

Personal Prophylaxis by Healthy Workers.

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DURING the past three or more years it has been the writer's privilege to visit some twenty-five institutions for the treatment of leprosy situated in ten different countries. These visits have been made possible by financial grants and official appointments made by the Japanese Government-General of Formosa. Certain observations and incidents have prompted the writing of this article, the object of which is to raise a note of warning to workers in leper hospitals and colonies, to doctors, nurses and non-professional staff members, as to their methods or lack of methods in the prevention of the spread of leprosy to themselves. The note raised is not alarmist nor is it hysterical, but in an age of preventive medicine the least the workers may be expected to do is to take reasonable precaution against themselves falling victim to the disease—be it tuberculosis, leprosy or any other infectious or contagious disease they seek to treat. If a nurse, in caring for a patient with enteric fever, goes down with the disease, blame is attached to herself and to her institution for her lack of care. She is not a heroine, but just incompetent and careless. If by carelessness a worker in leprosy contracts the disease, he or she by that offence against the laws of preventive medicine has done a dis-service to the campaign against leprosy. We who preach preventive medicine should practise

its laws, and so strengthen and not weaken that campaign, the object of which is to rid the world of leprosy.

The following are some incidents observed which have convinced me of the necessity of ventilating this subject :—

A healthy worker examining a leper patient is called out to see some visitors and the customary handshake follows.

A healthy worker with ungloved hands is examining breaking-down leprous nodules and expresses the fluid material with thumbs, the discharge covering the whole of the nail-bed. It was seven minutes by the clock before the hands were washed by a perfunctory swill around in disinfectant, and immediately the process is repeated, again soiling the nail-bed, and again by the clock eight minutes pass before the hands are washed. A smear taken of the material and the slide being examined was red packed with lepra bacilli. A nail-bed so grossly infected by leprous discharge even by prolonged washing could not be entirely rid of bacilli.

In his endeavour not to convey infection to his clean patients, a surgeon seeks to keep his hands clean and avoids contaminating them. If a careless worker contracts leprosy, it is not due to the fact of working amongst lepers but to careless habits.

A healthy worker changing money for leper people handles their coins, and takes no precautions as to washing hands, the process continuing an hour or more.

Healthy workers in dressing room or laboratory, assisted by lepers, in some cases infective skin cases, the healthy and unhealthy handling the same instruments, test-tubes, forceps, trays, handles of doors, chairs, etc., and with little evidence of washing the hands, or washing at prolonged intervals.

Healthy workers opening doors, gates, and windows of leper houses. Further, entering leper houses and wards and sitting on their chairs, tables and beds and indulging in " pawing " of leper patients.

Healthy workers shaking hands with leper patients. Notes of cases handled by leper and healthy people.

The superintendent of one institution did not believe in the theory that leprosy was contagious and used no preventive measures.

Healthy workers spending whole sessions with arms bare to the middle of the biceps, injecting without gloves, much palpation of patient at each injection, little or no evidence of washing of hands.

A question which has been running in my mind for some

time is what is the incidence of leprosy in workers among leper people? India is a highly infected country. The total number given by the last census was a little over one hundred thousand or about one in three thousand of the population. This number is considered to be far below the actual figure representing India's lepers, but it will serve for our present purpose. If among those who work among leper people, there be infected one doctor, nurse or lay worker among three thousand so engaged, such an incidence would be rated high. During my travels I have learned of over a dozen healthy workers in countries visited who have contracted leprosy within the past fifty years. At the same rate of incidence as obtains in India, these should represent thirty-six thousand healthy workers. Will anyone say that there has been this army of healthy workers directly or indirectly working with leper people during the past half century? It is to call attention to this danger that after discussing the subject with well known leprologists I have continued in the preparation of this paper.

Leprosy is contagious, but exact mode of transmission from the patient to the healthy, whether by nose, skin or alimentary tract, is not known, though there is a great probability in favour of the first two mentioned as primary routes of entry.

Familiarity breeds contempt, and this seems to be true in this regard. In order not to offend the unfortunate patient who is all too conscious of the stigma of his complaint, and perhaps to drown any smouldering fear in their own breasts, some workers may cultivate the contempt of familiarity, and think but little of the remote possibility of personal infection.

On my suggesting to one worker the use of gloves in injecting patients, the reply was the high cost of gloves, the deteriorating effect of oil on rubber, and the inconvenience, all of which excuses would hardly weigh against one worker in that institution contracting leprosy out of say three thousand who may work there during the next how many years? And this institution was instructing other workers in the modern treatment of leprosy. As a matter of fact, in the out-patient clinic for lepers of which I am in charge, if my healthy workers were not allowed gloves to wear, they would refuse to give the injections.

One is emboldened to publish this communication by the practice observed in use at Culion Leper Colony, Philippine Islands, the largest colony in the world, and one from which some of the best work on the disease is emerging. A

week spent in that colony gave the impression of good work being done with a splendid *esprit de corps* between workers and patients. There was always in evidence soap and water, basins of disinfectants, gauze in alcohol, and these were used though not to the extent of causing a medicinal dermatitis. Patients opened the doors for the healthy workers, who did not sit on the patients' beds, tables nor chairs. Separate chairs or stools were kept for healthy people (in our own clinic the patients' stool is coloured a mahogany and the workers' white, and they are not interchanged). Records were not seen by me to be handled by patients and healthy workers. No leper patients were seen to be working in the pathological laboratory. Culion has a separate coinage minted for use in the colony, and no money used there found its way into the general circulation. I do not wish to say their preventive measures never broke down, but they were carried out with what seemed to be a happy tacit understanding between both sides. The patient realised his infective condition, and did not wish to do anything which would endanger the healthy worker, while the latter maintained a very cordial attitude towards the patient. The patient was not in any way depressed by the fact that the healthy worker refrained from "pawing" him in the intimate fashion common amongst ordinary patients.

It is with the end in view that the methods used in this famous colony, and found easily practicable there, may be adopted and practised in all other leper institutions that this paper is written. We should take reasonable precautions and this can be done without being fussy or objectionable to our patients.

One change, long over-due not only in leper hospitals, but in many famous general hospitals the world over, is the elimination of the common towel, the old-fashioned roller towel, in favour of the small individual or paper towel so popular in Canada and the United States of America. A piece of thin towelling or gauze or bandage material eight to ten inches square is sufficiently big for an individual towel, and can be easily washed and sterilised.

Much could be said in favour of liquid soap when one sees the dirty messes into which even some medical men put their ungloved fingers. It does not require much imagination to dislike the idea of using the piece of common soap after the experience referred to in the previous sentence.

If the nose be a route of entry it would seem wise to use a mask; but while this is used by a very small minority, it would be very difficult to devise and use a mask which,

while efficient would not too greatly embarrass the worker.

In "Leprosy Diagnosis Treatment and Prevention," Dr. E. Muir says : Precautions to be taken by Doctors and Attendants :—

"(1) Never touch an infectious leper or any article which he has used or touched without thoroughly washing the hands immediately afterwards.

"(2) In attending to lepers or dressing their wounds use rubber gloves where possible, at least, this should be done in cases which are highly infective. . . ."

Other directions under this heading are given which may be had by reading the book itself, but these quoted are sufficient to indicate that those leading the world in anti-leprosy work are alive to the necessity of the care which this paper seeks to inculcate.

These rules may seem a counsel of perfection, but it should not be impossible to avoid the faults enumerated in the earlier part of this article, in fact, one would say emphatically, that every effort should be made to eliminate or minimise points of contact between the healthy worker and the infective patient, this for the sake of the worker, his or her family connections and society at large, as well as in the interest of the great game in which we are engaged, namely, to rid the world of leprosy.

Literature.

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