

THE MENTAL DISEASES HOSPITAL, SINGAPORE (1ST 100 YEARS) - A SHORT HISTORY (PART II)

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ABSTRACT

This article (in four parts) traces the history of the first four Mental Hospitals built in Singapore, which were occupied in 1840, 1861, 1887 and 1928. The management of the patients is described; also their lives and deaths. Mention is also made of the doctors and others who looked after them.

Keywords: High mortality, New Asylum, Management.

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This article has many quotations from primary sources. The author believes that this mode of presentation is more interesting than a rehash of the results of his research.

In Britain, during the early 19th Century, lunatics, especially the paupers, were ill-treated. There were scandals and inquiries which revealed a cruel state of affairs. This was followed by an awakening of social conscience and reform for more humane treatment of lunatics, culminating in the passing of Shaftesbury's Act. By comparison, the conditions at Singapore, which was considered a "remote outpost", were not too bad, and her doctors and leading citizens enlightened men. Shaftesbury's Act (An Act for the Regulation of the Care and Treatment of Lunatics) was passed on 4 August 1845. By it, many safeguards were written into the law for the welfare of lunatics, eg a permanent Lunacy Commission; records of admissions, deaths, Visitors' visits, doctors' visits and case books were to be rigidly kept; a specified Order and Medical Certificate were required before a patient could be admitted; Lunatic Asylums had to have printed regulations, and their medical attendants had to be registered.

The law in force in Singapore at the time of the Transfer was the Indian Lunacy Act of 1858. This Act was a simplified adaptation of Shaftesbury's Act. The Colonial Hospital Digest, however, had incorporated the spirit of the provisions of the English Act, and that was the standard expected after 1869.

There were on 31 December 1871, 145 patients. Eighty new patients were admitted during 1872. Thirty-two patients were discharged, cured and relieved, and 38 died "mostly from Diarrhoea and General Atrophy due to wasting of the Nervous System and failing of Assimilative powers".

There were complaints of inadequate accommodation and lack of a suitable ward for European patients.

But the only alteration made to the Asylum was the substitution of iron-grated doors to 18 of the cells to allow a more thorough ventilation and to enable the Attendants to watch the inmates without opening the doors.

In 1873, there were no changes made to the buildings as there were plans to build a new Asylum on a more healthy site. Only urgent repairs were undertaken.

Cholera Epidemic

In July 1873, the Asylum was visited by an epidemic of cholera.

The disease made its first appearance on 16 July and continued till 28 July. There were 27 cases with 24 deaths.

Because of this epidemic, the patients in the adjoining General Hospital were transferred to the Sepoy Lines. Fifty-three of the quiet and well-behaved lunatics were shifted into the empty General Hospital and thus much of the overcrowding was remedied.

The medical authorities could not assign a reason for the appearance and continuance of this disease, except that it was prevalent then in the surrounding Kandang Kerbau district, and it was assumed that "since the sanitary condition was as good as it was possible to keep it, 100 men in a dormitory at a season when the Cholera miasma was no doubt in the atmosphere, predisposed them to the attack."

For years past, it had been brought to the notice of Government, that the Asylum and its grounds were far too limited for the large numbers of its inmates. There was a little over 2 acres for 150 patients while the recommendations of the Commissioners on Hospitals and Asylums (in Britain) in 1864 was one acre for every 4 patients. Unfortunately, the position of the Asylum was such that there was no room for extending it on any side.

The average daily number of patients in the Asylum in 1873 was 133:

	male	female
Europeans, Eurasians	3	1
Chinese	91	4
Malays	18	2
Portuguese	1	0
Natives of India	12	1
Total	125	8

Not much in the way of occupation was available for these patients. In former years, oakum picking was a constant source of employment, the dockyard people supplying the old junk, but as there was little or no demand for oakum this form of employment ceased, and the only work for the patients was the carrying of water, sweeping the grounds and other household work connected with the Asylum.

The death rate was 27.8%, and this was partly accounted for by the fact that many of the patients were, on admission, in poor health and undernourished.

The diet in the Asylum, however, was considered "liberal, sufficient and nutritious".

The scale was:

Diet for an European

Rice 8 oz daily
Beef (fresh) 14 oz thrice a week

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Fresh fish	12 oz twice a week
Salt fish	8 oz twice a week
Lard	1 oz daily
Vegetables	10 oz daily
Bread	1 lb daily
Tea	1/4 oz daily
Sugar	1 oz daily
Salt	3/4 oz daily
Curry stuff	1/2 oz daily
Firewood	3 lb daily

Diet for a Native

Rice	2 lb daily
Fresh fish	6 oz thrice a week
Salt fish	4 oz twice a week
Pork or beef	1 oz daily
Vegetables	6 oz daily
Salt	1/2 oz daily
Curry stuff	1/2 oz daily
Coconut oil	1 oz daily
Firewood	3 lb daily

In 1874, the Asylum continued to occupy the old buildings as no decision had been taken regarding its removal to a better site, and the Principal Civil Medical Officer (PCMO) represented again that the question of its removal be considered at an early date, otherwise extensive repairs and refurnishing would be required. The floors had sunken, the roofs were leaky in many places, bedsteads were required and the cells had to have iron grating doors.

The daily average number of patients was 110. There were 15 deaths during the year, one from suicide and the rest from general debility, phthisis and chronic diarrhoea.

As stated above, when cholera broke out in July 1873 in the Lunatic Asylum and the immediate locality, the sick of the General Hospital were removed to the Sepoy Lines. When the outbreak was contained in October, the question of their return had to be considered.

The PCMO recommended to the Governor that the return should not be effected as the site of the General Hospital was ill-suited, and, from a sanitary point of view, most objectionable, being situated in low-lying land only a few feet above high water mark. The immediate locality itself was just as bad, there being hardly any drainage, and occupied almost entirely by a native community whose dwellings were always surrounded by filth of every description. In front, the hospital was shut out from the benefits of the south-west monsoon being under the lee of high land, and at the back, there was a low tract of land which in wet weather was almost a swamp.

Proposal for a new Lunatic Asylum

The PCMO proposed that the General Hospital and Lunatic Asylum be removed permanently to the Sepoy Lines where the new Hospital and Asylum could be built. He considered the site "suitable and most desirable, as there was plenty of space, the ground was high and dry admitting of easy drainage and open to all the prevailing breezes and the water supply was plentiful." Regarding the new Lunatic Asylum, he recommended one "capable of containing 200 lunatics with all the latest improvements and adaptations." (The present Lunatic Asylum was overcrowded with only about 2 acres of ground and no space for any extension).

The Governor, Sir Harry Ord, asked for a detailed plan and estimate to be prepared, but as he was about to retire, he wrote a minute for his successor stating that he was in favour of the PCMO's proposals, but left the final decision to the new Governor.

The new Governor, Sir Andrew Clarke, however, decided

that only the new General Hospital should be built at the Sepoy Lines, and that part of the old General Hospital should be used to increase the accommodation of the adjoining Lunatic Asylum.

The lunatics were still in the Asylum at Kandang Kerbau in 1875. The Colonial Engineer was of the opinion that the buildings were good enough for lunatics and natives, "and nothing had been advanced to justify the Government in condemning this range of buildings, at all events for the treatment of Lunatics and Native sick, even if it be allowed that they are low-lying and uncheerful for the treatment of European sick..."

The situation remained the same in 1877 when the PCMO wrote, "There is great need for extended accommodation for female patients, and for general attention to the state of the whole of the buildings, but as these points are at present under the consideration of Government, there is no necessity for me to dwell upon them".

Seventy-eight patients were admitted in 1877 (12 were female). They came from Singapore, Penang, Malacca and Perak.

In 1878, the accommodation was still insufficient, particularly for the female patients. (Provision, however, was made in the 1879 Estimates for extensive additions and repairs to the Asylum buildings and to improve the sanitation.) It was reported that an unusual number of deaths had occurred during the year. The death rate was 20% for males and 12% for females. Most of the fatal cases were due to Beri-Beri (26 cases with 18 deaths). Another reason was "a large number of the admissions are poor creatures, in a very low state, suffering in many instances from want and neglect, and of whom the prospect of recovery is very small."

As funds had been provided in the Estimates, extensions and renovations were carried out in 1879. The male cellular block was extended by adding 8 cells. The female portion of the Asylum was increased by 5 single cells and a room of 3 beds. The dormitory and infirmary were improved by the substitution of boarded floors for the former tiled floorings.

As a result of the expansion, the accommodation for native lunatics was considered ample. However, it was still lamented that "the entire absence of a suitable place for European lunatics, male and female, was much felt, but there were no prospects of this being supplied till a new Asylum was sanctioned."

Mortality remained high during the year. Three-fourths of the deaths were due to "Oedema" and "Atrophy". The medical authorities could not account for the frequency of the cases of "Oedema", but thought that it could be attributed to damp, and it was hoped that the improvement in the nature of the flooring in the dormitory would help in reducing the number of such cases. The deaths from "Atrophy" were chiefly in those sent to the Asylum in a very weak state of body and whose rallying powers were small.

The mortality was 19% for males, and 16% for females.

In 1880, the PCMO once again wrote to the authorities on the need for a new Asylum:

"The site on which this Asylum rests is not healthy. It lies low, is consequently damp, and the tidal canal (Bukit Timah Canal) running along its sides is unsanitary. Much Malarial Fever, often of a severe type, is the result, and cases of Oedema, General Dropsy and beri-beri are not infrequent.

The building was condemned on these grounds as far back as 1873, and the erection of a new one determined on, but for reasons unknown to me, the scheme fell into abeyance.

The question was again re-opened some eighteen months ago, and the Public Works Department was requested then to prepare fresh plans, but there the matter rested, and no further action has since been taken. (Only some repairs and extensions had been carried out in 1879).

Leaving quite alone its unhealthy position, there are other strong reasons why steps to have this proposal carried out should be adopted.

The recreation ground, which, for the insane, cannot well be too large, is exceedingly limited, and no available room exists for their employment in gardening and out-door occupation, which are more essential to the recovery of their mental condition, than would be the exhibition of the whole pharmacopoeia of drugs. One for females is entirely absent.

No proper accommodation is provided for Europeans, male or female, a class of patients which has much increased of late, and doubtless will still more increase.

The present building is in every way unfitted for their occupation, and to mix them indiscriminately with natives, I need not say, possesses grave objections.

Taking these and other facts which might be adduced, therefore, into consideration, a new Asylum becomes practically a necessity, and I trust that Government may see its way to build one within a reasonable period.

When its erection has been decided on, I would recommend that its site be chosen at a much greater distance from Town than the existing one.

The Serangoon district would be probably about the best position to fix upon”

Abscondence by patients were reported to be fewer than in previous years, attributable to some extent to the greater security afforded by the planking of the fence all round, but chiefly to discharging patients who had sufficiently recovered to be able to take care of themselves.

Cases of Oedema were still frequent, and the principal causes of death were from Dropsy and Atrophy, of which there were 13 and 10 cases respectively, out of a total of 32 deaths. The total number of patients in the Asylum during 1880 was 230.

The dietary was improved by the addition of a small amount of the ordinary pickled vegetables used by the Chinese, and of a little dhal (lentil) in lieu of a proportionate quantity of rice. This change was beneficial.

Views on Mental Disease

At that time, the views held regarding mental disease in the local population were:

“The phase of madness assumed by the native lunatic is generally a harmless one, and consists chiefly in excessive garrulity, and in the possession of extravagant ideas. Some are subject to periodical fits of excitement which a few days’ gentle restraint and treatment invariably allay.

The admissions are generally such as arise from Chronic Mania, Melancholia and Chronic Dementia.

Perfect recoveries from Chronic Mental Disease among natives would appear to be rare; partial ones do occur.

The proximate causes of insanity to be met with in the native in this Asylum certainly point to the great preponderance of physical over mental agencies in its production. In this lies the difference between him and the European. The latter is the subject of a mental restlessness, and a susceptibility of emotion to which the former is a comparative stranger. In the European, the physical and the emotional causes are much more nearly numerically alike.

Among the physical causes may be enumerated the abuse of narcotic drugs, such as Bhang (marihuana), Opium, etc, the congenital condition, Epilepsy, Fevers, Starvation and such like.”

In 1881, the total number of patients treated in the Asylum was 261, of which 68 were discharged, 13 absconded, 35 died, and 145 remained under treatment at the end of the year.

The inmates of the Asylum were very seldom placed under restraint, the rule being to permit them to go about the grounds, their health permitting, and do some kind of light

work, such as sweeping and keeping the compound neat and tidy.

The call for a new Asylum to be constructed on a more healthy site was repeated. The state of health of the inmates was not as good as could be wished for, and it was reiterated that as the Asylum was situated on an unhealthy and low site, during the wet months of the year, Dropsical Affections occurred among the debilitated patients, to which most of them succumbed. Thirty-five deaths occurred during the year, most of these cases were brought in a low and weak state, and did not survive their admission many days.

1882 was a relatively good year. No epidemic disease occurred among the inmates, although these diseases were prevalent in the Town, not far distant from the Asylum itself. The death-rate was comparatively low, especially when many of the cases treated were in a half-starved condition on admission. The chief causes of mortality were General Debility, Anaemia, Dropsy and Diarrhoea.

During the year, lunatics from Perak, Selangor and other places were received for treatment in the Asylum.

Once again, the PCMO expressed a hope that the Government would see its way and lose no time in constructing a new up-to-date Asylum in a healthier locality. Regarding occupational therapy, he said, “All the inmates who are able and can be induced to work, do so, but till a larger Asylum is built, and a Superintendent appointed with a much larger number of Orderlies than we have now, no proper system of labour can be organised among them.”

By 1883, lunatics from the Native States (Malaya) were regularly admitted for treatment, and it was anticipated that their numbers would increase yearly, and further strain the limited accommodation in the Asylum.

The Government at long last decided that a new Asylum was needed.

The PCMO commented thus:

“.... The Government has not, therefore, decided a day too early in the construction of a new Asylum, to be built on a more extensive and modern plan, with work-sheds, garden, etc attached, so that we shall thus have varied and powerful means at our disposal for employing, in a regular and systematic manner, both the minds and bodies of the insane.

An earlier recovery of their reason may then, under these conditions, be looked for.

The proposed site is a healthy one and in every way adapted for the purpose. It lies at some distance behind the General Hospital, Sepoy Lines (which started functioning in 1882); is a long way off the line of any public road, and has ample ground available for extension.”

A vegetable garden on a small scale, was started by Mr Leicester, the Apothecary in charge, and maintained by some of the inmates who had taken an interest in the work. It proved a success, and provided the inmates with an extra and substantial supply of vegetables to their diet which did much to improve their general health.

The Third Lunatic Asylum

The construction of the new Asylum at the Sepoy Lines commenced in the later part of 1884.

In 1884, 181 patients were admitted (being an increase of 54 compared with the preceding year’s admission). Of these, 118 were from Singapore, 30 from Penang, 6 from Province Wellesley, 12 from Malacca, and 15 from the Native States of Perak and Selangor. The numbers would go on steadily increasing from year to year.

The discharges numbered 110. Of these, 92 were discharged by the Visiting Justices to the Asylum at their regular monthly visits, and the rest were removed by their friends or relatives on their giving security.

The recovery rate was about 60%, and the mortality rate about 11%, death in the majority of cases resulting from an organic disease.

The garden attached to the Asylum continued to be the source of a good supply of vegetables for the inmates, and also provided many of them with exercise in the form of manual labour.

The PCMO expressed hope that in the new Asylum various kinds of "industrial labour" would be organised.

No additions or alterations were made to the Asylum during 1885 as the new Asylum in the process of construction at the Sepoy Lines was expected to be ready for occupation in the early part of 1887.

There was a small outbreak of Cholera in July 1885 (a total of six cases with 5 deaths - 3 males and 2 females). The doctors did not know the cause:

".... It is difficult to say how it commenced. The weather at that time was excessively hot, sultry and dry, and the nights, more than usually oppressive. The first case occurred in the general male dormitory, and the disease at first was entirely confined to that portion of the Asylum; later on, however, it appeared on the female side, where two were attacked and died, when it left as quickly as it came."

At the beginning of August 1887, another outbreak of cholera occurred in the old Asylum, and, in spite of all efforts, could not be checked, and on August 12, all the patients were moved to the new Asylum, which was fortunately nearly ready. The removal of the patients was somewhat hurried, but it was successful in putting an end to the outbreak. Three cases occurred after the removal, and then the disease stopped.

Description of the Third Lunatic Asylum

Details regarding the new Asylum (which Governor called "an excellent institution of which any country may be proud"), its patients and staff are quoted as they are of great interest:

"The new Asylum is built on the cottage principle, and occupies the side of a hill which is terraced. For males, there are 10 blocks of 10 cells each, the cells in each block being built round 3 sides of a square, the doors facing inwards. The fourth side of the square is filled in with high lattice-work fencing with gates. The centre of each small quadrangle is covered with grass. There are also for males, two association wards (ie open wards), an European cottage, a Native refractory ward, hospital and work sheds. There is accommodation for 234 males patients in all.

In the female portion of the Asylum, there are 3 cell blocks, similar to the male blocks, and a cottage for Europeans. A work shed and dining room are now being built.

The various quarters for Medical Officer, Superintendent, Matron, Dresser and Steward are complete.

During the year, the coping of the wall near the more surmountable parts of the railing round the Asylum was covered with broken glass, but in spite of this, two escapes occurred since it was done.

The grounds are mostly planted with foliage plants, and ornamental beds are gradually being made.

The water supply, however, was insufficient, and the shower and other baths could not be used. This deficiency is being rectified"

Most of the patients were admitted in weak health, more or less emaciated from insufficient food or reduced by maniacal excitement. The bulk of the admissions were cases of imbeciles or wandering lunatics arrested in the first instance by the Police.

After transfer to the new Asylum, anaemia of an acute type appeared among the inmates. The diet was improved and arsenic given to all inmates as a prophylactic. These measures were followed by a marked improvement in the general health of the inmates and the mortality decreased considerably.

Treatment of patients

With regard to the treatment of inmates, it was reported:

"Kindness, freedom from restraint, regular hours, good food, open air exercises and occupation. Little luxuries such as betel-nut and tobacco were given. Bromide of Potassium has been the sedative drug most used. Noisy and excitable patients had, as required, the shower bath from one of the taps. Three cases have been obliged to be placed in straight jackets to prevent their injuring themselves. No restraint has been resorted to except in six cases, and then only to prevent them hurting their companions, when they had to be kept in solitary cells."

In the old Asylum there were no proper records, but Dr Tripp, the acting Surgeon in charge, kept careful records since the opening of the new Asylum, and some information as to the types of insanity was available at the end of the year:

1. Cases of Mania:	(a) Acute	25
	(b) Chronic	38
2. Cases of Dementia		52
3. Cases of Melancholia		8
4. Cases of Imbecility		85
	Total	208

Industries

Establishment of "industries" was also quickly undertaken:

"In the old institution, nothing was given the inmates to occupy their minds. Since we have entered the new Asylum, steps have been taken to gradually teach certain of the most tractable lunatics to weave. They commenced from the small beginning of merely picking wool and cotton, from this they had to make thread, and now I have 16 men at the looms alone, and have produced through their efforts 15 blankets and 36 yards of white and checked cloth, which I hope in the course of the present year will be so far perfected that the clothing of the Asylum will be entirely the production of their own hands. I am only speaking of the present material at my command in the way of machines. Should my requests be granted in the supply of extra looms and other appliances, I am certain that we could help, if not supply, the other great institutions of this Settlement.

I am given to understand that an average of 42 lbs of coconut oil are consumed daily by the various hospitals in Singapore, and if we could get oil-expressing machines, this could be supplied from the Asylum.

The lunatics have themselves made 8 mattresses, 100 caps, 16 pillow-cases and 12 drill suits. Over 3,000 yards of jute string have been spun by them for the purpose of making gunny bags. One inmate strings tennis rackets well, and I have also tried shoe-making; this latter, owing to an insufficient variety of tools, has had to be abandoned. I have already dispensed with the dhoby (laundryman), and this work, as well as the scavenging and lighting, are now entirely done by the lunatics. In time, certain amusements might be got up such as magic lantern, and extra food, etc given on their feast days."

Mr De Silva, the Superintendent, went to Calcutta early in the year to study the various industries of the Indian Asylums, and on his return, taught the lunatics.

Eleven trained warders from Bengal were taken on as part of the staff during the year, and sworn in like the General Hospital servants, under Police Regulations. All the other servants, except the gardeners, were similarly sworn in. The employment of docile inmates to look after the weak and sickly patients was frowned upon.

On 28 September 1887, the Governor informed the Secretary of State for the Colonies that the new Lunatic Asylum was completed and that the lunatics had been transferred to it. He mentioned that Dr Tripp was temporarily in charge and asked

for a specially qualified Medical Officer to be selected and appointed to take charge of the new Lunatic Asylum. It was thought advisable that a medical man skilled in lunacy should be given charge of the Asylum, and devote his whole time to it.

Specialist in Mental Diseases

Dr William Gilmore Ellis was selected and arrived from England in September 1888. He was appointed for three years on probation, the first "specialist" to be appointed in Singapore's medical history.

Dr Gilmore Ellis settled down to work immediately. He initiated a number of changes and improvements, and was a disciplinarian.

When a patient (a criminal lunatic) escaped, he prosecuted the head male Attendant for disobedience and negligence. This man was brought before a Court of two Magistrates, and sentenced to four months' imprisonment, and later dismissed from the service.

There was another case of gross misconduct when a male Attendant was found beating a patient. He was prosecuted and sentenced to a fine of \$10 or 14 days' imprisonment, with dismissal from the service.

Dr Ellis had hopes that these two cases would be a lesson to the others with regard to their future conduct. He also discovered that 29 patients had absconded due entirely to the carelessness of the Attendants and gate-porters, faults he declared he would remedy in the ensuing year. There was a suggestion that the walls of the Asylum be raised, but he was of the opinion that they were sufficiently higher and more difficult to scale than those of many English Asylums. He thought that the numerous corners and pathways between the blocks favoured escape, as they afforded good hiding places.

An admission case book and a post-mortem register were started. The former contained a complete history of all cases from the day of admission, and was of great value in the study of lunacy in Singapore.

Dr Ellis also found many differences between the practice in Singapore and England.

Of the 176 new cases admitted during the year, a very large proportion were in a very poor state of physical health with very small prospect of recovery. Thirty-seven died within three months' residence.

The admission forms sent in by the Police with the new patients, were, in many instances, wrongly filled up, the answers in no way applying to the questions. Thus no help could be obtained from this source to indicate both the prognosis and treatment of most of the patients. Dr Ellis however was aware that the majority of the cases were wandering lunatics, about whom no history whatever could be gleaned.

Management of patients

The many different nationalities of the patients increased the difficulties of management considerably. There were English, Russian, Danish, Eurasian, Japanese, Burmese, Arab, Filipino, Vietnamese and Malay patients. Among the Indian patients there were North Indians, Bengalis and Tamils. And of the most numerous group, the Chinese, the predominant dialect (tribal) groups were Hokkiens, Teochews, Cantonese, Khehs and Hainanese.

He also found that the recovery rate was far too low, about 25%.

Changes in treatment were initiated. "Few patients were ever secluded, and then for only short periods." Strait waist-coats were abolished. The only mechanical restraint used were locked gloves, consisting of two small padded canvas bags tied round the wrists, to prevent self-injury or destructiveness. The drugs mostly used were Chloral Hydrate, Potassium Bromide, Cannabis Indica and Digitalis. There was no Paraldehyde available and orders were placed for it. "The curative agents

upon which we place the most reliance are freedom from restraint, open air exercise, plenty of occupation, regular hours and food, and, I hope soon to be able to add, amusements."

Occupational Therapy

A brief description of the "industries" in the Asylum would not be out of place as it gives a vivid picture of how things were:

"The occupation of the patients has been kept prominently in view, and all available means at our disposal have been made use of. Working hours are from 6 to 10 am and from 1.30 to 4.30 pm. There are now two large sheds in full working order on the male side, one for the manufacture of rope in all stages, from picking the raw jute to twisting the final strands. A much larger quantity of rope could easily be made, if a market for it was procurable. It can be sold with a slight profit to the Asylum at 7.5 cents per lb.

The other shed is in the charge of two Hindoo weavers from Calcutta. About 30 patients, mostly of a demented and quiet type, are here engaged in weaving cotton blankets and cloth, spinning thread, and mending old clothes. Seven looms are usually kept going. We now make all our own clothing, and could, I think, very shortly, supply the General Hospital and Prison, should the quality be of the right description.

Our cotton blankets are very good, and we make sufficient for our requirements.

When different qualities of threads and combs (on order from Calcutta) arrive, we can start five more looms, and I hope to teach the patients to make fancy mats, and even a thin description of carpet. Many patients, especially those convalescent, take a great interest in this work. The patience of the Attendants here is admirable, though taxed to the full, for the best workers are continually being discharged recovered, and their places taken by others quite ignorant of the work. We can sell our cloth at a slight profit, from 11 to 14 cents per yard.

Late in the year, 12 paddy threshing machines were fixed; these at present are used for crushing old bricks into dust for the Public Works Department. This work is of great use to me, as I am enabled to employ here a more acute type of patient, much to their own advantage, such patients being quite unfit for other work. The Public Works Department credit us with 50 cents a barrel for the dust.

About a quarter of an acre of waste ground has been brought under cultivation; one of the gardeners is still working at this, assisted by four patients. In time, when more land has been broken up, and more patients taught this work, we shall be able to provide the Asylum with a large portion of the vegetables used in the diet.

A coconut oil expresser was put up in November, but was found not to work satisfactorily. I do not think this work need be persisted in, particularly as so few patients could work at it at one and the same time.

Six patients help to cook in the kitchen, one works with the carpenter, two with the mason, two with the toty (cleaner), and seven are employed in painting. What they learn in this way might be useful to them upon their discharge, should they recover.

A very large percentage of the remainder of the male patients are employed sweeping and cleaning in and about the Asylum.

On the female side, there is one large work-shed, in which several patients are engaged in spinning thick thread from the raw cotton, for use in the looms, and others in the mending and making of clothes.

83% of our total numbers are usefully employed more or less. This, I know, will compare very favourably with the percentage in any Asylum in the British Islands."

Regarding amusements, it was regretted that more could not have been done. "On November 8, through the kindness of

Mr Tan Hood Leng, we had a performance of Chinese wayang, at which 185 of the inmates were present. The majority of these enjoyed and appreciated the entertainment thoroughly. It would be for the good of them all if more kind friends would come forward in a like manner. A small amount of tobacco is allowed to those who work."

Water Supply

Dr Ellis had complaints about the water supply and sewage disposal. He found the water supply barely sufficient. It was derived from two sources:

- (a) by a main pipe from two cisterns placed at the top of the hill behind the Prison, kept partly filled by a pump drawing from the Municipal main, and worked by the treadmill in the Prison. The Asylum was not able to draw from this source more than 8 to 10 gallons per head. The water was good but much stained with iron rust. It was the only water allowed to be used for drinking and cooking purposes.
- (b) from two wells situated in the lower levels of the Asylum. The water from these was formerly used for drinking. However, when 29 cases of severe diarrhoea occurred with 23 deaths, this water was suspected and its use stopped and there was no fresh case of diarrhoea. The wells were then thoroughly cleaned, cemented nearly down to the bottom and several cart loads of sand thrown in. The water was then used only for bathing, washing and flushing drains.

Dr Ellis commented that Asylum patients required more water than other people, and should have at least 20 to 30 gallons of good and pure water per head per day. The usual amount allowed in the English Asylums was from 30 to 40 gallons per head, and was generally nearer the larger quantity.

Sewage had formerly been buried directly outside the Asylum walls. It was now carted away every day, to the benefit of all living within the Institution.

The staff consisted of the Apothecary, Steward, Matron, Chinese Interpreter, Dresser, one male Head Attendant, and 28 Attendants, being about one to every 10 patients - a fair average.

In 1889, four unused rooms were incorporated into the association (open) wards, increasing the accommodation for 40 extra patients. The Asylum could now deal with 300 patients.

The year was eventful in casualties, and good statistics were marred by the occurrence of two suicides. One, a male patient, hanged himself from the bars of a window of one of the association wards, having first made a rope out of his blanket. At the inquest, the jury acquitted the Asylum officers of any blame in the matter. Not so in the other case of a female patient who had several previous determined attempts to strangle and hang herself. The Medical Superintendent had warned all staff to be vigilant. She escaped from the work-room, ran to a store room and drank carbolic acid out of a bottle. The Coroner severely censured the Matron for her carelessness, and she resigned later.

Of the casualties, one was a gardener who was attacked by a patient, who then seized his scythe and with it killed another patient. Another was a male patient who tripped and fell in the dining hall, injuring his head severely and died of a cerebral haemorrhage. A dislocated shoulder occurred in a fight between two patients. Many other casualties were of a trifling nature, occurring whenever a large number of insane patients are brought together.

Only 5 patients absconded in 1889, as compared with 29 during 1888, and 37 in 1887. One of the escapes was proved to be due to negligence, if not actual connivance, on the part of the Attendant in charge. The Attendant was prosecuted and sentenced to three months' imprisonment.

There was a further administrative improvement, when a book called the "Medical Journal" was introduced to keep daily

records of all casualties, seclusions, deaths, admissions, discharges and sick. The weights of patients taken on admission and afterwards at monthly intervals were also recorded. This book proved useful as a check on the Medical Register.

The recovery rate in 1889 was nearly 10% better than that for 1882. Dr Ellis noticed that the female recovery rate, however, was very low, less than 11% of the males. This was opposite to what prevailed in England. He thought that this was due to the rarity of admissions for Puerperal Insanity (only one in the past two years). This condition was one of the most curable forms of mental disease, and the proportion of puerperal cases in English Asylums was between 10 to 18%.

Dr Ellis was quite bigoted in some of his views. He stated that he noticed that in Singapore there was an absence of the more acute forms of insanity, and that the form most prevalent was a "mere exaggeration of a general somewhat low standard of intelligence". "Acute Melancholia" was also rare because it was "a disease that tends to attack educated brains".

The mortality rate remained very high, 33%, and one contributory factor was again the poor physical state of a large number of patients on admission.

Once again the principles of treatment were enunciated (and worth quoting):

"Our highest effort is to promote recovery of mental health, but this can be successfully accomplished in only a minority of the cases admitted. There are few cases, however, who are not benefitted by treatment, made more contented and comfortable in themselves, and more serviceable to others; the large amount of work that is performed in all Asylums bears witness to this. The principles of treatment briefly consist in endeavouring to bring the physical condition of the patients to its highest state of perfection, and in the providing of healthy employment. Also the beneficial action of remedies calculated to influence the mental state through the nervous system is not overlooked. The drugs mostly in use are Chloral, Bromide of Potassium, Cannabis Indica, Morphia, Hyoscyamine, Digitalis and Paraldehyde. Sulphonal, a new and highly spoken of soporific, has been applied for.

No mechanical restraint has been used during the year, and seclusion has been resorted to very sparingly, and only under exceptional circumstances."

All available means were taken to induce the greatest possible number of patients to employ themselves usefully, and more than 80% of the inmates were daily occupied, to the advantage of themselves and of the Asylum.

The land brought into cultivation the previous year yielded 663 lbs of vegetables, which were given as extra food to the sick, and to the hardest workers amongst the patients.

A large amount of cleaning was essential in the Lunatic Asylum, occupying a large number of the inmates and giving no monetary return. The whole of the Asylum, including drains, was washed daily, and many parts had to be re-done a second or even a third time.

The water supply was much improved and was of good quality.

The Asylum had difficulty in providing amusement during non-working hours and holidays, which was considered a great aid to recovery. The patients played draughts, read from a few of the story books available, sometimes aloud to others. The more industrious were given tobacco. A gift of books or papers written in the Chinese language was solicited.

Attendants

Dr Ellis also made known his views on the importance of attendants:

"In estimating the various factors which combine to secure good results in an Asylum, an important one to consider is the staff of Attendants. The amount of vigilance and care demanded

of those entrusted with the immediate charge of the insane, can only be appreciated by those who daily see their work, and the longer one does so the clearer the responsibility appears. It is, therefore, of the utmost importance to procure the services, for attendance on the insane, of persons of good character, of good temper, and intelligence. One wants Attendants with very varied qualities - the grave and cautious, the resolute and gay, the thinker and the worker, as well as the strong and swift.

It is essential also for the well-being of an Asylum that a large percentage of the Attendants should have had a long period of service, and as a means to this end, their pay should be good; their situation would then be of worth to them, and their fear of losing it is a valuable power for the promotion of a necessary strict discipline. the conduct of the Attendants on the whole has been fairly good, but far too many small breaches of discipline have had to be noticed. Were the power of inflicting some small punishment placed in my hands, I think I could combat the laxity with more effect. At present, I must either overlook a fault or dismiss the Attendant."

Lunatics Reception Ordinance 1889

On 28 February 1889, in the Legislative Council at the first reading of the Lunatics Reception Bill, the Attorney-General said, ".... make provision for the reception and detention here of lunatics from the Native States, from Labuan and from British territories in Borneo. We have here a very magnificent and expensive building and a highly qualified officer in charge of it, and now our difficulty is to provide inmates for the establishment and patients on whom that officer may exercise his skill. We, therefore, propose to allow the Governments of the places to which I have referred on paying all costs and expenses to send down their lunatics for treatment here. That is the whole scope and object of this measure. We have already a similar measure applying to criminal lunatics from the Native States which was passed in 1885, but it does not cover the case of ordinary lunatics, as does this Bill, the first reading of which I now move ..."

The second reading was on 7 March 1889, the Committee stage on 4 April 1889 and the Bill was read a third time on 18 April 1889 and passed (Ordinance X of 1889).

However, after less than a year of "looking for" patients, it was reported in 1890 that the proportion of female patients was steadily increasing, and the advisability of at once increasing the accommodation for them was pointed out as it had frequently been taxed beyond its limits.

Cholera broke out again as an epidemic in the Asylum in May. Twenty-eight patients were attacked and 24 succumbed to the disease. No member of the staff suffered. The cause of the spread of the disease in the Asylum was very problematical. All cases were promptly isolated, disinfection was thoroughly carried out, and a careful watch was kept over food and water, yet cases kept springing up in all parts of the Asylum. By the end of May the epidemic had entirely ceased.

Six patients absconded during the year, as compared with 5 in 1889, 29 in 1888 and 37 in 1887. The Medical Superintendent was not too upset by this. He was of the opinion that as it was impossible to keep the attendants on the alert all the time, and as the Asylum was managed on non-restraint principles, and had walls that could be easily scaled, a few escapes would generally occur every year, a matter to be lamented, but less harmful than giving the patients the liberty only of criminal prisoners.

Owing to the large number of sick among the male patients, one of the association wards was converted into an infirmary to facilitate good nursing and treatment as all the sick were in one place and not scattered all over the Asylum. The most prevalent illness was anaemia with rapidly increasing oedema, the cause of which was not known, despite post-

mortem examinations. It was believed to be due to "dampness":

"... long-held belief that the dampness of our single rooms and wards are much to blame for the prevalence of the disease, the increase of cases in rainy weather is noticeable, and the year has been an exceptionally wet one. The plan of structure of the Asylum prevents the sun's rays entering any single room, or, to any great extent, the wards, and considering the frequent washings they are necessarily subjected to, thorough drying by other means is next to an impossibility. Thus restless patients often sleep on damp tiled floors. It is superfluous to add that the night Attendants have strict orders to replace on their bedsteads all patients so found. The coolness of the tiles forms their attraction. ..."

Two pregnant patients were admitted and were safely delivered during the year. One prematurely of twins, who survived their birth but a short time. In neither case did any improvement follow in the mother's mental condition.

Two hundred and twenty-four men and 30 women were admitted during the year, most of them from Singapore and Penang, some from the Malay States and one from Borneo. As in former years, a large proportion (147 men and 17 women) were in very poor physical condition. Twenty-six were suffering from organic heart disease, and many others from functional cardiac irregularities.

At this time, the pattern of mental disease was changing in England. English Asylum Superintendents reported that acute and violent mania was becoming rare. Dr Ellis again stated that in Singapore, there was an entire absence of the more acute forms of insanity, even in the few Europeans admitted. However, he regretted that the absence of past records prevented his knowing whether the pattern was also changing, or that insanity locally had always been lacking in its most acute forms. He also mentioned that he had not yet seen a case of General Paralysis of the Insane in an Asiatic or Eurasian, when nearly 10% of admissions into English Asylums were from this irrecoverable disease.

The recovery rate was 37% comparing favourably with that of English Asylums. This was considered very satisfactory, and would have been higher had not the mortality been so great, for of those who had died from cholera, anaemia and other diseases, many undoubtedly were recoverable cases mentally. The female recovery rate was again very low as compared with the male.

During the year, as heretofore, efforts had been made to return unrecovered patients to their friends whenever possible. "In this way a distinct advantage was conferred upon the patients, and the institution was freed from the burden of their maintenance."

Post-mortem examinations continued to be made in all cases where the body was not claimed by relatives, and the great importance of such examinations was shown in many instances. During the year, 127 such examinations were carefully carried out and the morbid conditions found entered in the post-mortem register.

Regarding treatment, as formerly, seclusion had been resorted to very sparingly, and with the exception of locked padded gloves fastened on the wrists of two patients for surgical reasons, no mechanical restraint had been used during the year.

The Medical Superintendent, however, was not entirely against the use of restraint:

"The question as to the employment in Lunatic Asylums of mechanical restraint is occupying a considerable amount of public attention in England. Restraint of some kind is the basis upon which all treatment of the insane is based, and it is not so much abolition of restraint that we want as that it shall be carried out under constant and humane supervision. In those extreme and rare instances in which all other means fail to

secure the safety of the patient, mechanical restraint is justifiable and advisable, for, as it has been said 'it is always vigilant, it does not lose its temper, and it avoids the many risks attendant on manual restraint'. Should an instance requiring it occur, I should not hesitate for one moment in its use, and should regard it as the best and most humane treatment."

Sulphonal, the hypnotic, had been prescribed and found most beneficial, giving healthy sleep of several hours' duration when other drugs had failed.

Notwithstanding the large number of sick, 70% of the inmates were employed more or less usefully, daily throughout the year. The loom-sheds, kitchens and wash-houses employed a large number, others were occupied sweeping and cleaning, painting and gardening. Some of the very demented patients were employed in crushing old bricks into dust with paddy threshing machines. Female patients were employed in sewing and spinning cotton. A sewing machine had been procured which increased the work done.

There had been frequent complaints from Muslim patients and occasional refusal to eat, on account of their food being cooked in the same kitchen which supplied the Chinese, who were often fed on pork. Early in the year, the kitchen in the female Asylum was repaired, and one Ayah (female attendant) assisted by three female patients, cooked food there specially for the Muslim patients.

During the year, the treadwheel pump at the Prison broke down a few times, cutting off the water supply, and gangs of patients with buckets had to be sent a quarter of a mile to the nearest stand-pipe for the necessary cooking and drinking supplies. Bathing and washing were done in the Asylum well water. It was expected that in early 1891, Municipal pipe water would be laid on into the Asylum.

According to the Medical Superintendent, to know what amusements to give Asiatic patients was an insurmountable difficulty. A swing was put up in the female Asylum, and a daily paper taken in for the European patients. As usual, tobacco was given to the more industrious.

There were still complaints about the shortage of Attendants, which was not conducive to good treatment. Recent admissions and acute cases were not given work to do although that might be most advantageous to them. Either the existing employments were unsuitable, or the individual case could not be entrusted into an Attendant who had to look after many other patients. A patient whose sense of confinement was very intolerable and injurious, could not be sent for country walks because his mental state was such that two Attendants were required to provide against any emergency. Many had left to better themselves or to return to India. Of the remaining Attendants, many were inexperienced with less than one year's service. Good asylum Attendants could not be produced under a year. However, the performance of the attendants during the year had been fair, and in many instances, great vigilance was shown in preventing escapes and suicidal attempts.

Cost of patient care

In 1891, Dr Ellis made for the first time a calculation of the cost to Government of each patient in the Asylum, based on all salaries and expenditure, deducting the income from paying patients and goods manufactured by the patients. It worked out to be \$77.44 per patient per year. It was expected that this would diminish as the amount of industrial work increased. (But it was not to be so. It would double in 9 years' time - see below).

Dr Ellis completed his probationary period of three years in September 1891 and was placed on the Permanent Establishment.

The accommodation on the female side was increased by converting a small infirmary block, bathroom and latrine into

an association ward for 24 patients. The female Asylum could now accommodate 60 patients which was considered sufficiently large for years to come unless the female population of the Colony greatly increased.

The casualties, with few exceptions, had been the usual small cuts, abrasions and black eyes, due to accidental falls, from fits and occasional quarrels, so common in asylums, however thorough be the precautions taken. The serious ones were: a feeble male patient with phthisis and heart disease fell down, fractured his skull and died within three hours. Another was an attack by a lunatic criminal on another resulting in a punctured wound in the thigh. Five women who had eaten some wild tuba root they found in the garden suffered from acute and severe intestinal irritation, but all recovered within two days. The root was searched for and eradicated as much as possible.

Dr Ellis wrote an article on "that mental condition, peculiar to the Malay race, the culminating point of which is commonly called **amok** and is a state of blind and furious homicidal mania, several cases of which have come under my notice during the last few years." He thought that it could be related to epilepsy. Dr Ellis once again dogmatically stated, "General Paralysis of the Insane, a most fatal and irrecoverable disease, is rarely if ever, seen amongst Asiatics. General Paralysis is usually considered a disease of civilised life running at high pressure, and it is possible that the advance of this Colony in that direction is bringing upon it one more of the many evils inseparable from such a state."

During the year, provision for the unlimited supply of wholesome water was successfully carried out, but was not maintained (see below).

Number of lunatics in the population

Dr Ellis made a calculation of the number of lunatics in the Asylum in relation to the previous year's census, and found the ratio of lunatics to every 10,000 of the population of Singapore to be 6.06 (6.15 for males and 6.01 for females). However, he believed that "these figures appear more favourable to us, I think, than they really are, for I cannot but doubt that there are many insane persons, insane probably only to a slight degree, at large amongst the population, who, if living in England, would find their way into private homes or the workhouse, according to their status, and thus help largely to augment the returns from the Lunatic Asylums".

In this year, despite the difficulties in obtaining a history from the patients, a probable cause of insanity could be assigned to 51% of the admissions. Excluding "previous attacks", the commonest causes were organic heart disease, intemperance in drink and venereal disease. Cases of syphilitic brain disease were undoubtedly becoming more frequent.

The recovery rate in 1891 was 38.54%, an improvement on 1890. But the improvement was principally due to the admission of females suffering from a more recoverable form of insanity. During the past four years, the recovery rate had risen from 25% to 38.54%, but the Medical Superintendent did not think that it was likely to rise much higher.

Recovery rates varied from year to year according to the prevalent type of disease amongst the admissions. They were also greatly influenced by the standards adopted for "recovery". In Singapore, the standard was that "a person who has been certified of unsound mind is not considered recovered until capable of being certified to be of sound mind".

After-care

Dr Ellis felt that a lot could be done for the patients if an "After-care Association" or a "Society for Discharged Patients" could be formed;

"I should feel gratified if I could get some help from the outside in forming a small association, representative of our chief races, whose work should be analogous to that of the

After-Care Association in England. This admirable association finds homes for the patients who may be discharged from asylums, and who have no friends to whom they can go, and after a time finds suitable employment for them. The number to be helped every year would be few, but the advantage of that help incalculable. I am sure that the second admission of some of the patients discharged from this Asylum would never have been needed had they only been able upon their discharge to find friends to care for them for a short time, until they had again become accustomed to the bustle of the world, after their quiet and regular life. It was only a short time ago that a patient was re-admitted in a state of acute mania but a few days after his discharge. He had been quiet, orderly and industrious for three months, and was considered quite sane a month prior to being allowed to go. The worry of looking for work and a home, and the sudden change of having to do everything for himself, instead of having everything done for him, were undoubtedly the cause of his sudden relapse in what was probably always a weak brain. Had this patient gone to friends and been given some light employment and slight supervision, say even for a month, I am of the opinion that he would still have been at large, and a useful member of the community."

The death rate was 43.50% which was still very high. As in 1890, heart disease contributed largely to this rate (19 out of 87 deaths). Dysentery and phthisis were also more prevalent. Eighty-five post-mortem examinations were made, and the information so gained carefully recorded.

Treatment

Once again, a long commentary on treatment is quoted to indicate the trends one hundred years ago:

"Experience has taught all physicians to the insane that regular hours, regular and appropriate food, and regular work, supplemented by the careful exhibition of drugs (mostly tonic or sedative) and seclusion when necessity occurs, form the best treatment that insane patients can be subjected to. Suitable employment is essential to all, for, as has been said, 'idleness frequently begets idleness, and idleness destruction, and so on to the loss of hope, and then a patient may become a chronic lunatic and a life-long expense.' I do not say employment will cure everybody, but rightly applied it cannot fail to do good. Many patients now usefully employed were formerly dirty and destructive, and would soon fall back into their old ways and habits but for favourable occupation.

Seclusion has been resorted to more than usual during the year, for two reasons: firstly, we have had a large number of acute cases admitted, and, secondly, experience has taught me that a patient secluded is much less liable to be irritated and excited than when kept in order by manual force, besides, seclusion does not lose its temper. All details as to the seclusion of a patient are invariably entered in a book kept for the purpose.

The insane are very prone to digestive and intestinal troubles, making dietetics a matter of much greater importance in the successful treatment of insanity, especially the acute cases, than is commonly supposed. Indeed, in these latter, careful dieting is more important than all other forms of treatment put together. In many cases, a necessary diet is frequently an expensive one, and as thriftiness here would be false economy, it is not attempted."

To exonerate the over-worked nurses and attendants, attention was called to the frequent attempts at suicide in which a fatal result was averted. In 1891, there were four attempts to commit suicide by hanging and two by strangulation, which were frustrated by their vigilance. A reasonable amount of supervision was given to suicidal patients but to appoint a special attendant to each would require an enormous increase

in staff, and moreover would be vexatious to the patients. Such patients were allowed to mix freely with, and live the same life as the others. This was to vary the monotony of asylum life as much as possible, and to improve their physical condition, although such treatment was naturally attended with opportunities for suicide and escape. The Medical Superintendent believed that it was better to run such risks daily than to attempt to render the occurrence of suicide and escape an impossibility, an attempt, if carried out, would make asylum life harder to bear than life in prison.

Two steps were taken to try to retain the attendants in service. One was the building of quarters for married attendants in the hope that this would encourage the senior attendants to marry and stay on. The other incentive was the granting of one day's leave a fortnight.

Quite a lot of renovations were carried out in 1892: low bedsteads were fixed in some of the single rooms and in the association wards; the windows of all the single rooms were strengthened as several escapes had been easily effected by the removal of some of the bars; electric bells were installed between the Medical Superintendent's quarters and the infirmary block, between the Apothecary's and the Dresser's quarters, and between the Matron's and the Ayah's quarters; the removal of the wooden trellis work from most of the blocks which formerly shut in the damp and kept out air and sun.

In addition to this, some experimental work in construction of rooms in the Asylum was done by the Public Works Department:

"Alterations to a single room on the female side have been completed, at the cost of considerable thought and trouble by the Public Works Department, with the double object of preventing the exit of sound and yet allowing such free ventilation as is so absolutely necessary in this climate. The room as altered is a great improvement upon any other in this Asylum, and, I believe, the experience gained during its construction has taught us correctly how to build still better ones, should they be needed."

1892 confirmed the observations made in 1891 that cases of syphilitic brain disease were becoming more frequent. The admissions to the Asylum showing undoubted signs of present or past syphilis, were 4% of all admissions in 1890, 6.5% in 1891, and 18% in 1892. There was no doubt that the insanity in many of these cases was due to other causes than syphilis (as syphilis may co-exist with any form of insanity and have nothing to do with it in the aetiology.) On the other hand, a large number showed clinical symptoms of syphilitic insanity.

Laboratory

During the year, a small Pathological Laboratory was fitted up. A microscope with high power and immersion lens obtained, and much useful work, especially bacteriological, was done.

Once again the comments on the types of insanity are quoted:

"... the absence of the more acute forms of insanity in the cases admitted, ... the form most prevalent seems to me to be a mere exaggeration of a general somewhat low standard of intelligence. Again, many are admitted in a state of dementia, dull, obtuse and indifferent to their surroundings, without having had any previous acute mental disorder, and from this condition they frequently recover. Delusions and hallucinations are of a far simpler character than those met with in English Asylums, the former are rarely persisted in to any extent, and the latter worry the patient but little. All coolies - Chinese, Klings or Malays - thoroughly believe in witchcraft, and a large percentage of my patients upon recovery assign this as the cause of their insanity. It is necessary to bear this in mind, especially when examining new admissions, otherwise

what to them is normal belief might be considered a symptom of insanity.”

The recovery rate for 1892 was 45.45% (an improvement of 7% over 1891), the highest rate ever achieved in the Asylum since statistics were available. But the death rate still remained high at 26.63% (about double the rate in English asylums), but it was a great improvement being much lower than in 1891, and any of the past six years (when records were available). The improvements in the water supply carried out in 1891, and the general improvements to ventilation effected in 1892, had undoubtedly decreased the death rate.

In 1892, the principles of treatment had not changed. The curative agents upon which most reliance was placed were freedom from restraint, open air exercises, plenty of occupation, amusements, regular hours and regular food. Hyoscine administered hypodermically in doses of from 1/200 to 1/50 of a grain was found to be most useful in many cases of acute mania. It had an hypnotic action, but in addition exercised some great power in quieting patients, and making them more amenable to treatment generally.

The comments on the management of physical diseases in the mentally ill are instructive:

“Physical diseases in those under treatment in an asylum require a much larger amount of care and management than would a similar number in a General Hospital. In one, the patients are rational, reasonable, anxious to recover their health, willing to assist in their own treatment and thus make the nursing as light and easy as possible; in the other, the patients

are in only too many cases wishful to die, have perverted and unnatural habits, resist all treatment, refuse food, and are unceasing in their endeavour to injure themselves and often their nurses too. The smallest degree of neglect or forgetfulness, which elsewhere would be unnoticeable, in an asylum may lead instantaneously to a tragedy.”

The Medical Superintendent proposed to Government the introduction of good conduct money as in English asylums. He believed that this would be valuable in keeping up the necessary strict discipline among the Attendants. He suggested an increase of \$4 per annum to the salaries of all attendants, its half-yearly payments to depend upon the conduct of the individual.

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