# Report, by Dr. Heidenstam ... on leprosy in Cyprus / presented to both Houses of Parliament by command of Her Majesty, March 1890.

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## REPORT,

BY

## DR. HEIDENSTAM, C.M.G.,

CHIEF MEDICAL OFFICER,

ON

# LEPROSY IN CYPRUS.

Presented to both Houses of Parliament by Command of Her Majesty.

March 1890.



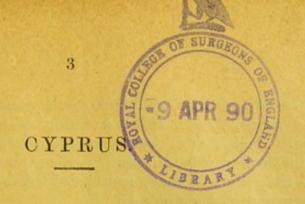


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1890.



## REPORT ON LEPROSY BY DR. HEIDENSTAM.

Sir HENRY BULWER to LORD KNUTSFORD.

Government House, Nicosia,

My Lord, August 1, 1889.

I have the honour to transmit herewith a report by Dr. F. C. Heidenstam, C.M.G., Chief Medical Officer of this Government, on the subject of leprosy in Cyprus. This report was intended by Dr. Heidenstam to accompany his annual report, but as the subject of leprosy is engaging special attention in England at the present time he has sent it in separately, and I forward

it separately for your Lordship's information.

2. The report is an interesting one in many respects, and it gives what information is known here regarding the introduction of the disease into the Island and the manner in which it came to be spread. I find it difficult to believe that a disease, which has been known to exist in these Eastern countries from time immemorial, never found its way into Cyprus till three centuries ago, but no doubt the earliest known record of it in the Island

may not go back beyond that date.

3. The history of the measures taken to provide for this unfortunate class of people dates, it will be seen, from the early part of the present century, when, to save them from destruction, the dragoman of the Government of that time, a person of wealth and influence, compassionately set apart a tract of land, about 120 donums, which he possessed at a distance of two miles from Nicosia, for the use of leprous persons, in order that they might live there in a separate community and cultivate the land and live by the produce of the land as well as by any other private means they might possess. If the scheme failed the failure was not due to the want of generosity on the part of the original donor of the land, but rather to a want of organisation and of such sufficient other provision for the wants of the leper community as would take the place of want of organisation, or as might, in any case, be needed in addition to the produce obtained from the cultivation of the ground. Thus it was that for want of organisation and of assistance of this kind, only a few lepers were found residing on the farm at the time of the British occupation. The greater number wandered about the country as mendicants.

4. After the British occupation the Government collected as many of these people together as could be found, or as room

could be provided for, and made arrangements under which they should receive each, daily, a ration of bread and  $2\frac{1}{2}$  cp. in money. A number of huts were added to those already existing, and the farm was fenced in. Further accommodation has since then, from time to time, been provided by the erection by the Government of stone houses.

5. The segregation of lepers in the Island is, to a great extent, secured in this way; but it is incomplete, as, no doubt, there are here and there leprous persons who are not inmates of the farm, while some of the inmates of the farm will every now and then take it into their heads to leave the premises and return to their villages. One disadvantage to be noticed is that the high road from Nicosia to Larnaca runs right through the farm; and although the farm is enclosed with a wire fence on all sides with the one exception of that part through which the road runs, it is, of course, that one exception which makes all the difference.

6. The following are among the measures which could, I

think, be adopted with advantage:

1st. The enclosure of the ground belonging to the leper farm on both sides adjoining the high road,

2nd. The gradual substitution of stone buildings in place of

the remaining buts of sun-burnt bricks.

3rd. The encouragement of the able-bodied inmates of the farm to work on the land and to lay out the grounds in a suitable manner so as to make their surroundings more cheerful and to give an interest to their daily lives.\*

4th. The appropriation of one of the rooms in the next stone building put up as a reading-room for the use of the people of the village, and a small annual provision for the purchase of a few books and old files of illustrated papers, &c.

I have, &c.

(Signed) H. Bulwer, High Commissioner.

The Right Hon.
Lord Knutsford, G.C.M.G.
&c. &c. &c.

#### Enclosure.

## LEPROSY IN CYPRUS.

During the 11 years I have been in this Island, and more especially since 1882, when I was appointed Chief Medical Officer, since which time I have had the leper asylum under my supervision and direct control, a wide opportunity has been afforded me for studying the nature, character, and attributes of leprosy, and in this study I have felt the keenest interest.

<sup>\*</sup> They do already cultivate a piece of ground and raise produce for their own use; but as no one will buy produce from the leper farm, for fear of the disease, there is no inducement to the inmates of the farm to produce for the market.

Although my observations are undoubtedly the same as those observed and observable in other countries where leprosy exists, they may, perhaps, prove of some interest, as, owing to the comparatively circumscribed area of this Island and the thinness of the population, I was enabled to follow and record the outbreak and progress, not only of the history of the disease in general but of almost every individual case which happened to come under my notice, with a precision almost impossible in large thickly-populated centres.

## Pathology.

I do not purpose here entering into full particulars on the studies I have made regarding the pathology of leprosy, as this is not within the scope of my present report; suffice it for me to state that the disease is identically similar, with no variations, to that met with in other countries; presenting the same characteristics of chronic asthenia, general constitutional cachexia, or an affected state not of any particular part of the human frame, but a completely vitiated condition of the whole system, and exhibiting also the same general varieties, viz., lepra tuberculosa, lepra anæsthetica, and lepra maculosa, which three forms are merely varieties of one common morbid condition, the disease being essentially identical in every form. In some cases even two or three of these varieties exist in the same individual, i.e., the tubercular form often commences with maculæ, and in all cases more or less anæsthesia is met with. The period of the incubation of the disease is very long and its development slow; the presence of a small micro-organism has been detected in the blood and saliva, but principally in the matter from the sores of lepers, which leads me to the natural conclusion that the disease is in a great measure due to the presence of this microbe. Other causes, however, may, I have remarked, increase the predisposition or favour the development and even the character of the affection.

## Etiology.

The first surgeon in medical charge of the leper asylum in this island—Dr. Irving—in his annual report for 1879 expresses an opinion which has also been supported by others, that malaria and

filth are the chief causes of leprosy.

The theory of malaria as being a direct cause of leprosy is not supported by facts in this Island, at least, as the villages the most affected, generally speaking, are those the least, if at all, infected with malaria miasma; and, on the other hand, localities known as eminently malarious regions are totally free from the disease. Further, it is a known fact that leprosy can and does exist in the finest of climates and indiscriminately in high or low temperatures. Malaria, therefore, as well as climatic influences in general can only be considered as adjuvant, predisposing factors of the disease through their tendency to weaken the constitution and reduce the vital power.

As regards filth and mal-hygienic conditions, neither can they be considered as having any direct connexion with the origin of leprosy. As in this Island, where both of those conditions are met with in a most paramount degree among the lower class of inhabiants, it would be difficult to explain how a village close to one affected with leprosy, and under the same dirty and bad sanitary conditions, is free from the disease, as also how inexplicable is the fact that the disease is not met with in villages which are exclusively Turkish, although the sanitary conditions and the poverty are just the same as in the Christian villages. Nevertheless, although those conditions do not solely constitute a direct cause of leprosy, they have an indubitable influence in harbouring and propagating the infectious virus and in promoting its action and progress.

Dr. Barry, the late Sanitary Commissioner for Cyprus, in his annual report for 1880, stated that the popular cause assigned for leprosy was the eating of putrid salt pork. The use of salt and putrid food as a cause of leprosy has also been advocated by others. I fail, however, to find how this theory can be supported in this Island where the majority of villages infected do not partake of this sort of food; and further, many lepers and families of lepers I have met, among whom were some Moslems, had never tasted pork in any form; and, on the other hand, villages, the inhabitants of which lived almost exclusively on this putrid salt

pork, have been free from the disease.

I consider, therefore, that putrid salt food, like all unwholesome nourishment tending to decrease constitutional vitality, can only, as malaria and mal-hygiene, be regarded as a helping factor, but

not as a direct cause.

It has generally been believed and urged that leprosy in Cyprus, as elsewhere, was inherent in the individual, and the lepers here when questioned as to the direct cause of their affection, invariably say inheritance, or as they express it, running in the blood, from generation to generation.

I was, I acknowledge, at first persuaded that the principal cause of leprosy was a condition passed down from one generation to another. After, however, a more careful investigation of almost every individual case which came under my notice, I am convinced that this theory was erroneous, as the following facts will prove:—

1st. Not only is it a known fact that there was no trace of leprosy in the Island before the arrival of persons infected with the disease, but in the localities infected where I have traced the origin of the disease it is irrevocably proved that before the arrival of a leper the disease was unknown.

2nd. In the 91 cases of leprosy which have come under my notice, and whose history is carefully recorded, I found that in two cases only, the grandfather and grandmother had the disease: in five, the father and mother; in seven, the father only; in six, the mother only; in three, the father and aunt; in five, the brother only; in two, sister

only; in four, uncle or aunt: in five, cousin or some connexion; and in 52 cases no relation whatever.

3rd. With rare exceptions all the inmates of the Leper Asylum have sisters and brothers, and in some cases, children, left at home, but who were not affected with the disease.

I know of several cases where the children of known lepers have not contracted the disease, but I will only mention those born in the Leper Asylum Hadgi Christofi, eldest son of Eleftheria and Vassili, decided lepers, left the farm and settled at the village of Messara; Michali, the second son of the before-mentioned, living at Treza; Yoannis, the third son of same, living at Komikabir; Hadgi Vassali, son of Savvas and Pannayiota, now living at the village of Killia. All the before-mentioned cases are perfectly healthy, are married, and have healthy children.

Then we have the two boys, Evangelis, 11 years of age, and Yoannis, 9 years old born in the asylum, just after the occupation, of leper parents, and up to the present showing no sign of the

disease.

Lastly, I have met and recorded cases where children have undoubtedly communicated the disease to their parents, who had up to that time been healthy; and I will here mention two of those cases which I have carefully and closely followed. The first case was that of the leper daughter of a certain \* \* \* a well-to-do peasant. She was brought to the leper farm at the commencement of the year 1883; all her relations and ancestors were healthy, never having had the disease, neither was there a case in the village from which she came. It was therefore supposed that she had contracted the affection from the wife of her cousin who lived in another village and whom she often visited and remained with. Soon after her admission to the farm her father came to me; he was then perfectly healthy showing no signs of leprosy, and asked to be allowed to take his daughter from the asylum as he wanted to leave her in the care of a woman who, he stated, cured leprosy. I informed him that his application would be attended to, but I strongly advised him not to undertake the responsibility of bringing his diseased child in contact with the other members of his family who were healthy. He appeared at the time to take my advice and left me. A few days after, however, it was reported to me that his daughter had clandestinely left the asylum, and I was informed later that she had left for Beyrout in company with her father and an elder sister. Some years later it came to my knowledge that this girl had died at Beyrout, and that the father and eldest daughter were to return to Cyprus. A few months ago they did so, both affected with leprosy.

The second case, that of M. of N., and an inmate of the leper farm, whose father, mother, and relations were perfectly healthy with no history of leprosy. M. left his village at an early age and went to K., where he contracted the disease, but I have been unable to trace under what circumstances he returned to N.;

but as the peasants remonstrated he was placed by his father in a garden he possessed, and he there looked after him, but as the leper's state became very precarious he was brought by his father to the farm, and two years later his father is also brought for admission to the asylum, a decided leper. No one else in the family has been affected.

These two cases, together with the arguments I have mentioned, I consider as strong proofs against the hereditary theory, and I will only add, that in this Island, at least, I have been unable to trace a case where the disease could have passed from one generation to another without indubitable evidence of contact.

### Race.

Under this heading there is little or nothing to be said with reference to this Island as there is not a large diversity of races, but as far as religion goes Christians and Moslems are both susceptible to the disease, although the latter have been affected in a remarkably small proportion in comparison with the former. In the leper asylum, out of 61 cases three only are Moslems, but this minority in the Turkish element can only be accounted for by the fact that a Turk avoids a leper as he would a mad dog.

The history of the three cases referred to above is so character-

istic that I will briefly mention the principal points.

The first, Mehmet Ibrahim, afterwards Christodoulo, he having some years ago changed his religion, I have been unable to trace accurately, as all the information given by him is not clear and I

could not verify it.

The second case, that of Mehmet Hassan, aged 25, from Larnaca, but residing at Peroi, was admitted into the Leper Asylum in 1885. His father, mother, grandfather and grandmother, as well as six brothers, the eldest 30 and the youngest four, were all perfectly healthy, and no other case in the village. He cohabited with a Christian woman, who after some time became a leper, and was ultimately brought to the leper farm, where a few

years after he followed.

The third case, that of Yussuf Abdulla, from Xerovouno, a village close to Lefka, 40 years of age, and of a strong and otherwise healthy constitution, and well to do. All his relations and children, two in number, perfectly healthy and no history or trace of leprosy among his ancestors, neither in the village from which he came. The only leper with whom he came in contact, and that somewhat frequently, was a certain Karames from Paphos. Anxious to ascertain the truth of this, a search was made for Karames, but all my efforts to find him proved futile; the man was known in Paphos as being affected with leprosy, but had left the place owing to the fear of being segregated. No one appeared to know of his whereabouts, when a few weeks ago I received the following note from Dr. G. N. Stephen, the district medical officer of Nicosia:—" Herewith an interesting case of leprosy in a Turk over 60 years of

"age from the Paphos district." I at once began to question the man and found it was Karames, whom I had been seeking. He informed me that he left the district of Paphos after the order had been given that all lepers should be reported to headquarters and went to live at a small village named Kokkino, in the Nicosia district, close to Lefka. All his family and children are well, and he cannot or does not wish to give any clue as to the history of his disease, and, unfortunately, I have not had time to investigate it. He knew, however, Yussuf Abdulla very well, he being a friend of his and had often stayed at his house; he also knew that Abdulla was affected with the disease; a few years after he himself was affected.

## Cause.

In my report for the year ended March 31st, 1884, I expressed

an opinion as to the cause of leprosy as follows:-

"My researches have led me to the conclusion that leprosy is what should be termed an inoculable disease, inasmuch as the virus is transmitted into the system in the like manner as many other maladies, notably syphilis, anthrax, glanders, &c., but it has not the same action on all constitutions, nor in all circumstances

of life, and is of a long and slow incubation."

My further studies and researches have not in any way altered the opinion I then expressed, and I am more than ever convinced that the direct cause of leprosy is simply and solely due to the inoculation of the virus of a person affected into another up to that time free, but, as I then briefly stated, the action of the introduced virus does not act uniformly in all cases, it requiring for its reproduction and development an appropriate field of action and predisposing circumstances and even then I am inclined to believe that it only takes effect when the virus is allowed to remain in contact with the skin for a not inconsiderable period. This would explain the fact, which appears otherwise inexplicable, (that) where several persons have been in daily contact with a leper only a few have been affected.

It has been advocated that instances of the communicability of leprosy have been rare, and so doubtful that it is impossible to rely on their authenticity. In this Island at least, this would not be the case, as I have met many cases where the slightest doubt could not be entertained. Take, for instance, the case of D., 70 years of age, and now an inmate of the Leper Asylum, and his wife E. He was a well-to-do man, born and living in one of the

healthiest villages.

There had been no case of leprosy in this village, neither had there been a suspicion of the disease in the whole family history. D. has three children, now grown up, whom he had sent from home to study about 15 years ago. About that time he took as a servant a certain M. who came from Acanthou, a village notably infected with leprosy. After M. had been in the service of D. a year or two, he began to show signs of leprosy, but as D. and his

wife had taken a great liking to the man, whom they used to consider and treat as one of their own family, they kept him seven years in the house until his affection became so pronounced, and the villagers remonstrating against his remaining amongst them, they had to send him away. Two years later E., the wife of D., was affected with leprosy and sent to the Leper Asylum, where she died two years ago. Soon after her admission D. left the village and came to Nicosia, asking to be admitted into the leper farm, but as he was not a leper his application could not be entertained. He remained in Nicosia, and about a year later, having shown signs of the commencement of leprosy, he was admitted to the farm, where he now is. There has not been any further case in his family, neither in the village.

I think that there can be no doubt that E., who during the illness of her servant M., nursed him, contracted the affection from him, and that D. contracted it from E. while taking care of her.

Stilon, 25 years of age, lately admitted into the asylum, is from Larnaca; all her family are healthy, with no trace of leprosy. She was servant maid in a very respectable house in Larnaca, but she left about 10 years ago to go away with a young man who had promised to marry her; he brought her to Nicosia, but, soon tiring of her, left her. She then took up with a certain Panayi Antonio, with whom she cohabited for a few years; he, however, having become affected with leprosy, was removed to the leper farm and the woman continued to lead a loose life, but in course of time as she showed signs of leprosy, she was taken to the farm, where she now is a decided leper.

Numerous instances of this sort have come under my notice, but

it would be impossible to note them in this report.

## History.

The history of the disease in the Island, which I will briefly

recount, also supports my assertions.

I have been unable to ascertain precisely the actual epoch of the first appearance of leprosy in Cyprus as there does not exist, or at least I have not been able to trace, any records on this subject. It is believed, however, and many of the oldest inhabitants of this Island state, that they had heard from their ancestors that Cyprus was entirely free from the disease 300 years ago, and that it was brought into the Island about that time by some lepers who arrived on a pilgrimage from Palestine to the monastery of Trooditissa, and who remained in the Island. This assertion would appear to have some foundation, as the old books on Cyprus I have read do not record the existence of the disease, although in some others of a later date it is mentioned. Further, it is evident from the date of infection of the different localities affected, that the commencement of the disease does not go farther back than that epoch, and from what I have been able to ascertain it is evident that the monastery of Troöditissa was the cradle of the disease as several

of the monks, some of their relations, friends, and servants, appear to have been the first known Cyprus lepers. It seems also beyond doubt that from this monastery the disease gradually spread to other parts of the Island, not, as is generally the case, with other acute transmissible affections from village to village, but only where one of those first-known lepers went to reside for a certain period or to villages with which they had frequent connexion, and, like all other diseases which are transmissible from the sick to the healthy, widening its circle of victims in the course of time.

Fortunately, however, I may perhaps say, the pronounced disgust felt by the inhabitants for any one afflicted with the disease, harsh as it may sound, prevented in a great measure the more general extension of the calamity, as no sooner did any person show signs of the malady than he was forbidden by his fellow villagers to enter the village and even in a majority of cases was driven by his near relations from house and home. Thus the outcast leper, abhorred and dreaded by every one, was forced to take to a vagabond life maintained by the alms of the benevolent. A spot outside the Famagusta Gate of the principal town of Nicosia offering great advantages for begging purposes, owing to the number of persons who entered and left the town by that gate, and being a convenient isolated site, attracted some lepers, who made it a permanent residence by erecting small mud buts in the adjacent ditch which surrounds the walls. There they resided and carried on their profession of mendicancy. This place, which formed the first congregation of lepers and the nucleus of the actual Leper Asylum, gradually became the general abode of the whole of the poor lepers of the Island and is spoken of to this day. as the leper camp of past days. At this place the lepers remained up to the commencement of the present century, when it is stated that the Pasha, governor of the Island, annoyed by this assembly of lepers, who had, in order to extract larger contributions, commenced to enter the town, extending their field of labour through the streets and bazaars, to the great disgust of the Moslem community, who, as I have already mentioned, had a decided horror of lepers, ordered that all of them should be made away with.

Mr. Georgakis, dragoman, having heard this decision and being moved for those unfortunate creatures, asked that their lives might be spared, and he offered a small farm that he owned in an isolated spot about two miles from the town of Nicosia for their use, where it was supposed they would be able to make a living by cultivating the land. To this farm they were at once transferred and orders were given that on no account should they approach Nicosia or leave the farm for other places; instructions were also issued at the same time to the authorities throughout the Island to send to this farm any lepers who might be residing in their respective

districts.

This reform, which was undoubtedly based on a very sound principle of public hygiene, unfortunately did not last long, owing to the want of efficient organisation to carry out the instructions given; the orders issued were very soon overlooked. On the other

hand, the orders given to the lepers not to leave the farm were very soon disobeyed, as the lepers finding it difficult, owing to their infirmity, to work for their living and having no means of subsistence, left the farm and took to their previous vagabond life of mendicancy, travelling through the villages, as they did not dare to show themselves in the towns. Thus, again, the lepers were once more scattered through the Island, where they were received with a certain amount of laxity, and were tolerated in some villages owing to the persecution they were supposed to be under, and it is remarkable to note that those villages only where a leper remained and communicated with others were affected with the disease; for instance, a leper, named Augustin, soon after the removal of the lepers from the Famagusta Gate, arrived at the village of Augastina; the villagers refused him admittance amongst them, but permitted him to take up his residence in a cave some distance from the village where food was sent to him and where he remained and died at an advanced age. No other case has occurred since that time in this village.

A little further on, at Marathovouno, a village notorious for the number of cases of leprosy recorded was completely free from the disease 70 years ago, where a leper named Tsankaris, a native of the place, but residing at Paphos, in a village close to Troöditissa, arrived in the village, having heard that he was to be sent to the leper farm, and as he was a well-to-do person he was permitted to remain in his house in the village, the villagers, however, having little or no communication with him, with the exception of a certain Hiero (old) Yacomo, who being an old friend of Tsankari frequented his house and often remained with him; he contracted the disease and died a decided leper. This was the first case in Marathovouno and from which the origin of every case is since traced generally from his family or relations although he had no progeny after he contracted the disease.

A little further we come to the village of Acanthou, whence many lepers of to-day have their origin. Totally free from leprosy until about 70 years ago, when a certain Hadgi Yorgi left the leper farm and established himself there. A few years after his arrival Liassi H. Yorgi, his near neighbour, is attacked and scon after him one of his daughters, followed by one of his sons, and soon after this two sons of Liassi's brother Christodoulo, then Episteni, a relation, and thus gradually and in time increasing

until the number of 33 cases is reached.

Passing on we arrive at the village of Exometochi, where Kritzo, a leper, having left the farm, had taken up his residence. After some time a certain Paoli who used to frequently communicate with Kritzo contracted the disease. Paoli had three children, but these were not affected; a nephew of his, however, named Yanaki, was affected later on and left the village for the farm. that time no further case has occurred.

It would be utterly impossible to embody in this report the history of every village affected with leprosy in Cyprus, but I can state that with a few exceptions, where villages were affected previous

to the present century and where the history of the case goes back to a remote period, rendering it impossible to be traced, for want of record, in all the other cases the arrival of the first leper in the village is easily ascertained and the progress of the affection clearly defined, proving in every case that the disease was brought there by some leper, and that unchecked, it gradually spread through the natural course of propagation.

Thus we find, at the time of the British occupation, of the 667 villages of the Island, 33 were infected, and from what I have been able to ascertain since, 150 lepers were living at that period.

## Leper Farm or Asylum.

At the time of the occupation some of the lepers were living at the farm, but even these were obliged to leave and go begging, and, as a matter of fact, were found in the by-ways and at all the Island fairs at this work. This having struck the authorities as manifestly improper, the Government made an arrangement by which the lepers received a daily bread allowance and a money allowance of  $2\frac{1}{2}$  copper piastres per diem on condition that they did not leave the farm; certain repairs were also made there and a cemetery enclosed at a short distance, as previously when a death occurred the body was carried to one of the adjacent villages for burial.

At the end of the year 1880 the leper farm, which had been administered, like all other villages in the district, by the Commissioner of Nicosia, was formally transferred to the Medical Department. The then head of the department, Dr. Fred W. Barry, with that indefatigable and praiseworthy interest he took in everything concerning his duties, undertook the reorganization of the farm, and it is to his commendable efforts that the first step of changing the farm into an asylum is due. Such accommodation as the Government of Cyprus could afford was provided, bedsteads and blankets were furnished to the inmates, and considerable improvements were effected in their treatment. A wash-house was constructed, and a system of cleanliness established and carried on at the farm, but as this newly-established asylum very soon became overcrowded the admission of fresh cases was discouraged.

In 1882 I was appointed head of the Department and the asylum then came under my supervision. I at once recommended the erection of further accommodation with the view of completely segregating the whole number of lepers on the Island. According to my recommendation, a stone-built house was constructed and soon occupied, and as although lepers, owing to the Government grants bestowed upon them and the persecution they continued to receive when at large, were coming for admission, I, in order to secure a more perfect seclusion, sent a circular to all the district medical officers requesting them to frequently visit the villages in their respective districts and at once to report any case of leprosy they met with or that came to their knowledge, and on the receipt of such information the leper reported was recommended for

admission and transferred to the asylum. This measure having naturally brought about an increase in the number of inmates and the accommodation afforded again falling short, an application was made for further accommodation and a second house similar to the first was erected.

The measures adopted since the occupation have undoubtedly been a noted improvement on the previous state of things, as in the first place those poor unfortunate afflicted lepers, who had previously been abandoned and persecuted not only found a safe shelter and means of subsistence, but were looked after and treated. Again, in a great measure, this seclusion, incomplete as it may be, has proved a great advantage to the community at large and has to a great extent checked the further progress of the disease, which assertion the following figures will bear out.

The number of lepers existing in the Island previous to the year 1878 was, according to authentic records, over 150. Since the reorganisation of the Leper Asylum 120 lepers have been admitted, 57 have died the last 10 years; 63 is the number now actually in the farm. From what I have been able to ascertain there are not more than 30 remaining still outside, thus the whole number of lepers actually existing in the Island does not exceed 100, proving

a marked decrease during the past 10 years.

But although the measures adopted have, in a great measure, prevented the rapid extension of the disease, they are not sufficiently stringent for promptly attaining the most desired end, i.e., completely eradicating its existence, because in the first place the asylum does not afford the absolute isolation required; being close to the town and other villages, there exists, notwithstanding the orders given to the contrary, frequent communication between lepers and healthy people. Secondly, lepers succeed now and again in secretly leaving the farm and return to their villages; (upon) these, although followed, brought back, and punished by the forfeiture of their money allowance for a certain period, this punishment does not appear to have a very deterrent effect, whilst the leper has once again been in close communication with his relations and friends.

Lastly, owing to the want of legislation on the subject, the surrender of all lepers and their absolute seclusion cannot be enforced.

This inefficient state of affairs struck me almost as soon as the control of leprosy came under my direct supervision, and in my annual report for 1883 I brought it to the notice of the Government. I had then entertained the idea of proposing the transfer of the leper farm to the island of Clythres situated at the north point of the Island, where communication with the lepers would be radically stopped, and their escape impossible. Unfortunately, however, this idea after mature consideration, had to be abandoned, it being attended with very great difficulties, and whilst aiming at a better state of affairs we had to do the best with what was provided for us, although it only permitted a modicum of success.

It is clearly obvious to me, from what I know of the disease in this Island, on which subject I have endeavoured in this report to give a brief record, that the direct cause of leprosy is contagion, and that for its prompt and complete eradication one main point has to be strictly observed, which is the immediate, general, and absolute isolation of persons affected with this disease; at the same time, I am quite alive to the fact that this desideratum, expressed in a few words, involves mountains of difficulty, but it is pleasing to me to hope that the Government, which has always shown the greatest interest in all questions concerning the public health of the Island, will in due time consider the possibility of carrying into effect that important measure.

April 1st, 1889.

(Signed) F. C. Heidenstam, Chief Medical Officer. LONDON: Printed by EYRE and SPOTTISWOODE,
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