Abstract

This article mentions briefly the history of the early General Hospitals of Singapore, and the events leading to the opening of the 1926 General Hospital (the predecessor of the present General Hospital). There is a detailed description of this hospital. During the next four decades there were many changes (alterations and additions) to cater to changing circumstances. The hospital also underwent an upheaval caused by the war with Japan and the Japanese Occupation of Singapore. The Japanese Armed Forces used the General Hospital for their own patients. The British General Hospital with its Maternity Wards were transferred to Kandang Kerbau Hospital which became the main Civil General Hospital for Singaporeans during the Japanese Occupation. There are brief descriptions of these alterations and additions as well as those made after the rehabilitation of the General Hospital after the war. The Obstetric and Gynaecological Service remained at Kandang Kerbau Hospital and did not return to the General Hospital. From 1975, with the commencement of the construction of the present General Hospital, the third to be built in the same locality, the 1926 General Hospital was demolished in stages. Some parts still stand, e.g., the porch of Bowyer Block, and the shell of Mistri Wing (now the National Heart Centre).

Key words: Alterations, Expansion, Origin

As in previous articles on the medical history of Singapore, this one has many quotations from primary sources. The author believes that this makes more interesting reading than a rehash of the results of his research.

The 1926 General Hospital was the second to be built in the Sepoy Lines locality. A detailed description of this hospital and its associated buildings with later developments will be presented later in the article. This is for posterity’s sake, and to allow the senior doctors in Singapore, Malaysia and elsewhere, who trained and worked in the wards and the various departments, to wallow in nostalgia (Fig. 1).

The early history of the General Hospital (1819 to 1869) has already been documented fully in a number of my articles.1-5 A brief recapitulation would not be out of place. This would give the reader a better grasp of the historical background.

When Sir Stamford Raffles landed in Singapore on 28 January 1819, one medical man, Sub-assistant Thomas Prendergast, was responsible for the health of the contingent. Some sort of “hospital” was soon required. The first hospital (actually a shed) erected in Singapore was in the Cantonment for the troops, i.e., it was a military hospital, but was known as the General Hospital. Singapore was very wild in the early years after its founding. Apart from the Cantonment, a few buildings around it and a few acres under cultivation, the whole island was covered by jungle.

By 1821, there were separate buildings in use as hospitals for European soldiers, sepoys and native paupers. Civilians (government officials and merchants) were treated in their homes by the army surgeons and, if very ill, in the homes of the doctors.

In 1822, the second General Hospital was built to replace the first one. By this time, the General Hospital (although a military hospital) had already been admitting sick sailors from the many ships calling at Singapore, and the European inhabitants. The General Hospital was administered as a military hospital until December 1822.

In February 1827, the Residency Surgeon reported to the Resident that the General Hospital had fallen down “on account of the decay of the temporary materials with which it was originally constructed.” The Executive Officer was
Fig. 1. Site plan of General Hospital, Singapore (built in 1926).

Fig. 2. Plan for the erection of the General Hospital, 1827.
immediately instructed to construct another hospital, but "with every regard to economy."

The plans for the erection of a new General Hospital were submitted in March (Fig. 2):

"84 by 36 feet including 8 feet verandah all around, divided into four compartments, having five doors, and three pairs of steps, the floor of plank and raised three feet; one end of the verandah planked 60 feet by 8 feet. Remainder of the building of attap and cadjan. Cook room in two divisions, 30 feet by 15 feet, and privy 14 X 17 with sunken wells."

("Cadjan" or "kajang" is a Malay word for palm frond, used for roofing, walls and covering.)

The Governor sanctioned the construction of the new hospital "on account of the indispensable necessity of such a building for the convenience of sick officers and seamen landed in the harbour." This rebuilding of the hospital, however, did not include housing for the subordinate medical staff, for when the monsoons came at the end of the year, the Executive Officer had to be directed to "order some attaps to be placed on the roofs of the huts occupied by the Hospital Dressers with all convenient despatch, as they are reported to be uninhabitable in the present rains."

Later, a fence had to be built around the hospital and a military guard posted as thieves were frequenting the General Hospital and patients were absconding! The posting of a Military Guard led to a misunderstanding between the Military and Civil Authorities. The Military assumed that since there was a guard, the hospital should be under their control. This controversy was resolved when the Governor decided that the new hospital should be under civil control as no military patients had been admitted into it since there had been a separate military hospital.

An Order-in-Council on the 18 February 1828 designated the hospital the "Civil Hospital" or "Singapore Infirmary" to avoid further confusion and misunderstanding.

The reader may wonder who did the nursing and other work in the hospital. The Straits Settlements in those days were also convict settlements (mainly for convicts from India), in addition to being political and trading outposts. The convicts were used for all types of work in Singapore. In the Medical Department, some were compounders, orderlies, sweepers, and coolies, etc. The convicts were used for all types of work in Singapore. In the Medical Department, some were compounders, orderlies, sweepers, and coolies, etc.

In February 1828, the Senior Surgeon came from Penang, then the capital of the Straits Settlements, on a tour of inspection of the medical establishments in Singapore. This was his official report of the Singapore Infirmary:

"This institution contained one European from a ship, labouring under Insanity, and one native campfollower ill of Scrofula.

A large attap boarded shed is occupied by them. Cots are provided at the public expense, and the tables, almeirahs and drawers recently paid for by the Government are arranged in this place for the preservation of medicines and instruments in use."

The staff members attached to the Singapore Infirmary were J. Caswell, Assistant Surgeon; Joseph Powell, Assistant Apothecary (employed also in the Pauper Hospital); and John Leicester, Hospital Apprentice (also employed in the Pauper Hospital and Medical Stores). The hospital did not see many admissions. In July 1828, only one European with "dysenteria" was in the Infirmary.

The General Hospital (the third) built in 1827 was allowed to deteriorate, and by 1830 was so dilapidated that no one would seek admission except in dire need. The roof was full of holes and there was not a single section of the roof through which rain did not enter. The hospital charges were high (90 cents per day for a European) in spite of the poor facilities.

The Assistant Surgeon in charge of the hospital reported to the Resident Councillor about the condition of the hospital, proposing that a new General Hospital be built to cater for the Europeans and Natives. He submitted a well thought-out plan dealing with the accommodation, medical aspects, hospital charges and staffing requirements. The proposal was rejected by the Government, and the broken-down shed continued to be used as a hospital until it was eventually abandoned.

In May 1832, there was public agitation for a hospital to be built for sick European seamen. The Government was against using its funds for unprofitable projects, and suggested "that this is a fit object to be provided for by public subscription amongst the Mercantile community of the Settlement."

In the meantime, an enterprising doctor in private practice sized up the situation and started a private hospital. But the hospital charges were exorbitant relative to the salaries of the poor sailors. Those who could not afford the fees were treated where convenient if they refused to go to the General Hospital. One such place was the Tavern, which had spaces for rent.

Public conscience in the form of the Grand Jury and letters to the Press continued to urge the building of a new General Hospital. The Government did not budge from the official view:

"As to the want of an hospital for sick Europeans … [it is] not the custom in England for Government to erect hospitals of this description, […] public contributions [are] usually raised for such purposes."

Some of the sick sailors were in Singapore because they had been shipwrecked in the nearby seas. Others came...
Of the hospital, the Government would not object to supplying the medical staff and medicines.

This was in June 1838. By August 1839, there was still no Seamen’s Hospital. Sailors of merchant ships went to the private hospitals if they had the means. Others were admitted into the Pauper Hospital. The Royal Navy sent its men to theMilitary Hospital.

A year passed and still nothing happened. The Resident Councillor, as the chief civil administrator in Singapore, was compelled to write to the Governor in 1840. He drew attention to the lack of a proper hospital for seamen, the plight of the abandoned sailors, and the unsuitability of the Pauper Hospital for Europeans. He also recalled the unsuccessful attempt in 1838 to build a hospital with public subscriptions, and expressed his opinion that the Government should be responsible for the care of sick sailors, and that funds for this be raised by imposing a charge on ships using the port and harbour. There was no immediate response to this proposal.

Cholera has been described as the sanitarian’s best friend. Its dramatic suddenness of onset and high morbidity and mortality (in bygone years) disturbed the complacency of the layman. Just as epidemics elsewhere in the world had led to improvements of medical services, so it was in Singapore where an outbreak of cholera among British naval ratings in May 1841 forced the Administration to take urgent steps to assess the adequacy of the Medical Department and to build a Seamen’s Hospital. (Cholera also played a part in the building of two later General Hospitals in the Kandang Kerbau district and the Sepoy Lines locality.)

The Governor asked the Senior Surgeon for a report, which was promptly submitted. The Senior Surgeon stated that there was no hospital for Europeans, and he had recommended the Captain of the naval vessel to rent a house for his sick sailors, but the owners had demanded very high rents. There was no alternative but to admit the sailors to the Pauper Hospital, which was most unsuitable. He also proposed that a hospital be built, with sufficient staff for 20 patients.

The Governor strongly supported the Senior Surgeon’s recommendation, and wrote to the Bengal Government. They in turn submitted the request to the Government of India for a decision. There was a compromise. It was also the opinion of the Government of India that a hospital for sick seamen was an undertaking for the mercantile community of Singapore, but authorised the Governor to give some assistance if the merchants took up the cause.

On receipt of this despatch, the Governor made an immediate appeal to the Chamber of Commerce. The response of the Chamber of Commerce was to solicit
voluntary contributions from its members and the public. Once again, the Editor of the *Singapore Free Press* lent his support to the endeavour, and tried to stimulate public donations by publicising the fact that once the hospital was built, the Government would be responsible for the staff and the recurrent expenditure.

However, as in 1838, there were merchants who were uninterested and not moved by the appeal to “liberal humane feelings”. After 1 year, the Chamber of Commerce managed to collect a sum of $2700. The Governor once again wrote to the Government of India, submitted a plan, and stated that the estimated cost of building the hospital was $7500, i.e., the Government would have to contribute the balance of $4800 towards its erection.

The Government of India this time (November 1842) authorised the erection of the Seamen’s Hospital. There were delays, and the foundation stone of the European Seamen’s Hospital was laid in June 1844 on Pearl’s Hill (where the first Tan Tock Seng Hospital was also to be built).

The hospital was not ready until July 1845, and began admitting patients on 1 November 1845. (Later, General Hospitals were built solely at Government expense, avoiding all the hassle regarding financing, staffing and administrative problems.) There were many teething problems: incompetent and inadequate staff; thieves who broke into the hospital, sometimes even attacking the staff; the lack of hearse; merchants and others who refused to honour their pledges; unruly patients who would, for example, smuggle spirits in and get drunk; and patients who absconded with hospital linen! A perennial problem was that of mercantile firms, shipping agents and their captains refusing to pay the hospital expenses of their sailors.

In 1856, there were proposals to reorganise the land defence and fortifications of Singapore. Part of the plan was to fortify Pearl’s Hill and concentrate some of the military sources there. The guns on Pearl’s Hill with those on Government Hill (Fort Canning) would be “sufficient to overawe the Town and afford a refuge to the European community in the event of either internal disturbance or foreign attack”. There had been riots among the Chinese inhabitants in 1854, and war with China had broken out again in 1856. The Chinese section of the Town was situated between Pearl’s Hill and Government Hill, directly under the guns which would be placed there. This plan was approved by the Government of India on 11 April 1856.

Before the Military could take over Pearl’s Hill, the Seamen’s Hospital, Tan Tock Seng Hospital and some other buildings had to be vacated and alternative sites found for them. It was decided that the Seamen’s Hospital would be moved to the Kandang Kerbau district. A whole “medical complex” (General Hospital, Lunatic Asylum, Apothecary’s Quarters, Medical Stores and Dispensary) would be built there.

Mutiny broke out in India in April 1857. This indirectly affected the development of the hospitals in Singapore. The Government of India ordered a halt to all public works except those of military importance. A Company of European Artillery arrived in Penang in March 1858, and two-thirds of the detachment were stationed in Singapore. The Seamen’s Hospital was requisitioned as their barracks, and the patients were moved to the Medical Stores on 30 March 1858.

A few days after the sick sailors were moved to the Medical Stores, cholera, which appeared in Singapore, broke out among them. The hospital staff was also infected. The cholera outbreak convinced the Authorities that the Medical Stores was not a proper place to house patients. A house was rented for this purpose, while the erection of the new hospital commenced.

Progress in building the new hospital was slow. By 1 October 1859, there was still no new General Hospital. Unexpected difficulties were encountered. There was trouble with the foundation and the water supply, and additional constructions were required and more money needed.

The hospital was ready for occupation on 9 January 1860, but the medical authorities declined taking over the hospital as all attempts to find drinking water near it had failed. Good drinking water was found in the wells nearby during the third quarter of 1860, and the hospital began to function on a proper footing in January 1861. By the end of 1862, the original defects in the masonry aqueducts were repaired and a plentiful supply of good drinking water could be led from the wells sunk in the sandy ridge near the Race Course into a tank in the hospital compound. The use of water casks was dispensed with. The amount of work in the General Hospital increased as the years went by.

In July 1873, when cholera broke out in the Lunatic Asylum, which was next to the General Hospital and the surrounding Kandang Kerbau district, it was considered expedient to remove the Native and European sick from the General Hospital to the Sepoy Lines as a temporary measure. After the outbreak was contained, the Principal Civil Medical Officer (new designation of the Senior Surgeon) recommended that the return of the patients to the General Hospital not be effected. The Sepoy Lines where the sick were accommodated was a more suitable site for a hospital:

“… There is plenty of space; the ground is high and dry, admitting of easy drainage, and the situation is open to all the prevailing breezes, and the water supply is plentiful ...”

He proposed that a new hospital should be built there to
accommodate Europeans and Natives. The Governor approved of the proposal “that the present arrangement will continue; the Sepoy Lines, or a sufficient of them being appropriated and converted into a General Hospital with a Lunatic Asylum in connection but detached.”

The new General Hospital at the Sepoy Lines was opened on 1 August 1882 (Fig. 3). (The term “Sepoy Lines” came to designate the locality in which the General Hospital was situated). This hospital was replaced by another which opened on 29 March 1926. This was the second General Hospital to be erected at Sepoy Lines.

The Medical School in Singapore was founded in 1905, and produced its first graduates in 1910. In 1916, its diploma of Licentiate in Medicine and Surgery (LMS) was recognised by the General Medical Council (GMC). But in July 1919, the General Council of Medical Education and Registration of the United Kingdom (to give the GMC its full name) sent a warning to the Government that standards of teaching and examination had fallen and, that if the high standards were not maintained, the Council would have to reconsider the recognition of the Licence of the Medical School.

This bombshell from the GMC was a blessing in disguise. It resulted in the Medical School having a new building in College Road, and the raising of standards of teaching (the benefits of which can be seen in present-day Singapore and Malaysia).

On receipt of the stern warning from the GMC, the Governor instructed the Principal Civil Medical Officer, Straits Settlements, the Principal Civil Medical Officer, Federated Malay States, and the Principal of the Medical School to consider the problem carefully and to come up with concrete proposals for improving the status of the School and the efficiency of its teaching.

They identified the following factors contributing to the problem:

a) Shortage of staff.

b) Shortage of space (for lecture rooms, laboratories, library and hostel accommodation for senior students near the teaching hospital, Tan Tock Seng Hospital).

c) Lack of facilities and equipment for practical work.

d) Lack of specialised teaching.

Accordingly, they made a number of recommendations. To overcome the shortage of space, the solution was to provide new buildings. A new Medical School building was needed to remedy part of the deficiency. (We will not refer to the other recommendations.)

The Government decided that if they were to build a new Medical School, they might as well rebuild the General Hospital nearby (in use since 1882) and develop the surrounding area into a separate self-contained medical complex. The Maternity Hospital was already in the General Hospital compound, albeit some distance away (it later came to be known as the Maternity Wards of the new General Hospital).

The year 1926 was rendered notable by two landmarks in the medical history of Singapore. One was the opening of the new General Hospital by His Excellency the Governor, Sir Laurence Nunns Guillemard, on 29 March 1926.

A detailed description of the 1926 General Hospital is quoted verbatim as promised earlier, together with a summary of later developments for posterity’s sake. It will also allow the senior doctors, who trained and worked there, to indulge in mixed feelings of sadness and pleasure recalling the happy and not-so-happy times spent in the hospital (Figs. 4 to 7).

“The new General Hospital contains 800 beds of which over 500 were occupied at the date of the opening.

It is built in three separate units:

(a) The first and second class male wards and the first class female wards with the main administrative block;

(b) The second and third class female wards; and

(c) The third class male wards with a sub-admission block.

The pavilion type of wards has been adopted throughout – the main feature being a long central corridor with wards at right angles on each side. An admission and casualty room and a dispensary and the offices and stores are in the main administration block. On the second and third floors are flats accommodating six of the medical staff. The operating theatres and the suites for the surgeons (including eye, and ear, nose and throat) and for the radiologist, are on one side of the main corridor behind the administration block, while the sterilisers and the first class kitchens balance the theatres on the other side. Behind this again come in succession three blocks of pavilion wards one of which has a third storey for the reception of tuberculosis cases.

This unit holds 200 patients. All the floors are covered with rubber sheeting.

The two second and third class female blocks, each of three floors accommodating 170, including a children’s ward of 36 beds, are situated between the first class unit and the third class male unit. The Pathological Laboratory lies behind the female wards and behind it again, near the main road at the back of the Hospital, is the Mortuary.

The third class male unit consists of five sets of
pavilions accommodating nearly 400 patients. The admission block in this unit contains the sub-administration office, dispensary, a venereal clinic, the third class operation theatres and the admission wards. There are separate kitchens for Mohamedans, Chinese, Sikhs and Bengalis. There is a system of lifts in every pavilion in the hospital. All the sanitary blocks are cut off from the main blocks by ventilating lobbies. The hospital has its own electric power plant, and its own telephone exchange.

Over one hundred Sisters, Staff Nurses and Probationers are accommodated in the Nurses’ Quarters.

There are attendants’ quarters for a menial staff of 200 ...”6

During the next four decades, there were many alterations and additions to cater to changing circumstances. The hospital also experienced the upheaval caused by the war with Japan and the Japanese Occupation.

These are summarised as follows:

1) In 1929, when the College of Medicine appointed its first Professor of Dentistry, space had to be found for a Dental Clinic. This clinic was housed in the Third Class Block of the hospital and was opened in April 1930.7

The accommodation, which had been improvised at the inception of the clinic from existing rooms, proved inadequate by 1935 for the rapidly expanding needs. Construction of a new building to house the Dental Clinic and Dental School commenced in 1936 and was ready in 1938.8

2) In 1931, by rearranging some wards, a compact Venereal Disease Unit was organised where all male inpatients suffering from venereal disease in Singapore could be concentrated and treated.9

An Outpatient Department was started in the Lower Block on 1 July 1931. The accommodation was actually a ward subdivided into rooms, a waiting area, etc. The space occupied by the old Dental Clinic was converted into extra rooms for the Outpatient Department when the new Clinic was ready in 1938.9

In 1932, the wards for the accommodation of cases of Pulmonary Tuberculosis were rearranged in order to provide for the separation of the early cases from the advanced cases.10

3) During the war with Japan and the Japanese Occupation of Singapore, there was upheaval in the General Hospital. In the last days of the war, the Japanese Armed Forces shelled and bombed Singapore. The General Hospital, with accommodation for 830 patients, found itself at the end of the fighting with some 3000, of whom 1100 were service casualties and 2400 civilian casualties.

On the evening of 15 February 1942, Singapore capitulated. Military patients were sent to Military Hospitals, civilians were sent home or to the Mental Hospital. The Japanese occupied the General Hospital on 18 February 1942, using it for their casualties. The General Hospital became their main hospital for South East Asia. The hospital was shared between the Japanese Army and the Japanese Navy.

The Civil General Hospital, together with its Maternity Wards, was transferred to Kandang Kerbau Hospital, which became the main Civil General Hospital for Singapore during the Japanese Occupation, and was known as Chuo Byoin (“Central Hospital” in Japanese). After the Japanese surrender in September 1945, the General Hospital was occupied by the British Military Forces, and Kandang Kerbau Hospital (as the protem General Hospital) continued to cater to the surgical, medical and obstetric and gynaecological needs of the civilian population.

In July 1946, General Hospital was completely taken back from the military authorities.11 The rehabilitation of the General Hospital was most formidable. Although there was no significant damage to the buildings; furniture, equipment and fittings were damaged or lost. These were gradually restored.

The three main blocks of the General Hospital, formerly known as the Upper, Middle and Lower Blocks, were renamed Bowyer, Stanley and Norris Blocks respectively in memory of 3 doctors who had been closely associated with the hospitals of Singapore and who had lost their lives during the war.

The “Unit System” was adopted in the General Hospital after the war. Prior to the war, patients were scattered throughout the hospital, and the Specialist and his staff had to search for them in the many wards. As the General Hospital was not like present-day hospitals in Singapore, which are “compact”, a “ward round” could cover long distances, and patients were often “missed”. With the Unit System, the Specialist and his staff had a group of contiguous wards with facilities close at hand. It was then the “modern European practice”. The Obstetric and Gynaecological Service remained at Kandang Kerbau Hospital and did not return to the General Hospital.

In the 1950s and 1960s, there were further developments:

4) A new Surgical Block comprising Consultants’ Rooms,
Laboratory, Operating Theatres, Outpatient Clinics and Wards, was opened in 1954. Two Surgical Units shared this block: Surgical Unit “A” (Head, Professor DEC Mekie) and Surgical Unit “B” (Head, Mr HM McGladdery). The old Surgical suites, including the ENT Department, and Consultants’ Rooms adjacent to the Radiology Department, were used for the expansion of the Diagnostic and Therapeutic sections of the Radiology Department.

5) A Children’s Block, known as the Mistri Wing (named after its benefactor, Mr Mistri) was opened, with Professor Wong Hock Boon heading the University Unit, and Dr Quah Quee Guan heading the Government Unit. The old Children’s wards, the Prison Ward and Ah Ban’s Canteen in Stanley (Middle) Block, were converted into the ENT Department with Consultation Rooms, Theatres and Wards (Head, Dr Au Kee Hock).

6) A new Pathology Department, complete with a Lecture Theatre and Museum, was built.

7) With the appointment of a Professor of Orthopaedic Surgery (JAP Cameron) in 1952, some wards and the operating theatres in Norris (Lower) Block became the Department of Orthopaedic Surgery. In 1956, with the rearrangement of wards and sharing of the operation theatres, a Government Orthopaedic Unit (Head, DWC Gawne) was started.

8) A new building to house the Outpatient Department (including the Casualty and Admissions Sections) and Dispensary, with the Blood Transfusion Unit above, was erected.

9) A new School of Nursing, Sisters’ quarters and Nurses’ quarters were erected as one complex.

10) New Medical Officers’ quarters and Housemen’s Quarters were built.

11) Renal dialysis was started in Medical Unit II by Drs Khoo Onn Teik, Gwee Ah Leng, Lim Cheng Hong and Lee Yong Kiat in a side-room next to the lift. Later, the attics above two wards in Bowyer Block were converted into a Renal Dialysis Unit.

12) Medical Unit II scored another first when Dr Charles Toh started a modest Coronary Care Unit at the back of Ward 19.

13) Medical Unit III (Consultants’ Rooms, Outpatient Clinics, Laboratory and Wards) was founded in 1965 in Bowyer (Upper) Block. The other two existing Medical Unit I and Medical Unit II were “University Units” under Professor GA Ransome and Professor ES Monteiro respectively. This new Unit was a “Government Unit” with Dr Gwee Ah Leng as Head and Dr Lee Yong Kiat as his deputy.

14) The Eye Department was already in Norris Bock in the 1950s.

From 1975 onwards, when the construction of the present General Hospital, the third to be built in the same locality, commenced, the 1926 General Hospital was gradually demolished in stages. Some small parts still stand, namely the porch of Bowyer Block, the corridor leading to the National Heart Centre, the corridor above this corridor, and the shells of the Mistri Wing and 6 wards of Bowyer Block. The old Mistri Wing has been converted into the National Heart Centre. The old wards now house the Medical Social Services Department, the Quality Management Department, the Infection Control Unit, the Staff Clinic, the Staff Recreation Rooms and Gymnasium, the Medical Records Store and Store Rooms.

REFERENCES

10. Annual Report of the Medical Department, Straits Settlements 1932.
Fig. 3. The Singapore General Hospital (circa 1910).

Fig. 4. The Singapore General Hospital (circa 1930).

Fig. 5. The Singapore General Hospital (Bowyer Block) in 1941/1942 during the Japanese Invasion. Note the red cross on the roof; despite this, several bombs fell in its vicinity (collection of Dr Cheah Jin Seng).

Fig. 6. A bill from the General Hospital dated 10.11.22; note the operation fees was $50 in 1922.

Fig. 7. The porcelain tea set used in the “A Class” wards of the Singapore General Hospital (circa 1950).