Dental education and special dental practitioner-cultivating system in Taiwan during the Japanese colonial period

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Abstract Background/purpose: During the Japanese colonial period, Taiwan had no dental school but had a medical school. This study explored the dental education and research activities in the medical school and special dentist qualification system in Taiwan during the Japanese colonial period.

Materials and methods: This study analyzed the "related incidents and documents of dental education and research and dentist qualification system in Taiwan during the Japanese colonial period.

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Introduction

During the Japanese colonial period, the medical education system for cultivating physicians was introduced to Taiwan for the first time. After several stages of development, Taiwan’s medical education system has progressed to become an important cornerstone for the development of Taiwan’s medicine and public health. The earliest medical education in Taiwan was Taiwan Government Taipei Hospital affiliated medical training institute established in 1897 (Meiji 30). It was a training institution specialized in training Taiwanese to become physicians, and was also a measure to quickly supplement physician manpower in the early days of Japanese rule of Taiwan. In 1899 (Meiji 32), Taiwan Government Medical School was established, which was the earliest medical education institution in Taiwan. After several reforms in the medical education system, it was renamed as Taiwan Government Medical College in 1919 (Taisho 8) and Taiwan Government Taipai Medical College in 1927 (Showa 2). In 1936 (Showa 11), Taipei Imperial University established its Faculty of Medicine. Taiwan Government Taipei Medical College was merged into Taipei Imperial University at the same time, and was called as Affiliated Medical College of Taipei Imperial University. On November 15, 1945, Kuomintang government took over the Taipei Imperial University and changed it into National Taiwan University (NTU). Moreover, the former Faculty of Medicine and Affiliated Medical College were renamed as College of Medicine of NTU. At that time, the College of Medicine of NTU has been developed for 48 years. Undoubtedly, its predecessor can be traced back to Taiwan Government Medical School established in 1899 (Meiji 32). Furthermore, until National Defense Medical College reopened in 1949, College of Medicine of NTU was the only medical college in Taiwan.

Throughout the Japanese colonial period, Taiwan did not establish a local dental school and did not directly implement a dental school education system for cultivating dentists. However, the modern medical system introduced to Taiwan during the Japanese colonial period included the establishment of the legal professional status of physicians and dentists, and their practice management. Although there was no dental school education system for cultivating dentists, dentists were actually active in the Japanese colonial period of Taiwan. In addition, the dental education activities and dental clinical training provided to medical students in the medical school in Taiwan did exist. The Department of Dentistry, College of Medicine, NTU was established in 1953, but its predecessor during the Japanese colonial period has rarely been studied for further exploring the history of dental education. It is generally believed that in 1906 (Meiji 39), the Department of Surgery of Taiwan Government Taipei Hospital established a dental treatment room, which was the earliest predecessor of the Department of Dentistry at National Taiwan University Hospital (NTUH). Moreover, it became an independent dental department in 1910 (Meiji 43). However, there should still be differences between the medical system and the medical education system. Therefore, from the perspective of medical system, the dental treatment room of the Department of Surgery of Taipei Hospital in 1906 (Meiji 39) is the earliest predecessor of the Department of Dentistry of NTUH. Even in Taipei Hospital, the dental treatment room since 1906 (Meiji 39) or the independent dental department since 1910 (Meiji 43) might have dental teaching activities and clinical dental training for medical students. However, from the perspective of dental education system, the predecessor of the Department of Dentistry of NTU should have another affiliation.

In the Japanese colonial period, although there was no dental school in Taiwan, studies of the dentistry-related incidents and documents revealed that there were still dental education and research activities in the medical school and a special dentist qualification system in Taiwan. Therefore, this study tried to explore the dental education and research activities in the medical school and special dentist qualification system in Taiwan through the collection and analysis of historical materials during the Japanese colonial period. We hope that the results of this study can
be an important reference for studying the history of dentistry and dental education in Taiwan.

Materials and methods

This study adopted the historical method to inquire the issues on "related incidents and documents of dental education and research and dentist qualification system in Taiwan during the Japanese colonial period". By analyzing the records of relevant historical materials, the historical facts about dental education events were described as follows: 1) the earliest dental courses in the medical school; 2) the earliest dental teacher in the medical school; 3) the first independent dentistry subject in the medical school curriculum; 4) the earliest medical school’s graduation examination for dentistry; 5) the system for cultivating dental practitioners in Taiwan; 6) the departments involved in the teaching and research of dentistry in the medical school; 7) the earliest teaching and research unit officially named in dentistry; and 8) the source of "real" dentists in Taiwan.

The historical materials used in this study were divided into two types: direct historical materials (original historical materials) and indirect historical materials (second-hand historical materials). The direct historical materials were the Taiwan Governor-general’s Archives, which could be searched online from Taiwan Historica. The indirect historical materials included Official Gazette, Annual Report of Taipei Hospital, Introduction of Taiwan Government Medical School, Introduction of Taiwan Government Medical School, Introduction of United States for investigation of dental treatments (Table 1). In 1915, it was promoted to be a professor. When he was in Taiwan, he taught "Dentistry and Clinical Practice" to the medical students in their fourth academic year. Later, he taught "Theory of Dentistry" and irregular outpatient clinical lectures to the medical students in their third and fourth academic years until his resignation in 1926 (Taisho 15) (Table 1). According to the literature, Professor Ansawa was the earliest teacher who taught dentistry in the medical school in Taiwan.

The earliest dental courses in the medical school

The 1899 (Meiji 32) "Taiwan Government Medical School Regulations" did not list "Dentistry" as a teaching subject for medical students. However, in the development of medicine, as early as the 18th century in Europe, treatments of dental problems were considered to be part of surgery. Problems involving teeth needed to be handled by doctors who had received special surgical training. The inheritance of the early dental profession was actually derived from orthodox surgical training. Therefore, it is inferred that when "Dentistry" had not yet been listed as an independent teaching subject on the teaching subject schedule of the medical school, the surgery courses might include dentistry subject. The "General Surgery" of the medical school was taught in the third semester of the second academic year of undergraduate, while the "Surgery Monographs and Clinical Practice" was taught in the third and fourth academic years of undergraduate. According to the first graduates of the medical school in 1902 (Meiji 35), it is estimated that the above courses were all started in 1900 (Meiji 33) for the first time. The literature showed that the "General Surgery" and "Surgery Monographs and Clinical Practice" were first taught to medical students in 1900 (Meiji 33). The part of dentistry covered by these surgery courses might be the earliest dental courses in the medical school. It was not until 1918 (Taisho 7) that a separate teaching subject of "Dentistry" appeared on the teaching subject schedule of the medical school.

The earliest dental teacher in the medical school

Dr. Kaname Ansawa, from Niigata Prefecture, graduated from the Medical Faculty of Tokyo Imperial University in 1911 (Meiji 44) and obtained the qualification of a physician in the following year. He was mainly a surgeon, and worked as an assistant in the Medical Faculty of Tokyo Imperial University before he came to Taiwan. Dr. Kaname Ansawa came to Taiwan in 1914 (Taisho 3) and worked in Taiwan Government Taipei Hospital. He was appointed as the director of the Department of Dentistry and concurrently as a lecturer in the medical school (Table 1). In 1915, he was promoted to be a professor. When he was in Taiwan, he taught "Dentistry and Clinical Practice" to the medical students in their fourth academic year. Later, he taught "Theory of Dentistry" and irregular outpatient clinical lectures to the medical students in their third and fourth academic years until his resignation in 1926 (Taisho 15) (Table 1). According to the literature, Professor Ansawa was the earliest teacher who taught dentistry in the medical school in Taiwan.

The first independent teaching subject of dentistry in the medical school curriculum

From 1899 (Meiji 32) to 1917 (Taisho 6), the Taiwan Government Medical School never had an independent teaching subject of “Dentistry” on its teaching subject schedule. In 1918 (Taisho 7), the medical school established a medical department for Japanese students. At that time, the undergraduate and medical departments of the medical school had a teaching subject "Theory of Dentistry", which was the first independent teaching subject of "Dentistry" to appear on the teaching subject schedule of the medical school.
The earliest medical school’s graduation examination for dentistry

From Taiwan Government Medical School to Affiliated Medical College of Taipei Imperial University, “Dentistry” has not been listed as an official teaching subject of the graduation examination for medical students. However, before 1918 (Taisho 7), the diploma of the medical school must include the teaching subject of the graduation examination and the teacher’s name. In 1915 (Taisho 4), there was a lecturer Kaname Ansawa under the teaching subject “Surgery” on the diploma. It is obvious that Dr. Kaname Ansawa, a dental teacher, also participated in the work of the medical students’ graduation examination. Therefore, the dentistry part in the teaching subject “Surgery” of the 1915 (Taisho 4) graduation examination for medical students should be the earliest dentistry graduation examination found in the medical school in the current literature. Until 1936 (Showa 11), the newly established Faculty of Medicine of Taipei Imperial University listed "Dentistry & Oral Surgery" as an independent graduation examination subject.8 In addition, the graduation examination for medical students of the Faculty of Medicine was held for the first time in 1940 (Showa 15).

The departments involved in the teaching and research of dentistry in the medical school

The Taiwan Government Medical School established in 1899 (Meiji 32) only set up the Medical Preparatory Department and Undergraduate Department. In 1918 (Taisho 7), it also set up the Special Department, Tropical Medicine Department, and Research Department. Among these departments, the Research Department recruited graduates from the medical school for further study in a certain medical branch (dentistry was also an optional medical branch), and the expected period of study was less than three years.8 Due to the regulations regarding the dental specialty license for physicians announced in 1918 (Taisho 7), Taiwan Government Medical School (renamed as Taiwan Government Medical College in 1919) was the only school which provided dental courses in Taiwan at that time. It was discovered from the dental specialty license application documents that some applicants who had finished dental training in the Department of Dentistry at Taipei Hospital or Japanese Red Cross Society Taiwan Branch Hospital before the announcement of the regulations could also apply for the dental specialty license after the announcement of the regulations. In addition, some medical school graduates who enrolled in Taiwan Government Medical College Research Department for research of dentistry could also obtain the dental specialty license to practice dentistry after the announcement of the regulations. Although they were not well-trained dentists, they were indeed dental practitioners cultivated in Taiwan.

The system for cultivating dental practitioners in Taiwan

Although there was no dental school or dental college in Taiwan during the Japanese colonial period, an educational system for cultivating dental practitioners still existed. In 1918 (Taisho 7), Taiwan Government announced the regulations regarding the dental specialty license for physicians. Physicians who had finished dental courses and training in medical schools and were deemed to have sufficient dental skills could apply to the government for the dental specialty license which allowed the qualified physician to practice dentistry in Taiwan. For physicians, this license was equivalent to a dentist license.4 Some medical school graduates who had finished dental training in the Department of Dentistry of Taipei Hospital or Japanese Red Cross Society Taiwan Branch Hospital before the announcement of the regulations could also apply for the dental specialty license after the announcement of the regulations. In addition, some medical school graduates who enrolled in Taiwan Government Medical College Research Department for research of dentistry could also obtain the dental specialty license to practice dentistry after the announcement of the regulations. Although they were not well-trained dentists, they were indeed dental practitioners cultivated in Taiwan.

| Position of school | Position of Taipei Hospital |
|--------------------|-----------------------------|
| 1914 (Taisho 3)    | Arrived (1914.5.5)          |
| Lecturer of Taiwan Government Medical School | Director of Dental Department |
| 1915 (Taisho 4)    | Professor of Taiwan Government Medical School |
| 1916 (Taisho 5)    | —                           |
| 1917 (Taisho 6)    | —                           |
| 1918 (Taisho 7)    | —                           |
| 1919 (Taisho 8)    | Professor of Taiwan Government Medical College |
| 1920 (Taisho 9)    | —                           |
| 1921 (Taisho 10)   | Investigation of dental treatments in European countries and the United States (1920.12.25—1922.12.21) |
| 1922 (Taisho 11)   | —                           |
| 1923 (Taisho 12)   | Professor of Taiwan Government Medical College |
| 1924 (Taisho 13)   | —                           |
| 1925 (Taisho 14)   | —                           |
| 1926 (Taisho 15)   | Resignation (1926.7.29)    |
Medical School Research Department (for the field of dentistry) in 1918 (Taisho 7) was the earliest department involved in the teaching and research of dentistry in the medical school and was also an education institution for cultivating dental practitioners in Taiwan. After that, Taiwan Government Medical College, Taiwan Government Taipei Medical College, and Affiliated Medical College of Taipei Imperial University still had this channel for cultivating dental practitioners in Taiwan (Table 2).

The earliest teaching and research unit officially named as dentistry

In 1939 (Showa 14), the Chair of Dentistry was established in the Medical Faculty of Taipei Imperial University, which was the 24th Chair of the Medical Faculty. Two chair professors of surgery were responsible for the teaching of oral surgery courses, while assistant professor Heijirou Oohashi, a dental teacher, was responsible for the teaching of dentistry courses for the medical students. The Chair of Dentistry was jointly held by the three of them. In addition, the Chair of Dentistry or its chair classroom (dental classroom) was the first teaching and research unit officially named as dentistry.

The source of "real" dentists in Taiwan

During the Japanese colonial period, Taiwan’s medical management system regulated that dentists must be graduates of public or officially recognized private dental schools. These dental school graduates are the real dentists in law. At that time, only Japan and Chosén had dental schools. According to the literature, the regular dentists in Taiwan were Japanese dentists who came to Taiwan for career development and Taiwanese (majority) and Chosén (few) to study dentistry and then returned to Taiwan to practice after graduation. According to statistics from Taiwan Government, by 1942 (Showa 17), there were 567 dentists registered to practice in Taiwan. Among them, 546 served in the dental clinics, 12 served in the hospitals, and 9 served in the public institutions.

The dental education activities in the possible predecessor of Department of Dentistry of National Taiwan University during the Japanese colonial period

The dental education activities in the possible predecessor of Department of Dentistry of NTU during the Japanese colonial period were the teaching of dental courses in Taiwan Government Medical School. The dentistry parts of the subjects of “General Surgery” and “Surgery Monographs and Clinical Practice”, which were first taught to medical students in 1900 (Meiji 33), might be the earliest dental courses taught in the medical school. However, there was no historical material to support the corollary of this study. It was not until 1914 (Taisho 3) that for the first time there was a dental teacher, Dr. Kaname Ansawa, who taught “Dentistry and Clinical Practice” in the Taiwan Government Medical School. Therefore, in 1914 (Taisho 3), the medical school hired a dental teacher to teach dental courses, which should be regarded as the earliest dental education activities in the possible predecessor of Department of Dentistry of NTU during the Japanese colonial period.

Discussion

The modern medical education system introduced in Taiwan during the Japanese colonial period was only medical education for cultivating physicians. There was no

| Year          | Department                                      | Purpose                                                                 |
|---------------|-------------------------------------------------|------------------------------------------------------------------------|
| 1918 (Taisho 7)| Taiwan Government Medical School Research Department | To recruit graduates from the medical school for further study in a certain medical branch (including the field of dentistry) The length of study was within three years. |
| 1919 (Taisho 8)| Taiwan Government Medical College Research Department | To recruit graduates from the medical school or those who were agreed by the dean for further study in a certain medical branch (including the field of dentistry) The length of study was within three years. |
| 1927 (Showa 2)| Taiwan Government Taipei Medical College Research Department | To recruit graduates from the medical school or those who were agreed by the dean for further study in a certain medical branch (including the field of dentistry) The length of study was within three years. |
| 1936 (Showa 11)| Affiliated Medical College of Taipei Imperial University | To recruit graduates from the medical school or those who had the qualification of a physician or a dentist as a postgraduate to study in school (including the field of dentistry) The length of study was within three years. |
| 1939 (Showa 14)| Chair of Dentistry of Medical Faculty of Taipei Imperial University | Responsible for the teaching of dental courses for medical students (including Dentistry, Oral Surgery, and dental outpatient clinical lectures in the fourth academic year) |
dental education for cultivating dentists. Current research on the medical history of Taiwan generally focuses on the development of medical education system for physicians. The development of dental education system for dentists, apparently, receives less attention. This study thus attempted to excavate the records of "related incidents and documents of dental education and research and dentist qualification system in Taiwan during the Japanese colonial period" in the literature, reconstructed the appearance of Taiwan's dental education and research, summarized the dental education activities in the possible predecessor of Department of Dentistry of NTU, and described the special dentist qualification system in Taiwan during the Japanese colonial period.

In the medical system of the hospital, a dental treatment room was established in the Department of Surgery of Taiwan Government Taipei Hospital in 1906 (Meiji 39), and then it became independent as the Department of Dentistry in 1910 (Meiji 43). In addition, in the medical education system, there was a Chair of Dentistry (its chair classroom was the dental classroom) established in 1939 (Showa 14) in the Medical Faculty of Taipei Imperial University. The above three units were officially named "dentistry or dental" in the hospital or medical school during the Japanese colonial period. Many modern profiles about the predecessor of Department of Dentistry of NTU often confuse the differences among the above three units and have false reports. In fact, the Department of Dentistry of NTU is a unit of the education system, while the Department of Dentistry of NTUH is a unit of the teaching hospital, although the staffs in the two units overlap each other (i.e., one person is a school teacher and is also a hospital physician or dentist at the same time). This situation was also true during the Japanese colonial period. In this case, the predecessor of the education system and that of the dental treatment system should still be different. Therefore, it should be unquestionable that the dental treatment room of the Department of Surgery of Taiwan Government Taipei Hospital in 1906 (Meiji 39) is the earliest predecessor of the Department of Dentistry of NTUH and it should not be regarded as the predecessor of the Department of Dentistry of NTU.

In the past, Taiwan’s research on dental education in the medical school during the Japanese colonial period was very lacking. As a result, the description of the predecessor of the Department of Dentistry of NTU in the history of College of Medicine of NTU was very few or even mistaken. This study examined the timelines, organizations, characters, and dental education events related to the medical school during the Japanese colonial period, described the historical facts of dental education events in the medical school, and clarified the timing of their occurrences, which would help to trace the predecessor of Department of Dentistry of NTU. This study provided important information about the history of dental education and research in the medical school during the Japanese colonial period. The results of this study may be an important reference for further inquiries of the dental education history in Taiwan.

Although the teaching subject schedule of Taiwan Government Medial School from 1899 (Meiji 32) to 1917 (Taisho 6) did not include a separate teaching subject of "Dentistry", we could not assume that there were no dental courses for medical students at that time. From the viewpoint that dental treatments were also part of surgery, this study inferred that the "surgery" curriculum in the medical school might include dental courses. The teaching subject "General Surgery" for the first graduates of the medical school in their third semester of second academic year started in January 1900 (Meiji 33), and the teaching subject "Surgery Monographs and Clinical Practice" in their third academic year started in April 1900 (Meiji 33). Therefore, the earliest dental education in Taiwan may have occurred in the "surgery" curriculum of the medical school in 1900 (Meiji 33). Even so, the above inferences are currently not supported by historical materials and should not be considered as the dental education activities in the predecessor of the Department of Dentistry of NTU.

For inquiring the dental education activities in the predecessor of the Department of Dentistry of NTU, there are two important time points: 1914 (Taisho 3) and 1918 (Taisho 7). This study found from historical materials that Dr. Kaname Ansawa was the earliest dental teacher in the medical school. In 1914 (Taisho 3), Dr. Kaname Ansawa served as a lecturer in the medical school and taught the "Dentistry and Clinical Practice" to the medical students in their fourth academic year. Although there was no independent teaching subject of "Dentistry" in the medical school’s teaching subject schedule at that time, the medical school officially used "Dentistry" as the curriculum name under the subject of "Surgery". In addition, Dr. Kaname Ansawa taught dentistry as a dental teacher and participated in the work of the medical students’ graduation examination at that time. Therefore, it is believed that the 1914 (Taisho 3) medical school "Dentistry" curriculum should be the earliest evidence of dental education in the predecessor of Department of Dentistry of NTU. Dr. Kaname Ansawa was promoted to be a professor in the medical school in 1915 (Taisho 4) and was also the first professor of dentistry in Taiwan’s medical history. In addition, he was a surgeon graduated from the Medical Faculty of Tokyo Imperial University. Because of his medical background, it was possible that medical students’ interest in dentistry was aroused, and it could also make dentistry as an attractive specialty chosen by some of the physicians. Therefore, in the medical school and hospital that were dominated by medicine at the time, he was also relatively capable of leading the development of dental education and dental medicine.

In this study, it was found from the 1915 (Taisho 4) medical school diploma that there was a lecturer Kaname Ansawa under the graduation examination subject of surgery. This finding indicates that Dr. Kaname Ansawa also participated in the work of the medical students’ graduation examination. Therefore, it is possible that the graduation examination subject of surgery may also cover the content of dentistry. However, before and after Dr. Kaname Ansawa, the current historical materials did not find any other dental teacher with a surgeon background. Therefore, after Dr. Kaname Ansawa’s resignation in 1926, it was not clear whether there were still dental topics in the graduation examination subject of surgery. Because Dr. Kaname Ansawa laid the foundation for Taiwan’s dentistry, his successor Dr. Shizuo Kobayashi, a dentist graduated from a Japanese dental college (the earliest dental teacher
with a dental background), could continue to develop Taiwan’s dental education and dental medicine based on the established foundation by Dr. Kaname Ansawa.7

In 1918 (Taisho 7), there were three important events related to dentistry. First, Taiwan Government announced the regulations regarding the dental specialty license for physicians. Second, an independent teaching subject dentistry appeared in the teaching subject schedule of the medical school. Third, a new department (so-called Research Department) established in the medical school, which provided the opportunities for medical graduates to study a medical branch including the field of dentistry. Taiwan Government Medical School began to have divisions of the Research Department in the academic system in 1918 (Taisho 7). Because the medical school hired a dental teacher in 1914 (Taisho 3), the Research Department at that time also had the ability to provide dental education and research. It can be called the earliest dental teaching and research institution (its research field covered dentistry). Subsequently, Taiwan Government Medical College and Taiwan Government Taipei Medical College both also set up the Research Department. In addition, the regulations regarding the dental specialty license for physicians created an incentive for medical graduates to return to the Research Department to study dentistry. After they had completed the dental research (or dental training), they could obtain a school’s dental training certificate for further application for a dental specialty license which was equivalent to a dentist license at that time.

This study found from the Taiwan Governor-general’s Archives that the physicians who applied for a dental specialty license self-reported the dentistry-related education experiences in their resumes including dental research in Taiwan Government Medical College Dental Research Department, Research Department (Dentistry), or Research Department for dental research. The above findings indicate that although the dentistry is not a division of organization in the medical school, it is indeed a division of concept in the field of enrollment, teaching and research in the medical school at that time. Therefore, the Research Department of Taiwan Government Medical School or Taiwan Government Medical College might be the first medical institution that had the function for cultivating local dental practitioners.

From 1918 (Taisho 7) to 1939 (Showa 14), the development of dental education in Taiwan did not have a significant change. Until 1939 (Showa 14), the Chair of Dentistry was established in the Medical Faculty of Taipei Imperial University to become the 24th Chair of the Medical Faculty. Its chair classroom was called dental classroom, and only then was there an official teaching and research unit named as dentistry. The Chairs in the system of the chairs were the basic unit of Imperial University of Japan, and the Chairs had the dual functions of teaching and research at the same time. At that time, the Chair of Dentistry of the Medical Faculty was presided over by two chair professors of surgery who taught the oral surgery courses and an assistant professor Heijirou Oohashi who graduated from a Japanese dental college and took the responsibility to teach dentistry courses. Therefore, the Chair of Dentistry (or dental classroom) of the Medical Faculty of Taipei Imperial University became the first official Dentistry-related teaching and research unit in the history of medical and dental education in Taiwan.

Throughout the Japanese colonial period, Taiwan did not establish a local dental school after all. Taiwanese who wanted to study dentistry had to go to Japan or Chosen to study in a local dental school.4 The system of giving the dental specialty license to qualified physicians started from 1918 (Taisho 7) and was not revised until the end of the Japanese colonial period. The regular dentists were mainly Japanese and Taiwanese who graduated from the dental schools in Japan. The dental practitioners in Taiwan were mainly these “real” dentists. In other special cases, in addition to physicians with dental qualifications, there were also regionally-restricted dentists, Chinese physicians engaged in dentistry, or foreign dentists who came to Taiwan to practice. However, the number of Taiwanese who went to Japan or Chosen to study dentistry and returned to Taiwan to practice in dentistry gradually increased during the Showa Period.13 Therefore, the number of physicians who graduated from Taiwan’s medical school or college and then went back to the medical school to study dentistry began to reduce gradually. There were a lot of physicians who had obtained the dental specialty license but did not work as a dentist. In the literature, we did not find any double-qualified physicians who were really enthusiastic in dental practice and dental education for a relatively long period. This fact is not difficult to understand because many of these double-qualified physicians might be only interested in dentistry-related researches or they tended to receive the dental training due to curiosity or interest. They finally found that the dental practice was not an easy job because they had insufficient dental training and at last they decided to return to practice as a physician. Because no double-qualified physicians were really enthusiastic in carrying out the dental education work in the medical school, the inheritance of dental education spirit of Japanese colonial period was difficult to continue after the World War II. In other words, there was no suitable Taiwanese dentist to inherit the dental education spirit of Japanese colonial period. Therefore, in the early period after the World War II, the retained Japanese teacher Dr. Heijirou Oohashi introduced Dr. Shwei Kuo to NTU to teach dental courses for the medical students in College of Medicine of NTU. Dr. Shwei Kuo who graduated from a Japanese dental college had served as an assistant in the Department of Dentistry of Affiliated Hospital of Taipei Imperial University, and then operated a dental clinic outside before the end of the World War II. Dr. Heijirou Oohashi might hope that some Taiwanese dentists could continue the noble work of dental education and research in the medical school.

Based on the aforementioned facts, it could be implied that in the Japanese colonial period the dental education and research work was passed from Dr. Kaname Ansawa to Dr. Shizuo Kobayashi and Dr. Heijirou Oohashi, and finally to Dr. Shwei Kuo in the College of Medicine of NTU after the World War II. The effort paid by these four important persons finally laid the foundation for the establishment of Department of Dentistry of NTU in the future. We concluded that although no dental school was established in Taiwan, there were rich dental education and research activities in the medical school and a special dentist qualification system during the Japanese colonial period.
Declaration of competing interest

The authors have no conflicts of interest relevant to this article.

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