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Perspective article

The activities of oral health care for high school students in Taipei City during the Japanese colonial period

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According to the documentary records of the island-wide Taiwan Dental Association (TDA), Taiwan launched an oral hygiene implementation campaign since 1929. The team led by Professor Heijirou Oohashi, which was mainly composed of the dental staff from the Taiwan Government Taipei Hospital, conducted a series of oral health care-related activities. In April 1938, the Taiwan Government Taipei Hospital was restructured into the Affiliated Hospital of the Taipei Imperial University. Its main works included providing

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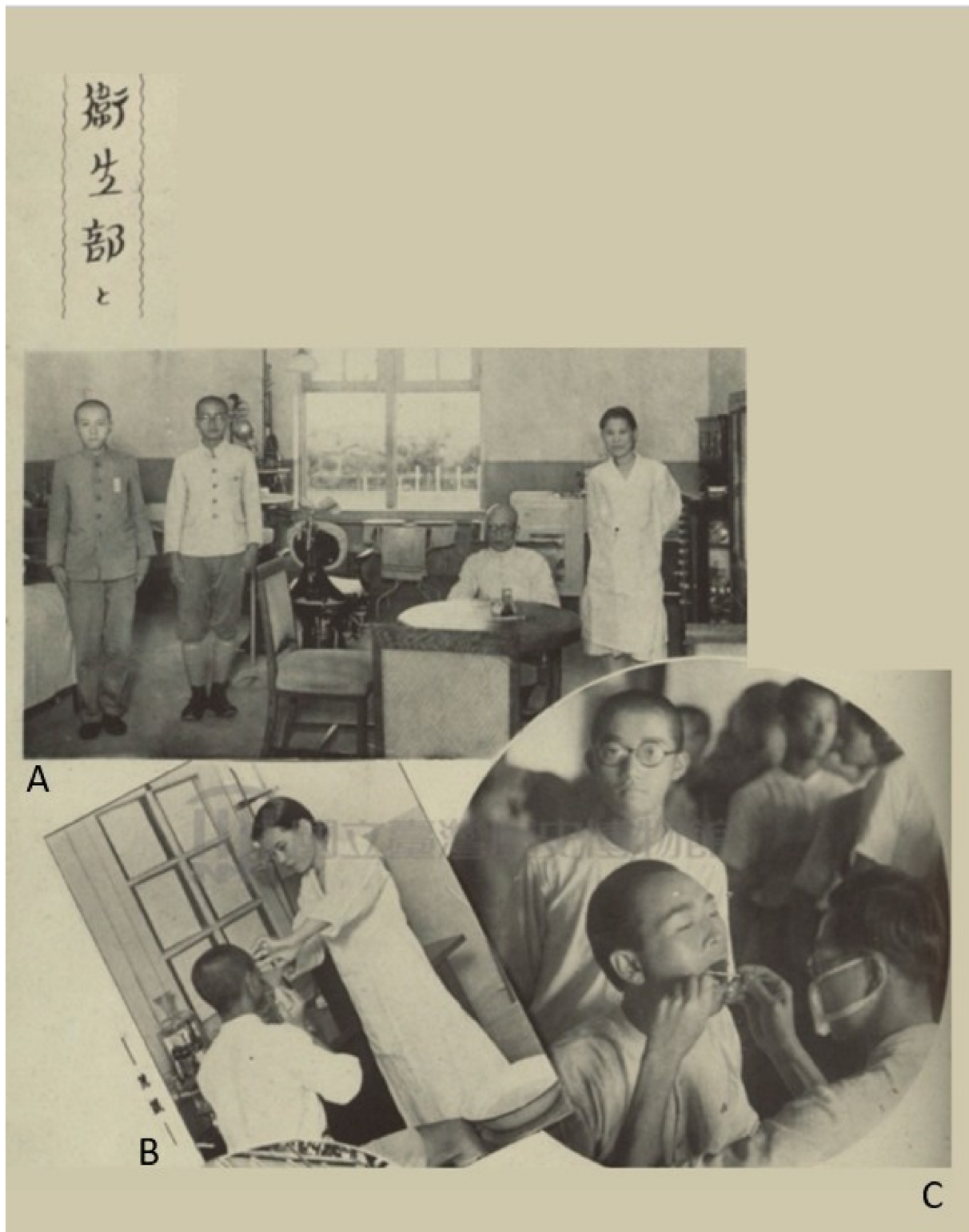


Figure 1 The students receiving dental examinations by the dentist in the Taipei Second High School from the 17th Graduation Yearbook of the Taipei Prefecture Taipei Second High School published in 1943 represented (A) the members of the school health department taking a group photograph, (B) the students receiving eyewash treatment in the school, and (C) the students receiving dental examinations in the school. This image was available and accessed from the Campus Life Memory Database (<https://school.nmth.gov.tw/>).

oral hygiene lectures to the school teachers, setting up the dental treatment rooms in the schools in Taipei City, holding "Caries Prevention Day" activities, conducting oral examinations for the primary and high school students in Taipei City, and popularizing the oral hygiene concept and oral disease prevention among the public.^{1–3} However, there was a paucity of the surviving documentary records about the oral hygiene implementation campaign. The TDA kept written records of the oral hygiene implementation campaign but no visual records of the related activities at that time. Fortunately, the high school yearbook at that time preserved visual records of the campus oral health activities. This study attempted to search for the relevant historical materials to depict the situation of these campus oral health activities at that time.

There is a photograph of the students receiving dental examinations by the dentist in the Taipei Second High School from the 17th Graduation Yearbook of the Taipei Prefecture Taipei Second High School published in 1943 (Fig. 1). This photograph is included in the Campus Life Memory Database (<https://school.nmth.gov.tw/>), which illustrates the actual situation of the students receiving dental examinations on campus at that time.

The upper portion of this photograph showed the members of the school health department taking a group photograph (Fig. 1A). Printed above the photograph was a title in Japanese kanji: "Health Department". This health department could be understood as a student club that assisted in health care service work. On the left side of Fig. 1A, there were two students in uniform in a room with medical equipment, while on the right side of Fig. 1A, there were two persons like a school physician and a school nurse. On the middle part of Fig. 1A, there was a medical chair. This may be the dental unit set up in the school under the oral hygiene implementation campaign at that time. It was placed facing the window to obtain good natural lighting for the dentist to perform dental examinations and treatments. Therefore, this building space may be a school health room or a dental treatment room. The lower left portion of this photograph showed the students receiving eyewash treatment in the school (Fig. 1B). Printed below the photograph was a title in Japanese kanji: "Eyewash". In the photograph of Fig. 1B, a school nurse could be seen washing a student's eyes. This activity was speculated to be related to the prevention and treatment of trachoma. The lower right portion of this photograph showed the students receiving dental examinations in the school (Fig. 1C). In the photograph of Fig. 1C, a dentist could be seen wearing a mask and examining a student's teeth. The students lined up in order waiting for oral inspection. During the examination, the student sat upright on a regular chair with his mouth opening, and the dentist used a mouth mirror with his bare hands to examine the student's teeth by the natural lighting.

During the Japanese colonial period, the oral hygiene implementation campaign was launched since 1929, while installing a dental unit (or establishing a dental treatment room) in the schools in Taipei City was one of the main activities. Starting from 1930, the dental units were successively installed in the key schools in Taipei City, and the dentists began to visit these schools to conduct the dental examinations and treatments for the students.² Initially,

the participants were Japanese dentists and the participating schools were mainly for the Japanese students. In 1939, Dr. Shwei Kuo (1913–1997), the founding director of the dental school of the National Taiwan University (NTU), was assigned to the Taipei Second High School to provide oral health care services for the students. Dr. Kuo graduated from the Taipei Second High School in 1933. Then, he went to Japan to study the dentistry and graduated from the Department of Dentistry, Specialized Faculty, Nihon University in 1938. After returning to Taiwan, he served as a "Deputy Assistant" in the Affiliated Hospital, Medical Faculty, Taipei Imperial University.^{4,5} At that time, the Taipei Second High School was a school mainly for Taiwanese students. It was a fitting arrangement for him to return to his alma mater to provide oral health care services for the students. Therefore, the dentist in the photograph was most likely Dr. Kuo. He might be the first Taiwanese school dentist in Taiwan. Until the end of the World War II (1945), the number of the dentists in Taiwan was only 738, including 493 Taiwanese dentists.^{6–8} Therefore, when the dentists were still in shortage, the Taiwan dental community had already begun to implement the policy of the school dentists conducting oral health care services for the students. This showed a very advanced action and thinking.

Since Taiwan implemented national health insurance (NHI) covering the dentistry in 1995, the dental care for the public is accessible easily. Generally speaking, there is no need to have a dental treatment room on campus. Currently, oral health activities on campus are still ongoing in Taiwan. Many primary and high schools in the remote and rural areas still have established their dental treatment rooms. The dentists go to the campus to provide basic dental treatments, such as dental cleansing and dental fillings, for the students in the schools of the remote and rural areas. In addition, regardless of the urban or rural areas, the dentists go to kindergartens to provide dental professionally topical fluoride application for the preschool children, and they also go to primary and high schools to conduct oral examinations and oral health education for the students. All of these are common and regular oral health activities on campus. Moreover, these activities have been proven to be effective for the caries prevention.^{9,10} Looking back at the history of oral health care, it is a constant principle that early establishment and development of correct oral hygiene habits for the children and adolescents has a significant impact on their oral health and overall health. Therefore, it is critical that the campus oral health activities actively promote the development and reinforcement of the lifelong habits of the children and adolescents to further maintain their oral health and overall health.

Declaration of competing interest

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

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