

LEPROSY IN SOCIETY

I. "LEPROSY HAS APPEARED ON THE FACE"

by OLAF K. SKINSNES, M.D., PH.D.*

Objectives and Sources

Prevalent Western social misconceptions concerning leprosy have been well publicised. In recent years it has been widely stated that such misconceptions existent through the world, and in the West in particular, are attributable to the Bible; *vide*, "One major and world wide problem in public health results from an erroneous translation of the Old Testament" (LENDRUM, 1945). It is contended that the term "leprosy" is a mistranslation of the Hebrew term "tsara'ath" (zaraath) (COCHRANE, 1956; GRAMBERG, 1959; LENDRUM, 1952; LOWE, 1942; MACARTHUR, 1953; NIDA, 1960; SWELLENGREBEL, 1960; TAS, 1955; WALLINGTON, 1961) and that "tsara'ath" was, in fact, some other, presently unknown and perhaps extinct disease (MOISER, 1961).

While there is no denying the influence of Western interpretation of the Bible on Western society's reaction to leprosy, it seems that there has been no adequate attempt to study and understand the underlying basis for society's response apart from this vigorous pursuit of attribution of responsibility to Biblical influence.

Many of the contentions advanced to uphold this position appear unrealistic and superficial in view of the prevalence of similar social reactions to leprosy which are widespread among people only recently, or not at all, under Biblical influence. It seems, therefore, that an inquiry into the folklore of leprosy in such a society might yield a clearer and less parochial understanding of the problem and that this, in turn, might serve as a commentary on the above-mentioned assumptions. In the search for understanding, well-meaning half-views and resulting obfuscations are no more helpful than tenacious adherence to misapplications of ancient concepts and misconception no matter what their origin.

On this basis, the following presentation has three major objectives. The first is to present a better understanding of the social milieu with which patients having leprosy must contend; secondly, to bring into the open misconceptions that will otherwise be less likely to

* Formerly Senior Lecturer, Department of Pathology, University of Hong Kong and Pathologist, Hay Ling Chau Leprosarium, Hong Kong. Presently, Professor of Pathology, University of Chicago, Chicago, Ill.

This investigation was pursued as part of a study in leprosy supported by a grant from the American Leprosy Missions, Inc. The mission carries no responsibility for the opinions expressed or the conclusions reached.

Presented in substance at the International Leprosy Conference of the Mission to Lepers and the American Leprosy Missions, Inc. at Lucknow, India, 1953 and abstracted in part in the report of this conference, pp. 68-72.

be confronted by rebutting facts; and thirdly, to provide a background for the better understanding of the relationship between the social and medical pathology of leprosy.

The material presented has been derived from multiple sources, mainly as follows:

1. Translations from Chinese records, ancient and modern.
2. Conversations with a considerable number of Chinese during a decade of leprosy oriented work in Hong Kong, with supplemental trips in South China and Formosa. Individuals contacted came from all walks of life, including patients at the Hay Ling Chau Leprosarium.
3. An organised inquiry in several agricultural villages, fishing communities, temples, and locally practicing herbalists in Hong Kong. This was accomplished through the assistance of two young, intelligent Chinese men. Though not medically trained, they were well educated, had been given a considerable knowledge of leprosy, and were thoroughly briefed in techniques of questioning through informal conversation. Findings were reported in detail almost daily, from well-kept notes.
4. Term papers written by medical students at the University of Hong Kong who used as their sources of information grandparents, other relatives, and acquaintances.
5. A review of all reports concerning leprosy which appeared in the *China Medical Missionary Journal*, the *National Medical Journal of China*, and the *Chinese Medical Journal* from 1887 through 1950.

Geographically and ethnologically, Hong Kong is a part of South China, lying contiguous to the province of Kwangtung which apparently has as great an incidence of leprosy as any area in China. A large portion of the people living in Hong Kong give as their home some village in China in which their families have resided for generations and with which they retain close contact. During the decade of inquiry here concerned, numerous immigrants from many other areas of China also took up residence in Hong Kong.

Against this background, it is suggested that the information to be presented on the social reaction to leprosy is reasonably representative of concepts held in South China and that they also have validity for other areas of China. This conclusion is further substantiated by references to this subject found in the Chinese medical journals noted above.

The Reaction of Society to Leprosy

The Reaction in Concepts of Source and Transmission

The legend current concerning the origin of leprosy refers to the period of the Tang Dynasty (A.D. 618–906), though there is in ancient Chinese literature evidence that the disease was known and recog-

nised at the time of the Han Dynasty (206 B.C.–A.D. 220), if not considerably earlier. According to this folk story, during the middle of the Tang Dynasty the reigning emperor was engaged in a war with a powerful war-lord named An Liu-Shan who laid siege to the capital and forced the emperor to flee in the company of his favourite courtesan, Yang Kwei Fei. She was a lady of legendary beauty and was responsible for the emperor's misfortune, having caused him to neglect affairs of state to the extent that discontent was rife among his people and his lords. While the emperor and his retinue, accompanied by the remnants of his army, were in flight, his immediate guards suddenly refused to proceed farther unless he first permitted execution of Yang Kwei Fei. To spare his own life, the emperor issued the order and her body was left lying by the roadside as a witness to the accompanying army that she had finally been deposed. As the convoy passed, some soldiers, charmed by the beauty of the body, had improper relations with it. The legend states that all the soldiers who committed this misdemeanour subsequently developed leprosy as a punishment from Heaven and that thus the disease originated. One of the many names current for this disease is *Tien Ying*, meaning "Reward from Heaven". This story was repeated as often as any other concept during the interviews conducted during the survey.

This account sets the tone for much of the folklore and many of the concepts concerning leprosy. There are two predominant opinions regarding the transmission of leprosy. The first holds that the disease is venereal, contracted almost exclusively through contact with prostitutes. There is a common saying which declares, "If one likes gambling one will always be poor, if one likes to play with harlots one will get leprosy." The belief is so firmly held that it is usually one of the first opinions ventured when questions are asked about leprosy. Anyone contracting leprosy is almost automatically assumed to have lived improperly. Patients, early in the course of giving their histories, protest vehemently that they do not know how they could have contracted leprosy since they have not been guilty of running in the company of prostitutes.

An equally widespread corollary concept holds that leprosy can be "sold" by the sufferer to individuals of the opposite sex through cohabitation with a healthy partner. If a man thus gives of his disease to a woman, it is reasoned, he will have less of the illness himself. It is said that women are forced into prostitution in order to have the opportunity of "selling" their leprosy, thus lessening its severity and possibly even obtaining a final cure. Some informants give the number of necessary acts for effecting a cure as eight, but most consider it indefinite.

Stories in this respect are numerous, one common one being as follows. Once a woman, after contracting leprosy, succeeded in

seducing a young and only son in a quiet lane. They were observed from a distance by his sister. Seeking to save the boy's life and the family name she quickly enquired of him if he had passed urine since his act. When he answered in the negative, she admonished him not to, the idea being that if he had not yet urinated the germs would not yet have passed up into his body. She then immediately had intercourse with him. According to some accounts she thus received the leprosy agent into her own body, but according to other versions she caught the emerging germs in some fresh, warm ox turd which twenty-four hours later showed a growth of worms thought to represent the leprosy inducing agent. The sister, to conclude the account, subsequently committed suicide out of shame for her incestuous act, but her brother did not contract leprosy.

The second, firmly held concept regarding the transmission of leprosy is that the disease is congenital. Children of infected parents are believed certain to acquire the disease. Though there are some variations, such hereditary transmission is generally conceived to extend through three generations. By the fourth generation the disease will have died out, or at least have become so mild as no longer to make itself apparent. A common derivative custom has entailed enquiring back three generations into the family history of parties about to be married and of slave girls before purchase. A proverb states, "If the slave-girl is very cheap she probably has the leprosy".

In addition to these two main concepts of the transmission of leprosy, there are numerous subsidiary ideas regarding its contagiousness, with respect to which one does well to govern one's actions in any contact with persons having the malady. The urine and faeces of patients with leprosy are considered to be among the most dangerous of poisons and it is believed that contacts with such excreta, or objects contaminated therewith, will give rise to the illness. The excrement is regarded as being most dangerous when still warm. In South China public toilets have often been constructed overhanging ponds so that the excrement drops into the water. If a person having leprosy uses such a toilet, the fish in the pond may become contaminated through eating the refuse and it is thought that those who subsequently eat such fish will get leprosy.

The notion of bodily heat transference of noxious influences carries into several other beliefs. Thus it is alleged that if a person with leprosy urinates on hard, dry, sun-baked ground, the urine heat will tend to rise. If then a healthy person urinates on the same spot, the heat will pass directly up his urinary stream and he will get leprosy. Likewise, it is declared that if one sits on a chair which still retains bodily warmth from recent occupancy by a person with leprosy, then such a sitter may expect to get leprosy. If the chair, on the other hand, has had opportunity to cool off, the danger will have passed.

There is a story current concerning a group of more public-minded individuals with leprosy living in a certain Kwangtung village who had special chairs hung up under the rafters to be brought down only for the use of healthy visitors. Another account tells of an actor who contracted leprosy before World War II. Following a common belief, he ate the flesh of a dead infant, believing that this treatment would drive leprosy from his face into his buttocks. He then reserved a special chair for himself which no one else was permitted to use.

There is a saying that it is not dangerous to sleep in the same bed with one having leprosy. This is, however, conditioned on taking proper precautions. Thus, if the healthy sleeper retires first and the one with leprosy second, the bodily heat of the latter will remain with himself and there is no danger. If, on the other hand, the individual with leprosy retires first and warms the bed, the healthy bedfellow may expect to get leprosy. In sleeping with such a bedfellow one must also take care not to lie foot to foot so that the soles of the feet touch.

It is not considered dangerous to talk to or eat with a person having leprosy, though other informants said that it is possible to spread the disease by inhaling droplets of spittle thrown into the air and though sputum is considered by some to be a possible contaminant source of leprosy. In eating with such individuals, however, one should avoid eating the gravy or the soup, presumably because the prevailing use of chopsticks and common centre dishes may give opportunity for transferring the leprosy agent to the fluid in which all the vegetables bathe.

"Feng-shui", the somewhat mystical and indefinite combination of lucky and unlucky influences in a district which determine its fortunes, is not generally considered to be a factor in the occurrence of leprosy. Those who do attribute a definite influence to it cite, for example, the report that the villagers some time ago dug a pond in front of the village of Lo Woo. Thereupon three persons in the village were found to have leprosy and were chased away. Subsequently, three more instances were found and "Feng-shui" influences, presumably disturbed by the digging of the pond, were blamed for this outbreak of the disease.

Related to this supposition, though not actually of it, is the account of an individual with leprosy who after his death was buried by the villagers on a hill-slope not facing their own village. The slope did, unfortunately, overlook another village from a distance of three miles and the inhabitants of this second village protested the burial vehemently on the ground that leprosy would be transmitted to them from the facing grave. As a result the body was exhumed and re-buried farther away near the sea-shore where its influence presumably would be dissipated over the waters.

During the Ching Ming Festival, in the fourth lunar month, it is

customary to visit the graves of ancestors, clear them of overgrowth and make propitious offerings. Accordingly, in the terms of another account concerning the malign influence of leprosy even after death, a ten year old son presented himself at the grave of his formerly leprotic father to pay his respects at Ch'ing Ming. Returning home he remembered that he had left one of the ritual cups at the grave and went back for it. On the second trip he cut his foot on some grass at the grave and not long afterwards developed leprosy. The villagers concluded that the buried bones had contaminated the growing grass, which had its roots in the same soil, and so the disease was transmitted to the son.

Various tests are employed to detect the presence of leprosy and these have been applied to potential slave girls before purchase, to persons suspected of having leprosy and in some districts, at least, they are customarily applied to amahs (woman servants) and wet-nurses before employment. One of the commonest consists of viewing the face of the suspect through a charcoal flame, on which there may or may not have been thrown mercury. If leprosy is present, the face is said to appear red and nodular, while, if healthy, it will appear greenish. Variations consist, for example, of viewing the face through the light of a kerosene pressure lamp, an electric bulb, or through a mosquito net in the light of a candle. Another commonly quoted test consists of burning a hair from the suspect. If the hair curls up, the person is regarded as healthy while if its ashes drop to the ground, he is regarded as having leprosy.

The Reaction in Concepts of Curability and Treatment

Public opinion regarding the possibilities of curing leprosy are unfavourable to the patient, the predominant attitude being that no cure is possible. When queried on this matter one merchant exclaimed, "If leprosy can be cured, then salted fish can live again!" A common proverb declares, "If a gambler can reform, then there too is medicine for leprosy."

In visiting temples to determine the priests' interpretations of whether or not the gods could provide a cure, the spurious case of a friend, who had disfigurement of his face from leprosy and who had tried Western trained physicians as well as local herbalists, was posed and the advice of the priests asked. In each case the answer was that even the gods could not cure this disease. Oracle sticks were shaken and the answers were uniformly unfavourable, except in one instance. Here the answer, though somewhat ambiguous, appeared favourable and the interpreting priest was momentarily puzzled. He, however, soon saw his way out and his reasoning was: (a) Leprosy can not be cured, (b) in this instance the god gives a favourable answer, (c) ergo, the diagnosis of leprosy given by the Western physicians and the local herbalists must be at fault and the friend probably does not have leprosy.

A number of local herbalists were visited and the same spurious case posed. Many of the practitioners were cautious, indicating that they could cure the disease but always reserving at least one type of leprosy as being incurable. The type declared as incurable by some of the practitioners was "chicken-foot" leprosy which was characterised as showing clawed hands and fluid escaping from the feet. (Cure here was obviously equated with loss of paralysis and return to normal function.) Most of these healers declared that there were 36 kinds of leprosy in all—a classification which in complexity is reminiscent of some modern clinical attempts along this line. Some pointed out that 5 of the 36 varieties each affected one of the "five vital organs" (heart, liver, lungs, kidneys, spleen) and therefore were incurable. One herbalist maintained that he could cure 30% of all cases of leprosy but his medicine was so strong that those who took it and were not cured would die from it. In general, the impression was that these healers were almost all willing to try to cure the disease but that actually they had no real confidence that this could be accomplished. The prospect of a fee seemed to be a motivating influence in the willingness to attempt treatment.

This pessimism regarding the possibility of curing leprosy is interesting in view of the fact that *hydnocarpus* has been used in indigenous medical practice for the treatment of leprosy for centuries. There are accounts of this drug in writings as remote as the Sung Dynasty (A.D. 960–1279), though it appears that, particularly in earlier times, it was used as a balm for the treatment of all kinds of sores. By the Ming Dynasty (A.D. 1368–1644), however, it was clearly in use for leprosy and Li Shih Chen says, "It is called *Ta Fung Tzu* (leprosy seed) because it is used for treating *Ta Fung* (leprosy)."

Current indigenous methods of therapy and hopes for favourable results are concerned more with concealing the disease or making it less apparent than with actual cure. To have "leprosy appear on the face" is a major calamity, because it then becomes impossible to hide it. If the disease can be driven to the feet, to the buttocks, or to the bones, for example, it will be less apparent and easier to hide and the sufferer can more readily retain his position in society. According to some herbalists even the incurable form of leprosy can be treated with a certain medicine (of undivulged nature) so that it will no longer show. Mercury often has this attribute given to it. One herbalist who was consulted declared that he could give a medicine which would have such an effect. He refused to divulge its nature and declared himself too ethical to use his knowledge because patients so treated would be able to continue life in the community and be a source of danger to others.

A "special" laxative is said by some to be able to produce a diarrhoea with which the leprosy germs pass out of the body in the faeces. It is said also that some similar drugs can be used by female

sufferers to drive the germs to the womb and thus create a more favourable opportunity for "selling" the disease.

One distasteful method said to be occasionally practiced in the attempt to hide the disease is the eating of the flesh of dead infants. Some believe that a cure can be effected in this manner but others merely declare that leprosy can be made to recede to the part of the body corresponding to the part from which the infant's flesh is taken.

The Reaction in Concepts of Diagnosis and Detection

The community's wish to make the disease apparent stands in opposition to the desire of the sufferer to keep the disease hidden. A common belief is that the presence of banyan trees makes a district liable to have leprosy. A corollary notion holds that the banyan tree, particularly its roots, has a baneful effect on persons having the disease. If the suspect drinks water in which banyan roots or streamers have been boiled or soaked, his ears will become larger and nodules will appear on his face if the disease is present (an apparent reference to lepra reactions). In addition he will feel ill. This is used as a test in the case of leprosy suspects, but it is also used to drive away known cases. Wishing to get rid of such a person, the villagers will place the root of a banyan tree in the village well and, on drinking the water, the undesirable one is expected to feel so ill that he will leave the community.

Fisher folk have an adaptation of this idea in their practice of burning shells of king crabs. It is maintained that even if such a shell is burned in a room separate from that occupied by a person with leprosy, the latter will, on smelling the burning odour, feel ill immediately.

Mixed in with all the inaccuracies in concept there is a core of true knowledge about the disease, particularly as regarding the manifestations whereby it may be recognised. The thickened ears and nodular facies are well-known though the loss of eye-brows and eye-lashes are not much referred to by the general populace. The latter is, however, well recognised in traditional medical writing and is known to the indigenous practitioners. Thus the *Nei Ching*, or Canon of Internal Medicine (attributed by some to the tenth century before Christ but certainly written much later than that) states, "Thus suffering from 'ta feng' (leprosy) have stiff joints, the eyebrows and beard fall off." The deformities and sores encountered in leprosy are likewise well-known to the public and it is recognised that the ulcers, particularly of the feet, are slow in healing. The atrophy or "no flesh" of the muscles of the hand, particularly in the region of the fifth abductor and the first dorsal interosseous muscles, are frequently mentioned, especially by the practitioners. The herbalists also refer to anaesthesia of the lesions, but the general public apparently takes little heed of the anaesthesia and more commonly refer to the lesions of leprosy as being itchy. Though not

much mentioned by the general public in the interviews recognition of anaesthesia of the leprous lesions has been known from ancient times. Thus in Ko Hung's, "Prescriptions for Emergencies" (A.D. 281-361) there is a statement to the effect that, "The first symptom of 'lai ping' (leprosy) is numbness of the skin or a sensation of worms creeping."

In the year A.D. 610 there was published a famous medical treatise known as *Ch'ao Shih Pin Yuan* (Ch'ao's Pathology) which noted in detail many of the diagnostic signs of leprosy such as loss of sensation, absence of sweating, loss of hair and eyebrows, perforating ulcers, distorted ears and fingers, disfigured face, bleared eyes, hoarse and raucous voice, nasal deformity, etc. The descriptions are so comprehensive that they include a variety of other skin diseases, which cause confusion to later writers. The confusion continues down to the present day, affecting not only the public but also the traditional practitioners. Thus leprosy may be confused with secondary lues, scabies and various dermatomycoses. It is also commonly believed that various other diseases may be transformed into leprosy. One patient described how his first lesion appeared near one eye. A friend told him that it was ringworm and that he had better have it treated because if it spread and reached the eye it would turn into leprosy. Not infrequently one hears the report that syphilis can turn into leprosy and one informant cautioned against feeding an infant who has smallpox the flesh of cocks or geese, saying that if this was done the child would be liable to develop leprosy.

In summary, it appears that from periods as remote as the Han Dynasty or earlier, leprosy has been dreaded as a calamity sent to punish moral evil. This attitude probably arises in large part from the lingering and deforming nature of the disease which has its major manifestations on the surface of the body where they are clearly evident to all observers. From this concept it is easy to understand the growing supposition that sexual misdemeanour as a moral lapse may be associated with contracting this disease. It is likely that confusion over the identities of secondary lues and the manifestations of leprosy in the past three centuries has greatly enhanced such judgement. This idea is the major social reaction in concept to leprosy and has greatly influenced society's reaction to persons contracting the infection. It has given rise to many of the subsidiary notions and practices.

The Reaction in Action

Almost invariably when the subject of leprosy is raised, horror, fear and disgust with this illness will be expressed. Usually when queried as to how they would treat a person found to have leprosy, the answer of the villagers was, "Drive them away".

When the Hong Kong leprosarium was first projected, the Hong Kong area was thoroughly surveyed for possible sites. As likely

locations were found inquiries were made as to the possibility of obtaining land and the purpose for which it was desired could, of course, not be hid. The immediate reaction of neighbouring villagers was that of facing a major calamity that must be averted at all costs. Numerous were the arguments heard and no amount of talking could persuade them that their fears were groundless. They were convinced that if a leprosarium were built in their neighbourhood they would soon have no grandchildren because no one would then venture to marry their daughters. They were certain that some leprous influence would move over the hills and leprosy would become common in their villages. And so the arguments went, *ad infinitum*, till when pressed too far, the ultimate argument, as tersely expressed by one village elder, was, "If you bring 'lepers' into this area we will kill them!"

Remarkably enough, in the area where the first temporary quarters were located, there was no difficulty with the neighbours. They were not influential or organized and the patients were moved *en masse* to the prepared quarters one morning. The Chinese neighbours calmly accepted the presence of the patients as a matter of fate, already accomplished and beyond their control. Nearby European residents wrote letters to the press concerning the dangers of having leprosy so near, but the Chinese vegetable gardeners and others, promptly proceeded to make a small profit by selling vegetables to the patients and buying in return rabbits and ducklings.

Likewise, when land was finally secured for the institution and compensation was paid to the few villagers on the island, the majority left but a few requested employment as gardeners or other helpers. The contractors who subsequently erected the major buildings claimed that they would have difficulty in recruiting workmen, but as a matter of fact the institution never suffered on this account. When the first female patients went to the island, there were rumours that the workmen would surely leave, but again sufficient workers were available for the work to proceed as scheduled.

In Kwangtung it is not an uncommon practice for villages to employ persons with leprosy as guards for their fields. The fact that they have this disease is considered as increasing their effectiveness in scaring away marauders.

One gains the impression that though there is a deep-rooted feeling of revulsion toward leprosy and those suffering from it, the Chinese sense of fate and of tolerance enables his society to accept the occurrence of the disease without a preliminary violent reaction. The community approaches the problem of the individual with leprosy with caution. Increasing suspicion is directed at the suspect and gradually his reputation and social position may be completely ruined. This is easily accomplished because society is steeped in accounts and stories having to do with the evilness of persons with

leprosy and children are early inculcated with the notion that all such individuals are monsters or creatures of evil. Thus there appeared at the laboratory one day a young man and his wife of three years, accompanied by interested male relatives and friends. The problem was, did the girl have leprosy? She had no evidence of this disease but the villagers had been whispering that she had leprosy, and, as a result, her husband had been suspicious of her and had refused to live with her as husband. It requires no great stretch of imagination to understand the mental and emotional disturbance that this girl must have gone through.

Occasionally an outburst does occur and when it does, it is often violent and extreme even though the immediate provocation may be slight. The provocations may be economic or may result from particularly obnoxious action of some person with leprosy, or personal animosity may result in some individual using the fact of leprosy to remove another individual with whom there is a difference.

One week-end in June, 1951, rumours of unknown source rapidly spread through several fishing communities in Hong Kong. These were to the effect that there were "lepers" swimming about in the water of these areas seeking to kill people in order to obtain human hearts for the preparation of medicine with which to treat their disease. These communities were kept in an uproar for much of one night, everyone combining in a hunt to trap the supposed invaders. None were found, and it is thought that the rumours were started by interested individuals for undisclosed personal reasons. Some even thought that the attempts at that time to find a site for the leprosarium might have had an influence on the origin of this episode.

Occasionally the community takes violent action to rid itself of such "undesirable" individuals. Thus stories are heard of villagers (not in Hong Kong) taking persons with leprosy out and shooting them. On other occasions such sufferers have been locked in houses and burned. In some places it is told, any person having leprosy and found roaming the streets is caught in a net (so as to avoid touching him with bare hands) and then tied to a stake and burned.

These are dramatic episodes, but fortunately they have been relatively uncommon and unnecessary. Society is competitive. When economic conditions in general are poor and the necessities of life are available in only limited quantities, the protection and assistance of the family and group assumes an increasing importance to the well-being and survival of the individual. This is well-demonstrated in China where family connection and the influence of friends has traditionally entered into many of life's reactions. When the individual was saddled with the handicap of leprosy and the onus that it carries, and when, in addition, as a result of these concepts, his family and friends abandoned him, the ultimate in misfortune had indeed touched him. In the full sense of the saying: "Leprosy

has appeared on the face" of both the individual and the social group which so treats him.

The Reactions of the Person Contracting Leprosy

The Human Reaction

Sharing his community's concepts of leprosy, having heard since childhood the stories current about this disease, lacking any real conviction of the possibility of a cure, knowing the ostracism and family disgrace that awaits the public recognition of his disease, and finding no comfort in his religion (for the priests declare his illness a punishment from Heaven and incurable by the gods), the predominant reaction of the person contracting leprosy is one of disgrace and fear. He vehemently protests his innocence of moral delinquency and seeks by all possible means to hide the evidence of his malady. The sufferer will probably spend most of his substance on drugs and medical fees in the forlorn hope of obtaining a cure or at least of driving the disease to some unexposed portion of his body where it can be concealed. He is preyed on by quacks advertising secret formulas capable of producing the longed for cure. Great was the glee of some of the Hong Kong patients when one day there was admitted to the leprosarium an herbalist whom they recognized as one to whom they had in the past paid good money for a promised cure that never materialised.

Suicide is contemplated by many and accepted as the final solution by not a few. Thus one villager related that ten years previously there lived in a village known to him a married woman having four sons. When she found that she had contracted leprosy she wished to die and requested that her family bury her alive. They dug a hole in the ground, she jumped in, and so she was interred as she requested. In Formosa, of a group of about two hundred young men with early leprosy, fifteen committed suicide within a period of a few months.

In most individuals who contract the disease, the urge to lie is strong. Besides attempting to hide the disease, many try to "sell" leprosy as described above. Just how widespread this practice is cannot be known, but the general public believes that it is widespread, and it is this belief which is largely responsible for the ill repute of those with leprosy. Thus one villager stated that, "Lepers always think of lessening their disease, so they are selfish and they always try to sell the disease to others."

When finally "Leprosy appears on the face," and the individual is driven from society, he reacts by attempting to hide himself in larger cities where he may make his living by begging or by petty criminal efforts. Occasionally in rural areas incidents have been noted where such persons have banded together and lived in deserted temples or in less inhabited areas in the hills near villages. From such

vantage points they would keep an eye on village events. If, for example, they heard of an impending wedding, the leader of the group might suggest to the chief parties to the event, e.g. the groom's father, that a cash contribution be made to their organization. If the contribution was refused, the group leader selected the most disfigured case of leprosy in his group and sent him to the house of the principals to "squeeze" them and frighten them into reversing their decision.

In some instances tales are heard of persons with leprosy who actually react so violently against societies' treatment that they set out to deliberately wreak vengeance by giving leprosy to others with no hope of thus mitigating their own disease. Thus villagers told of one man who mixed some of his urine with the tea for others to drink. Another man is said to have scraped the skin scales from his lesions and mixed them with the food in a restaurant. He was caught and killed.

With a background such as this, it is not surprising that some of the patients who show up for institutional care are far from being tractable, cooperative individuals. The surprising thing is that the majority react with reason and cooperation when they are met with an understanding of their problems and their cultural background, and with a genuine expression of concern.

Discussion

No survey of old general Chinese literature is available devoted to a study of the possible mention of leprosy and its connotations in everyday life. Surveys of remote Chinese medical writings have, however, been made (K. C. Wong 1930; S. H. Lae 1954). Though there is some ambiguity the further back one goes with respect to what disease entity was meant by terms now used for leprosy, it is fairly clear that leprosy was known at least back to the Han Dynasty (206 B.C.–A.D. 219) and that descriptions of that period include characteristics recognized as typical for leprosy as it is known today. This literature is not concerned with the social reaction to disease, but occasionally one finds coupled with the mention of leprosy indications that the disease was looked on with horror and fear and that even in ancient times it was thought of as a punishment for moral lapse. Epidemics of other diseases were likewise considered as evidence of heavenly displeasure, but the suggestion is that leprosy was peculiarly so in an individual way rather than as a punishment of society as a whole.

There is no doubt but that the ancients of the East, as well as of the West, confused and grouped together disease entities which modern medicine differentiates. It is thought that psoriasis, eczema, impetigo, scabies, etc. were perhaps so confused with leprosy. Syphilis may likewise, at least since Ming Dynasty times, have been

grouped with leprosy. There is considerable question as to whether or not syphilis existed in China prior to this period, though gonorrhoea and chancres (soft?) were earlier described.

It might be expected that even at present times a relatively medically illiterate populace, such as that which was for the most part the subject of this survey, might likewise show much confusion over these disease entities. Yet, this populace readily separates out the fully developed case of leprosy and shows a high degree of astute suspicion with respect to earlier cases. Though not unheard of, relatively few cases with disease other than leprosy presented themselves at the leprosy outpatient clinic as new cases. One is led to believe that in an endemic area of leprosy the populace is quite knowledgeable in recognising and delineating this disease entity without at the same time necessarily understanding it. One wonders, without available evidence, if the ancients were less knowledgeable.

The origins of the folk tales and conceptions of leprosy are obscured by time and diffusion. Nevertheless, there is no question but what the populace knows the object of these tales. There also is no question but that the Bible had no part in the development of this folklore in South China for it has not been there long enough nor had a significant effect on the general populace so as to influence their thinking and beliefs. In fact, most of them have never heard of it.

The conclusion seems inevitable that leprosy *per se* called forth this social reaction; that where subsidiary disease entities enter the picture they merely provide additions to the theme of belief and reaction for which leprosy provides the core.

The question arises as to whether this may not also have been the case in the Middle East and gives impetus to further search for the reasons responsible for the unique response of society to the presence of leprosy. A possible answer will be suggested in a subsequent paper.

Summary

An inquiry has been made into the beliefs and practices of sample segments of society in South China, including farmers, fishermen, temple priests, practicing herbalists, patients with leprosy and assorted persons from other occupational groups. These have been supplemented by reports in the Chinese medical journals.

From this inquiry the following major concepts held by the general populace regarding leprosy become apparent:

1. Leprosy has been regarded as a punishment from heaven for moral misdemeanor. It is therefore often spoken of as "T'ien Ying" meaning "Retribution from Heaven."
2. Persons who contract leprosy were thought to be transgressors of moral law and likely to be morally suspect.
3. Leprosy has been regarded as a venereal disease.

4. Bodily discharges, body heat, skin scrapings, etc. from persons with leprosy have been regarded as noxious elements, and since persons having the disease are believed to be evil, they have often been suspected of using these elements to harm society.
5. Inquiry at temples confirms the belief of the common people that the gods can cure all diseases except leprosy, and there is therefore no hope for those with this infection.
6. Leprosy is thought to be hereditary for three generations and the children of parents with leprosy are considered certain to acquire the disease.
7. Frequently mentioned is the belief that persons with leprosy may "sell" the disease to others and cure themselves through sexual contacts with varying numbers of healthy persons.

These concepts, with wide ramifications and elaborations, are embedded in the folklore of the common people. Current methods of treatment and hope for favourable results are therefore more concerned with concealing the disease or making it less evident than with achieving a cure.

This folklore is indigenous and unaffected by Biblical statements or other Western writings concerning leprosy. The parallel reaction noted in this society with that prevalent in the West casts doubt on the contention that the reaction to leprosy in Western society is the result of Biblical teachings regarding leprosy, or mistranslations of the Bible into tongues other than the original.

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