「葫蘆裡賣什麼藥:日治時期台灣地區的藥局與藥業困境(觀察與討論)」

(報告大綱)

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Dispensing medicine in the clinic has a long history and still exists in many

areas of East Asia. Private doctors in these places dispense their own drugs, unlike in

western countries where drug dispensing must be done by pharmacists. Conflicts

surrounding the separation of prescribing and dispensing in Japan, Taiwan, and

Korea revealed that this hybridized pattern of clinical practice was not only a

compromise in an era of scarcity in medical resources, but also a rational choice of

the private clinician in the per-1945 medical system in East Asia.

This paper explore the historical roots and structures forming dispensaries or

pharmaceutical clinics in Japan and Taiwan, where the clinicians practice like a

hybridist of pharmacist and physician.

In the following discussion, the terms "pharmaceutical clinic" and "dispensary"

indicate private institutes that provide diagnosis and dispensation together. The term

"scientific Chinese medicine" means OTC drugs with ingredients scientifically

extracted from traditional formulas of Chinese medicine.

The rise of the pharmaceutical clinic/dispensary in Japan

Chinese medicine had dominated Japan and Taiwan for centuries. Not until the

Meiji government issued the "Ise (Medical Regulations)" in 1874, The westernized

system of medical service started in Japan. During the process of enforcing the

"Medical Regulations," the Meiji government exaggerated the elite image of western

medicine and its practitioners, thereby sacrificing the pharmacist's professional

status.

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According to the original Regulation 41 in the "Medical Regulations" the pharmaceutical business in Japanese, with the exception of the traditional herb medicine, had to follow the strict rule of separation of prescribing and dispensing. This rule soon had to be modified in 1884 due to "different social conditions and the historical heritage of herb medicine in our country (Japan)."

Based on the revision, the government allowed the private practitioners to open up dispensaries, where the functions prescribing and dispensing would be combined under the supervision of dispensary clinicians. The rapid growth of the private dispensary was certainly the outcome of the Revision in 1884, but was also an inevitable result when medical graduates of universities decided to be private practitioners. By the early 1890s, Japanese medical education had been established as a three-layer system. On the top, the medical graduates from imperial university system fulfilled the goal of medical westernization. The second layer consisted of "medical colleges." These "colleges" were medical vocational schools attached to high schools. The "medical colleges" were considered to be above secondary education and below the imperial universities, there was another path to becoming a doctor, passing a Ministry of Interior-run examination open to those without any medical educational background. Most examinees learned the minimum knowledge required to pass the examination.

University graduates became practitioners in various public hospital and governmental facilities, while the other doctors of lower ranks practiced in private dispensaries. After a rapid increase in the number of medical graduate in the 1900s, even university graduates had to work in private dispensaries due to the tight job

market in public hospitals.



Although university graduates did start to practice at private dispensaries, the majority of private pharmaceutical clinics were still the territory of practitioners from medical colleges and other resources. After the 1900s, the university graduates in the community united with the lower-rank clinicians and became the leaders of the integrated private clinician sector. When the Great Japan Medical Association was established in 1916, it was led and controlled by private practitioners, and a considerable proportion of the leading doctors consisted of university graduates. The Great Japan Medical Association played a key role in lobbying the government to retain the revision of Regulation 41 of *Medical Regulations* and strongly resisted the request to restore the original vision of Regulation 41.

Compared to the powerful influence of The Great Japan Medical Association after university graduates joined, Japanese pharmacists were obviously in a worse position. In the 1870s, pharmacy department at imperial universities were established only for training to accommodate imported western drugs. Pharmaceutical laboratories, not regular pharmacies, were the main working places for these university graduates. After the issue of *Medical Regulations*, only twenty-nine schools of pharmacy (equal to high-school level) were built in the Meiji era; however, 20 schools closed after the revision. Chart 1 here shows the hierarchical relationship between medical practitioners and pharmacists, along with the training background in each professional group. The colored items represent the main body in each professional groups.

Selling prescription medicine and botanical materials as OTC drugs

A domestic pharmaceutical industry was not established in the Meiji era, the

government being the major importer as well the distributor of western drugs.

The revision of Regulation 41 weakened pharmacist's professional image and fortune. To survive, Japanese botanical pharmacists first took advantage of the shortage in imported medicine during the wartime. In the years of Sino-Japanese War (1894-95) and Russo-Japanese War (1904-05), a manufactory of herb medicine was remodeled produce western-like OTC drugs. The market of herbal medicine was continuously shrinking due to the increase of western medicine, imported and domestically produced. The major change happened right after the WWI. The first generation of pharmaceutical scientists had already returned from Germany and 17 pharmaceutical colleges (at the same level as the medical colleges mentioned above) were built during the Taisho era and the first half of the Showa era, while universities continued training pharmaceutical professionals on the laboratory s.

Like the revision to Regulation 41 which granted dispensation rights to doctors, the revision of *Japanese Pharmacopoeia* (*Nihon Yakkyokuho* 日本藥局方) in 1891 promoted the appearance of scientific Chinese medicine. The version gave new criteria to classify medicine into three categories: fundamental medicine, OTC drugs for health, and botanical medicine. The revision in 1891 classified scientific Chinese medicine as a part of legal medicine. That is, a dispensatory referee in 1938 would list a Chinese herb medicine, 常山 along with other western chemical refrigerants under the same category.

The western classification of prescription medicine and OTC drugs vanished in *Japanese Pharmacopoeia* after 1891, replaced by a hybrid standard of mixing scientific manufacture and experiential effectiveness. Medicine that fit each criteria would be legal for doctor's prescription and pharmacist's selling. While pharmacists

in Japan had lost the right to dispensing medicine to private practitioners, they may have been compensated by selling prescription medicine and botanical drugs as modern OTC drugs, with no clear definition between prescription medicine and OTC drugs.

Than, What happened in Taiwan after 1895

From a political perspective, colonialism could be the most authoritarian form of governmentality. The implementation of the Japanese colonial medicine occurred at great expense to political liberty and human life. The role of private dispensary was more important in colonial Taiwan.

Doctor's monopoly in the market of medical services

The colonial government issued the "Regulation of Medical Practice in Taiwan" right after the occupation, following by the "Regulation for Pharmacist, Drug Sale and Manufactures" in 1896. Both Regulations were almost the same as the precedents in Japan, but lack of pharmaceutical education.

The majority of medical practitioners in colonial Taiwan were graduates of the lical school and of the medical college. Only less than 5% of medical professionals before 1942 received university or higher training. The total number of hospitals increased dramatically after the mid-1920s. However, the number of public hospitals never exceeded 35.

Between 1902 and 1940, 81.87 percent of medical practitioners in public and private facilities were graduates from Taiwan, but only 12.66 percent worked in public hospitals. Of these only 5.46 percent would stay after they completed training in hospitals. The rest and the majority were private practitioners.

Policies also helped private doctors in gaining a monopoly in the market of medical service. In one way, the colonial government attempted to suppress the practice of Chinese medicine. By the end of the 1930s, more than ninety per cent of the doctors in Taiwan practiced western medicine while only two percent less legally treated their patients in Chinese medicine.

In colonial period, no formal pharmaceutical education was ever even considered by the authority. Since the colonial government provided no pharmaceutical training and licensing examination. It was difficult for pharmacists in colonial Taiwan to maintain a professional image; rather, they were often considered medical salesman. This situation deeply harmed the professional status of the pharmacist and their power to be a balanced power from the doctors. Chart 2 shows the career and relationship among three major medical professions, which was very different from the structure presented in chart 1.

The number of legal pharmacists in Taiwan increase from 13 in 1912 to 257 in 1942. The growth of pharmacists actually shows a less dramatic but similar trend than the growth of private dispensaries (figure 1).

Due to the difficulty of accessing the medical facilities in the cities, traditional medicine or botanical materials became the major replacement of western medicine, with their convenience and cheaper price. The growth of botanical drugstores was very fast, especially after 1924 when the number of pharmacies started to decline. In 1942, there were 10,238 botanical drugstores in various sizes, five times the number of pharmacies (2,070).

The revision of *Japanese Pharmacopoeia* in 1891 allowed botanical medicine to be a legal part of prescription medicine. In the following twenty years, an expanding

list of botanical medicines shown in Japanese pharmaceutical manufactures. The only criteria for the production of scientific Chinese medicine was that the materials had to be listed in *Japanese Pharmacopoeia*. Since 1931, not only former Taiwanese OTC manufactories produced scientific herbal medicine, but Japanese pharmaceutical factories also did. The number of OTC manufactures grew from 385 in 1912, 839 in 1927, to the peak of 1,073 in 1933 (figure 3)

Metaphors in supporting the combination of prescribing and dispensing

The combination of prescribing and dispensing medicine as well as some OTC drugs in private dispensaries hurt the business of pharmacy. In colonial Taiwan, the business of pharmacy shrank dramatically after the 1920s. (Figure 4).

In Taiwan, pharmacies found it difficult to survive as private dispensaries took over dispensing business and OTC as well botanical drugstores grew after the 1920s.

Chart 3 shows the businesses practiced in the private dispensary, pharmacy, and OTC (including botanical) drugstore. The business of pharmacies was obviously squeezed from all sides.

Only one business (Sale of OTC drugs) overlapped between the private dispensary and OTC drugstore. However, pharmacies faced competition in all areas, with private dispensary in the first three items and with OTC drugstore in the other two.

A book provided a good case how the clinician of dispensary would sell the medicines from regular OTC drugs to the prescription needs great care. To stomachache, the author's treatments varied from "taking aspirin 0.5 gram with two cups of Japanese rice wine (*Sake*)" to the injection morphine. Generally speaking, the practice of dispensary almost covered major medical services. The patient could

possibly buy any service at dispensary, depended on budget or expectation.

Compared to the variety in the service of dispensary, the pharmacy and OTC drugstores could obviously provide services in limitation.

To survive, pharmacies could in one way play the major supplier for the dispensation in dispensary, or promote herbal OTC drugs in much lower price. To the first strategy, pharmacies cooperated with doctors in medical college to invent OTC drugs from local resources. For instance, during the period of influenza crisis (1918-1920), a big pharmacy Siseitō posted an advertisement "the advanced prevention of influenza" on *Nichinichshinpo*, promoted cough syrups, injections, and even the mask dispensed or invented by faculties of Taipei medical college. Additionally, to imported medicine, western medicine from Japan dominated the pharmaceutical market in Taiwan almost fifty years. Several Japanese—owned pharmacies in Taiwan not only sole the prescription medicines in small pack to regular customers, but also to doctors in the wholesale package.

After the 1920s, the market of scientific herbal medicines such as *Jindan* (仁丹, mouth freshener), *Chujoto* (中將湯, female robortant), and *Rokakusan* (龍角散, cough powder) etc. was soon expending. Almost major pharmaceutical companies had similar products and promoted them with words of scientific study or experiential effectiveness in history. The impact of scientific herbal medicine was influential and the doctors would take the traditional dispensation "chapping (*sazaii*)" for preparing the herbal medicines in the dispensary. As the western and herbal OTC drugs could be sold by regular OTC drugstores, pharmacies, and even the private dispensaries, the benefits of using "science" to promote certain OTC medicines could equally be enjoyed by these three institutions.

Compared to herbal medicines could be "scientificalized", traditional therapy

did not receive attention. Majority of medical professionals in post-war Taiwan still saw Chinese medicine "non-scientific" and superstitious. Without practitioners, herbal medicine in Japan and Taiwan was merely a component of prescription at dispensaries and doctors still refused to accept pharmacist a professional. Restricted by the revised Regulation 41, pharmacies before WWII in Japan and Taiwan were in fact no different from bigger drugstores.

Concluding remarks

Like the concept historians preferred- "today is the sediments of time and events", doctor's resistance to the policy of separation of prescribing and dispensing medicines after 1997 has its reasons deeply rooted in history. The reason "different social conditions and the historical heritage" in supporting the revision of Japanese *Medical Regulations* in 1884 would also mirror the difficulty that we are facing today. Although the separation policy is prevalent in western countries and may be advance in providing double professional (medical and pharmaceutical) protection to the patient, a successful policy needs the linkage with social customs and historical manners. After reviewed the development in the pre- WWII decades, the author found that the problems in enforcing the separation policy can not only blame on the defects of policy design, but also the historical tangle from the past.