtain some of it. The more it secures, the closer society will come to that ideal outcome visualized by Skinsnes in the series of articles to which reference is made. As in the case of other diseases, control will rest ultimately on the training and devotion of an adequate number of competent professional workers. Social recognition of their accomplishment, with removal of all opprobrium, will then come as a matter of course.

—Esmond R. Long