

The early history of pharmacy in Singapore

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As in his previous articles on the history of medicine in Singapore, this one also has many quotations from primary sources. The author believes that this makes more interesting reading and gives a better sense of the times than a rehash of the results of his researches.

The King Edward VII College of Medicine started training pharmacists in 1935.

Certain background historical knowledge is necessary to trace the development of pharmacy as a Profession in Singapore⁽¹⁾. Records are very scanty. There are very few references to pharmacy in the official records and newspapers.

The Straits Settlements comprising Singapore, Penang and Malacca were British possessions for nearly 130 years. Penang and Malacca are now constituent States in Malaysia, and Singapore is an independent sovereign Republic.

A brief resume of the establishment of the Straits Settlements is as follows:

In 1786, Sir Francis Light acquired Penang; in 1819 Sir Stamford Raffles acquired Singapore, and in 1824 by the Anglo-Dutch Treaty, Malacca was transferred to the British in exchange for Bencoolen on the west coast of Sumatra. Thus by 1824, the three British settlements were established, and by 1826, were known as the Incorporated Settlements of Prince of Wales Island, Singapore and Malacca with Prince of Wales Island (Penang) being the capital.

The headquarters of the Civil Medical Department of the Straits Settlements was in Penang, and the Government Medical Services were very modest in the early years. There was a Senior Surgeon (sometimes called the Superintending Surgeon), the professional and administrative head of the Service in Penang, and an Assistant Surgeon at each of the three settlements. (The term "Surgeon" denoted a rank, not that the holder was a "surgical specialist"). These doctors were assisted by a few Medical Subordinates, e.g. Apothecaries, in the performance of their duties. The designation "Apothecary" was also rank. It did not mean that the holder was a "pharmacist, druggist

or chemist". They were actually "second class" non-British doctors who had not qualified in the United Kingdom. They had obtained their medical qualifications from Indian Medical Colleges. They were treated as assistant doctors by the British.

In 1832, the capital was transferred to Singapore, and in 1835, the headquarters of the Medical Department also moved to Singapore.

Since Penang was founded 33 years before Singapore, and was the capital before Singapore, reference would have to be made to developments in Penang every now and then to illustrate trends in early Singapore.

When Sir Stamford Raffles arrived in Singapore on 28th January 1819 with a detachment of European and Indian troops in seven ships, one medical man, Sub-assistant Surgeon Thomas Prendergast, was responsible for the health of this expedition. He was also in charge of the Medical Stores and Dispensary.

Soon a hospital was needed, and one, actually a shed, was erected in the Cantonment for the troops, but was known as the General Hospital. In 1822, a second General Hospital was built to replace the first one, and although a military hospital, began admitting sick sailors from the many ships calling at Singapore, and the European inhabitants of the place. More staff was needed, and the establishment approved was

An assistant Apothecary who will visit the General Hospital with the Surgeon and have charge of the Medical Stores \$40 p.m.

A Native Compounder attached to this Department \$8 p.m.

When the second General Hospital caved in and collapsed due to decay of the materials used in its construction, a third General Hospital was built in 1827 and put under civil control. Its establishment was as follows:

"J. Caswell Rank: Assistant Surgeon

Joseph Powell Rank: Assistant Apothecary. Employed also in the Pauper Hospital.

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John Leicester Rank: Hospital Apprentice. Employed also in the Pauper Hospital and Medical Stores."

The reader may wonder who did all the nursing in the hospital. The Straits Settlements in those early 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, dressers, orderlies, sweepers, coolies, etc.

The Straits Settlements were administered as part of India, and had to depend on the Government of India for personnel to staff its hospitals and Medical Service. As India is about 2,000 miles away, in the days of the sailing ships, replacements were hard to come by whenever vacancies occurred as a result of death or ill-health. It was difficult to get officers to volunteer for service in the Straits Settlements as the settlements in the early years were regarded as backward, and service there was considered a "hardship posting".

The situation was even more critical where the Medical Subordinates were concerned. It was possible for a Medical Officer to supervise all the hospitals and Medical Services in a Settlement, but the actual work was almost entirely borne by the Medical Subordinates.

To remedy this, the man on whose shoulders lay the burden of trying to cope with increasing demands with limited staff, the Senior Surgeon, proposed that local boys should be trained for the Medical Department. He submitted a plan to the Governor on 28th August 1822. The plan was to obtain Apprentices from the Penang Free School, train them and when qualified to perform their duties, to be appointed Assistant Apothecaries. The plan was approved as "judicious" by the Governor and Council.

In March 1823, the Senior Surgeon selected James Ash as the first youth to be apprenticed in the Medical Department. He started his training as a Compounder. And a few more were selected later on. This scheme was not popular.

A description of the duties of an Assistant Apothecary in Penang in 1830 may throw light on why it was difficult to get boys to train for five years, and at the end of which, to receive the poor salary offered:

"He is placed in charge of the medicines at the Convict Hospital, from which the Native Pauper Hospital, Lunatic Asylum and Jails are also supplied.

He has to attend to the Surgeon when he visits the hospitals, take down notes of any important case, register the prescriptions, see to the medicines compounded, superintend the Dressers, register the names, etc. of all the patients who come to hospital, enter their details and draw out returns for them all lastly.

He must be a person who is able to maintain strict discipline in the hospitals, which is sometimes no easy matter, particularly in the Convict Hospital ..."

One can imagine the life of an Apprentice serving under the Assistant Apothecary.

Some of the locally trained Apothecaries left for private practice, some threatened to resign if their salaries were not increased. Some were dedicated and remained in the Service. Two were selected for mention by the Senior Surgeon in 1847:

"..... These two young men emulate each other in zeal and attention. Without the benefit of regular medical education, they have possessed themselves of a very thorough knowledge of Pharmacy, are competent to manage Fractures and Wounds in emergency, and that with no mean skill, and are not without a considerable knowledge of the practice of Medicine."

Two other references to Pharmacy are quoted to demonstrate the sort of training available locally:

In February 1849, an Apprentice who had been educated at the Singapore Institution (Raffles Institution) was selected. After serving a three months' probationary period, the Senior Surgeon certified that he gave "promise of industry and good conduct", and took him under his personal tuition "for a few months longer for the purpose of becoming acquainted with the nature and properties of medicines". The Senior Surgeon also recommended that he should receive his full allowance "upon his passing an examination in Pharmacy at the end of the year".

In 1852, "Rules and Regulations for Apprentices" were published:

".... Apprentices of 3 years' standing will be expected to know how to read and write prescriptions in English, to determine the various medicines by sight and to be able to tell their doses and qualities, as far as whether they belong to the class of purgatives, emetics, diuretics, etc.

The passed Apprentice (after 5 years) will be expected to have a thorough knowledge of Materia Medica, to know the components and proportion of all the official preparations, to be able to tell the effects and the doses in which they are given."

By contrast, some of the British doctors qualified in the United Kingdom during the same period, had their pharmacy training in the universities⁽²⁾:

General and Professional Education of Assistant Surgeon J.G. Sim, M.D. Edinburgh:

After a general education which included Greek, Latin, Humanities and Mathematics, he went to Edinburgh to study Medicine:

1820 - became Apprentice to Professor Russell and Messers Bell.

Winter session 1820/21 - Chemistry and Pharmacy by Prof Hope.

Winter session 1821/22 - Materia Medica by Prof Dunearn.

Winter session 1823/24 - Chemistry and Pharmacy by Prof Hope.”

“Dr John Scott, M.D. St Andrew’s, F.R.C.S.I., a general practitioner in Singapore during the 1850s and 1860s, had an additional qualification - Certificate (or Diploma) of qualification in Chemistry, Botany, Materia Medica and Pharmacy, the compounding and administering of medicines, and in Medical Jurisprudence and Toxicology from the Royal College of Surgeons of Ireland”.

On 1st April 1867, the Straits Settlements were transferred from the India Office to the Colonial Office and became a Crown Colony with its own Legislative Council.

The Apprenticeship Scheme was a failure. But relying on India for the supply of Apothecaries was not ideal. The men recruited were not the best available, and they were ignorant of the many languages, dialects and customs of the local multi-racial society.

A third alternative was suggested: that local boys be trained at the Madras Medical College to be Apothecaries. The proposal was approved by the Government.

In 1869, the first two boys were sent to the Madras Medical College. Thenceforth young men from the Straits Settlements were sent regularly to Madras with occasional breaks in continuity until 1904, the year before the Straits and Federated Malay States Government Medical School (as the King Edward VII College of Medicine was known then) was founded.

From the above introduction, it is obvious that pharmacists in the modern sense of the word did not exist in Singapore during the times under discussion. Those were the days of the simple mortar and pestle, weighing scales and leeches.

We will now deal with who performed some of the duties of pharmacists (known as druggists and chemists in those days). There were two groups. Those in the private sector and those in the public (government) service.

The first doctor in private practice arrived in Singapore on 21st July 1826. He stated that he was a “Surgeon and Druggist” in this letter⁽³⁾:

*To The Honourable J. Prince, Esq.,
Resident Councillor,*

Sir,

In compliance with your circular presented to me this forenoon, I beg to inform you that I arrived at this Settlement on the 21st July 1826. My profession here is as a Surgeon and Druggist, and that I have no permission from the Honourable Court of Directors for residing here.

I have, etc. A. MARTIN.”

(Druggist is a person qualified to fill prescriptions, and authorised to sell drugs and medicines).

The private practitioners in early Singapore advertised often and freely in the newspapers about their practices and related matters. From these advertisements, one can draw some conclusions about the practice of “pharmacy” in those days.

Another Dr Martin, M.J. Martin, who owned the Singapore Dispensary, advertised that he had started a private hospital in the Singapore Chronicle on 24th May 1832, and in nine subsequent issues⁽⁴⁾:

Hospital for Seamen

M.J. MARTIN, Surgeon, begs to inform Commanders of Vessels trading in this Port that he has fitted up a House in a very desirable situation as a Hospital for the reception of sick European and other Seamen.

Singapore Dispensary, Commercial Square.

The same advertisement also announced the sale of Soda Water at \$1.50 per dozen bottles. Later advertisements stated that the soda water was manufactured at the Dispensary.

In July 1834, Mr Charles Wilson, Surgeon, while visiting Singapore decided that the opportunities were bright and became a resident. He advertised his practice and his private hospital⁽⁵⁾.

He must have done very well. After eight months, he could expand and open a Dispensary for the retail sale of drugs, and to fill the prescriptions of other doctors, and he informed the public thus⁽⁶⁾:

“..... The circumstances under which I remained here precluded the possibility of affording a supply of medicines to those who might wish to purchase, having had only sufficient for my private practice,

but now having an open dispensary, and receiving supplies from London and Calcutta, I shall be able to accommodate those friends who may wish to favour me with their commands. I shall always prepare those prescriptions entrusted to my care from Medical Gentlemen or private families with my own hands, and this I hope will give more confidence to my friends.”

J.I. Woodford was one of the local boys trained to be Apothecaries in Penang in the 1820s. When he left the Government service, he started the Kampong Glam Dispensary in Singapore. He was listed as a “Chemist and Druggist” in the 1846 Singapore Directory⁽⁷⁾. In 1847, Martin & Little of the Singapore Dispensary were included in the list of “Chemist and Druggist⁽⁸⁾.”

Woodford advertised, apart from the opening hours of his dispensary, also that “Medical prescriptions will meet with prompt and careful attention at all times. Medical chests can be filled up and supplied on short notice, and at moderate rates.”

Over the years, he advertised the sale of many patent medicines and books on medicine and sex for laymen, e.g.

- A few dozens of **ESSENCE OF GINGER** and a few **CHAMOIS SKINS**⁽¹⁰⁾.
- For sale - **GROSWELL & CO'S PERFUMERY; CHAMOIS LEATHER; A FEW BOTTLES OF FINE BUSSORAH AND GHAZEPORE ROSE WATER; GENUINE KAYU PUTIH OIL; ORANGE FLOWER WATER; CARRAWAY SEEDS AND A FEW CHILDREN'S TRUSSES.**
- **FLUID MAGNESIA** to be had at the above Dispensary.
- **CAPSULES OF BALSAM OF COPAIBA**, pure and without smell or taste⁽¹¹⁾.
- **KEATING'S COUGH LOZENGES**⁽¹²⁾.
- **THE PHYSIOLOGY OF MARRIAGE**⁽¹³⁾.
- Sex preservation - on the secret infirmities of youth and maturity with 40 coloured engravings⁽¹⁴⁾.

The Singapore Dispensary's advertisements over the years, apart from the medical services available, included⁽¹⁵⁾:

The Dispensary is open for the sale of medicines and the answering of prescriptions from 9am to 5pm daily. Medicine chests are fitted with the requisite medicines and their directions for a tropical climate, while particular medicines with their directions can be supplied to those visiting countries subject to peculiar endemics.

Resident Dispenser⁽¹⁶⁾:

R. Tucker in 1850; Thompson in 1851; Robert Jamie (manager and dispenser) in 1861. Originally Dr Little himself resided on the premises.

- **HOLLOWAY'S PILLS AND OINTMENT, WITH TESTIMONIALS**⁽¹⁷⁾.
- **PULVERMACHER'S PATENT PORTABLE HYDROELECTRIC CHAIR** - cures many diseases. Sole agent⁽¹⁸⁾.
- **QUINTESSENCE OF JAMAICA GINGER AND CAMOMILLE.**
- **ESSENCE OF SARSAPARILLA (ROYAL COLLEGE OF PHYSICIANS).**
- **COD LIVER OIL.**
- **CITRATE OF MAGNESIA.**
- **ORIENTAL OR PERSIAN DENTIFRICE**⁽¹⁹⁾.

Commercial enterprises in Singapore also jumped on the band-wagon, and extolled the virtues of medical gadgets, miracle cures, and medicines, etc :

- **GALVANO-ELECTRIC AND MAGNETIC RING** - prevents and cures many diseases⁽²⁰⁾.
- **CURE FOR TUBERCULOSIS (TB)** with testimonials⁽²¹⁾.
- **ANTIRETHISMA** for prickly heat and mosquito bites⁽²²⁾.
- **NEW FRENCH CURE FOR V.D.** with sex book⁽²³⁾.
- **VICHY WATERS. IODATED SIRUP OF HORSE RADISH** (better than Cod Liver Oil⁽²⁴⁾).
- **CORDIAL OF BENEDICTINE MONKS OF THE ABBY OF FECAMP.**
- Book - **MANAGEMENT OF INFANTS AND CHILDREN IN HEALTH AND DISEASE**⁽²⁵⁾.

There was no control then of “medical” advertisements with their unsubstantiated, misleading and dubious claims. Over the years, there were many changes among the doctors in Singapore. Only Woodford and Martin Little advertised the sale of patent medicines, etc. Dr W Maney of the Central Dispensary advertised that he was willing to visit homes of parents and guardians to vaccinate children, and “Medicine chests replenished⁽²⁶⁾”.

Most of the doctors did their own dispensing, or had a dispenser or unqualified assistants. Woodford had a partner, Leonard Scheeder, in 1861, and renamed his dispensary, the New Dispensary, with Henry Woodford as dispenser. Dr J Scott of the Straits Dispensary had William Neil as his dispenser⁽²⁷⁾.

In the public sector, the system of hospital management remained as it was for many more years. The British Medical Officers were in charge but the actual work was done by the Apothecaries. They

were responsible for the patient care, victualling, discipline and general management of the hospital.

Where the hospital dispensary was concerned, they supervised the work of the Apprentices and dispensers.

Poisons were easily available, and were often used by murderers. A few incidents and reports will be quoted to emphasise this point.

At a Coroner's Inquest held on 15th March 1834, there was recorded for the first time, the use of chemical tests (albeit very primitive) for the detection of poisons. Two Malays had thrown some white powder into the cooking pot of some Chinese, two of whom ate the rice from the pot, vomited and died⁽²⁸⁾.

"Dr Oxley having examined the bodies. The contents of the stomach having been carefully preserved, and a portion having been subjected to the two delicate trial tests of the ammoniacal nitrate of silver, and the sulphate of ammonia, with a view of forming the arsenite of silver and the sulphate of arsenic, had precipitates highly indicative of those substances; the latter test, more particularly threw down its characteristic precipitate of a fine lemon colour."

At another Inquest held on 14th October 1848, Mr Traill, the Assistant Surgeon, stated that he found about half a teaspoonful of white powder in the stomach of the deceased, and

"some of the powder was thrown on heated charcoal. It caused a strong odour like garlic, so far resembling arsenic; more I cannot determine until I have further tested the powder. The rice shown to me by Constable Hill showed parts of a similar-looking powder"⁽²⁹⁾.

To demonstrate the ease with which poisons could be obtained, another case will be quoted. A man went to a dispensary and asked for arsenic. When his request was turned down by the apothecary, he retorted, "No matter, I can get it anywhere in the bazaar." There was even an editorial in the Singapore Free Press on 6th September 1850 on this subject⁽³⁰⁾.

"Attempts to poison and deaths from the same cause are not of rare occurrence to this Settlement. Without mentioning many suspicious deaths which have happened at short intervals during the last few years, the Police Book proves that a number of information have been laid in cases of poisoning, but every facility being given by the local customs to conceal the perpetration of such horrid crimes, the Police could not, and it was impossible ever to trace the chain of events which would have been required

to substantiate the charges. In all the small Kling stalls throughout the whole town, we may see arsenic exposed and offered for sale openly, this poison lying close and often being in contact with tamarinds, onion, salad, sugar, etc."

Opium was the other drug commonly used by murderers, and by suicides and attempted suicides.

The Grand Jury on 16th April 1853 made this Presentment on the perennial problem of unrestricted sale of poisons⁽³¹⁾:

"The Jurors present that the unrestricted sale of arsenic (and other poisons) in the Bazaar, where they are found placed side by side with condiments and other articles used in cooking, is highly objectionable and dangerous to the community. The Jurors are of the opinion, that the sale of such articles should be restricted to persons licensed by the Superintendent of Police, and that they should be bound to keep a Register of all sales, and of the purchasers' names." (The Poisons Ordinance was not passed until 1905 - 52 years later).

There were attempts to control the availability and use of opium and morphine by law. The Opium Ordinance and the Morphine Ordinance were passed.

In 1904, these two ordinances were amended with a view to bringing those dealing in these drugs as Chemists and Druggists under more efficient control, and restricting all unqualified medical men from prescribing them.

Then the Poisons Ordinance (X of 1905) was passed and brought into force for regulating the possession and sale of poisons. Only qualified Chemists (pharmacists) and those holding certificates of competence from the Principal Civil Medical Officer (equivalent to today's Director of Medical Services) were licensed to deal in retail. Others were given wholesale licenses. All licensed premises were regularly inspected. When necessary, prosecutions of law-breakers were instituted and convictions obtained.

The Police were also very vigilant in the carrying out of the Morphine Ordinance, and several cases were brought to Court for infringement of the law. Cases were also brought against Chemists (pharmacists) by the Medical Department for infringement of the Poisons Rules (made under the Poisons Ordinance)⁽³²⁾.

In that year, five candidates passed the required examination as Chemists and obtained certificates from the Principal Civil Medical Officer.

Later when the Straits and Federated Malay States

Government Medical School (as the King Edward VII College of Medicine was known then) was founded in July 1905, the preparation and examination of candidates for the Pharmacy Certificate, which was recognised by the Principal Civil Medical Officer for the issue of licences under the Morphine and Poisons Ordinances, were carried out under the auspices of the Medical School⁽³²⁾.

In 1907, the Morphine Ordinance was repealed and the new Deleterious Drugs Ordinance (XIV of 1907) was passed in July in order to better deal with the abuse of deleterious drugs (at that time, opium, morphine and cocaine and their derivatives).

New Rules under the Poisons Ordinance were also issued. During the year, 13 wholesale, 37 retail and seven wholesale and retail licences were issued for poisons⁽³³⁾.

In 1908, two licences were issued under the Deleterious Drugs Ordinance, and 57 licences for either wholesale or retail or both were issued under the Poisons Ordinance in Singapore⁽³⁴⁾.

Thereafter, licences continued to be issued to qualified persons under the Deleterious Drugs and Poisons Ordinances.

In 1910, the Deleterious Drugs Ordinance was amended and came into force in October. It was again amended in 1913, and many times more later on - 1925, 1927, 1928, 1935, 1937 and 1939 - to better deal with deleterious drugs⁽³⁵⁾.

In 1908, the Straits and Federated Malay States Government Medical School Ordinance 1905 was amended and a new section added (section 26) to legally allow the Medical School to examine candidates and grant certificates of competency and knowledge to chemists (pharmacists):

“26. It shall be lawful for the Council after such examination as it shall consider proper, to grant to any chemist resident in the Colony a certificate of competency.”

In June 1912, the Governor sent the Secretary of State for the Colonies the syllabus for the Pharmacy Certificate awarded by the Medical School. This was for the Pharmaceutical Society of Great Britain, which wanted to assess standards before deciding to have reciprocal relations with pharmaceutical societies in other parts of the British Empire⁽³⁶⁾.

A reply was received in December 1913. The Pharmaceutical Society of Great Britain had agreed to have reciprocal relations with societies in the Colonies⁽³⁷⁾.

In 1913, the name of the Medical School was changed to King Edward VII Medical School. The Annual Report of that year had this item⁽³⁸⁾:

“Extra-mural Examinations:”

Qualified Dispenser. One student out of three candidates obtained his Pharmaceutical Licence under the provisions of the Deleterious Drugs and Poisons Ordinances after attending the required classes and passing the examination. The scope of this examination on the recommendation of the Straits Pharmaceutical Association, has been materially widened and the standard raised.”

The Poisons Ordinance was amended in 1916⁽³⁹⁾.

In 1921, the name of the Medical School was changed to King Edward VII College of Medicine.

In 1926, a new General Hospital (the second at Sepoy Lines, to replace the 1882 General Hospital) was opened. It was decided that the new hospital should have a qualified pharmacist. Mr T Roebuck was appointed to the new post of Dispensing Chemist, General Hospital, in February 1928. He was also appointed Lecturer in Pharmacy in the King Edward VII College of Medicine⁽⁴⁰⁾.

Soon it was realised that locally trained pharmacists were necessary to administer and enforce the widened scope of the Deleterious Drugs and Poisons Ordinances, and to protect the public.

On 2nd October 1933, the Registration of Pharmacists Bill was read a first time in the Legislative Council. The second reading, committee and third reading took place at the 25th October 1933 meeting of the Legislative Council. The Bill was passed and became Ordinance No. 30 of 1933 - “An Ordinance to provide for the Registration of Pharmacists.”⁽⁴¹⁾

The object of this ordinance was to provide for the training of pharmacists and also for the registration of properly qualified pharmacists in the Straits Settlements.

In greater detail, the Ordinance, among other things:

- (a) established the Pharmacy Board and its constitution;
- (b) established the Register of Pharmacists;
- (c) restricted the use of certain titles (pharmaceutical chemist, pharmacist, chemist and druggist, druggist or pharmacist) to qualified pharmacists registered under the Ordinance;
- (d) specified the persons entitled to be registered under the Ordinance.
- (e) stated the conditions as to the “sale of drugs” (amended in 1937 to “keeping, retailing, dispensing and compounding of poisons and deleterious drugs”) by registered pharmacists and bodies corporate.
- (f) specified the circumstances under which

the Board might cancel an annual practising certificate and order the removal from the Register the name of any registered pharmacist.

Mr T Roebuck had three publications in 1933:⁽⁴²⁾

- (a) Notes on the British Pharmacopoeia 1932.
- (b) A guide to the British Pharmacopoeia 1932.
- (c) A course of dispensing for Medical Students.

Because of the passing of the Registration of Pharmacists Ordinance, another post of Dispensing Chemist was needed and created in 1934 for appointment in 1935⁽⁴³⁾.

Things were moving for the training of pharmacists locally. Future developments for 1935 were mapped out⁽⁴⁴⁾:

“Course of Training of Pharmacists.

In order to put into operation a course of training already planned at the College of Medicine for pharmacists, provision has been made in 1935 for the engagement of an additional dispensing chemist. After his arrival, a course of lectures and practical demonstrations will be started. The course of the College of Medicine will last for one year and will follow a term of three years apprenticeship served by the candidate with a qualified chemist. On passing an examination at the completion of the course, the successful candidate will be eligible for registration under the Registration of Pharmacists Ordinance. It is hoped that in course of time, a sufficient number of qualified pharmacists will, by this means, be made available to replace the unqualified assistants who are now employed in pharmacies and dispensaries in Singapore and elsewhere in Malaya.”

“In Pharmacy, special stress is laid on local requirements.”

The College of Medicine accepted its first batch of 13 pharmacy students in June 1935⁽⁴⁵⁾. Most of the lecturers were part-time, as evidenced by this despatch.

The Governor informed the Secretary of State on 23rd October 1935⁽⁴⁶⁾:

“Honorarium of \$600 to the Curator of the Herbarium at Singapore for delivering a course of lectures on Botany to students attending the recently instituted course at the College of Medicines for the Pharmacists Qualifying Examinations.”

The first batch of students sat for the qualifying examination for the Diploma in Pharmacy in August 1936⁽⁴⁷⁾:

“The first qualifying examination for the Diploma in Pharmacy was held in August 1936. 13 students sat for the examination of whom 9 passed (2 with

distinction), 2 were referred in pharmaceutical chemistry and 2 failed in all subjects. The results were very gratifying in view of the fact that the standard of the examination is high, and great credit is due to the lecturers.”

In December 1936, there were 187 students including 62 dental and eight pharmacy students in the College of Medicine⁽⁴⁷⁾.

But in 1937, no course in pharmacy was held because of leave arrangements (i.e. the lecturers were in the United Kingdom on leave)⁽⁴⁸⁾.

And the Registration of Pharmacists Ordinance was amended to improve the definition of titles which might be used by registered pharmacists⁽⁴⁹⁾.

When the academic year commenced in June 1938, there was an entry of ten pharmacy students, and in 1939⁽⁵⁰⁾, five of them received their diplomas⁽⁵¹⁾.

By then T. Roebuck was the Senior Dispensing Chemist and A. F. Caldwell was Dispensing Chemist⁽⁵²⁾.

During the Japanese Occupation of Singapore (1942-1945), the General Hospital was used by the Japanese Armed Forces. Kandang Kerbau Hospital served as a general hospital for the local inhabitants, and was known as Chuo Byoin. Mr Lim Teng Kok was the pharmacist in charge of the hospital pharmacy.

After the Japanese Occupation, refresher courses were conducted in the College of Medicine, and Final Professional Examinations in Pharmacy were held in September 1946 for students who had their studies interrupted by the War and the Occupation. Two students were awarded the Diploma in Pharmacy⁽⁵³⁾.

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