

THE HISTORY OF DENTAL EDUCATION IN THE PHILIPPINES

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ABSTRACT:

This research report imparts updated information on the history of dental education, curriculum, and dental practice regulation in the Philippines. In 1913, the Philippine Dental College in Manila was established and the country saw its first dental school open. From ten dental colleges in 1953, the Philippines currently has thirty-six dental colleges in the different universities within the nation. A minimum of a 2-year pre-dental program is the requirement to continue to a 4-year Doctor of Dental Medicine (DMD) program. The dental internship is a clinical learning phase that is reserved for the last two years of the program, which is a requirement for graduation. The Professional Regulation Commission (PRC) provides a rigorous, national, Dentist Licensure Exam (DLE) as a requirement before a dental graduate becomes eligible to practice dentistry in the Philippines.

Keywords: dental education, history of dentistry, dental school curriculum, Philippines



INTRODUCTION:

Similar to the history of dental professions in other nations, dentistry in the Philippines started as a rudimentary craft. The first tooth pullers were barber surgeons and were known as sacamuels during the Spanish occupation. The first special course resembling that of dentistry in the country was offered by the University of Santo Tomas and the graduates were called cirujano ministrantes. Later on, the term was changed to cirujano dentistas.^[1,2]

The history of formal education in the field of dentistry started in 1903 during the American occupation, when the Philippine Civil Commission passed the First Dental Law Act No. 593. This created the Board of Dental Examiners (BDE) and subsequently the prerequisites in taking the Dentist Licensure Exam

(DLE). This board was made up of Dr. Robert T. Olliver as chairman, Dr. Wallace G. Skidmore as secretary-treasurer, and Dr. Antonio Vergel de Dios as member. It was stipulated in the law, that a person who wanted to practice dentistry in the Philippines, should be a graduate of a dental college recognized by the National Association of Dental Faculties and National Association of Dental Examiners.^[1]

In 1930, provision in Act No. 3538 provided for a reciprocal agreement that allowed the practice of foreign dentists in the Philippines, if the country of origin of the foreign dentist offers the same. In 1934, another law was passed to allow the practice of dentistry even without passing the DLE. Eventually this law was

opposed and vetoed by Governor General Frank Murphy.^[1]

From a 4-year program of dental studies prior to 1951, it now takes six years to attain a Doctor of Dental Medicine (DMD) degree.^[3]

Before World War II, the Philippines had the most number of dental schools in Asia with ten institutions, India had seven, Japan had seven, Indonesia had three, Pakistan had two, while Thailand and Korea had one a piece.^[3] Presently there are thirty-six dental schools or colleges in the country.^[4] The first ten dental schools in the Philippines were the Philippine Dental College (1913), University of the Philippines (1915), National University (1924), Centro Escolar University (1925), Manila Central University (1929), College of Oral & Dental Surgery (1933), Southwestern Colleges (1946), Iloilo City Colleges (1947), University of the East (1948), and University of San Agustin (1953). Southwestern Colleges in Cebu City, which is now known as Southwestern University PHINMA was the first dental school outside of Manila. This was followed by the creation of Iloilo City Colleges and the University of San Agustin, which are both located in Iloilo City.^[1,2]

Through House Bill 2783, Republic Act (RA) No. 417 was signed by then Philippine President Elpidio Quirino. This law added the practical test in the DLE, added a penal provision for illegal dental practice, and ratified the provisional

requirements of the members of the BDE.^[1]

The first record of dental student enrollment yielded 3, 227 dental students. In the December 2017 DLE, there were a total 762 (51.35%) of 1, 484 total dental graduates who passed the written phase of the examination. For the practical phase, 763 (99.22%) of the total 769 eventually passed and hence, became licensed dentists.^[4]

CONCLUSION:

The dental schools of the Philippines are regulated by the Commission on Higher Education (CHED) in the Philippines. Moreover, CHED Memorandum Order (CMO) No. 33 Series of 2006 stipulates the policies, standards, and guidelines for dental education. Universities that anticipate the offering of the 6-year DMD degree program must adhere to the former and make the latter a guide. This program is composed of the pre-dental course in the first two years, basic medical and dental sciences with pre-clinical subjects in the next two years, and the clinical training in the last two years.^[5] (Table 1)

The academic year in the Philippines mostly is divided into two semesters and a summer semester. The first semester starts from June until October, the second semester from November to March, and the summer semester from April to May. In the 2-year span of the pre-dental curriculum, a total of 108 credit units (CU) which includes 21 CU

for language or humanities; 12 CU for mathematics, natural sciences, and information technology; 25 CU for natural sciences; 21 CU for social sciences; 15 CU for human health sciences; 6 CU for physical education; and 8 CU for National Service Training Program (NSTP) are required. For the 4-year dentistry curriculum, a total of 173 CU which includes 37 CU for basic medical sciences; 73 CU for basic dental sciences; 6 CU for pre-clinical subjects; 43 CU for clinical dentistry; 6 CU for hospital dentistry; and 8 CU for community dentistry. In the last two years of the program the students are immersed in a clinical training and expected to finish the minimum clinical treatment cases as provided by CHED. These are, but not limited, to cases in restorative dentistry, prosthodontics, maxillofacial surgery, endodontics, periodontics, and others. These clinical training courses are interspersed in to four semesters within the last two years of the DMD program. An additional three years of education is required to attain a master's degree or specialization in the various fields of dentistry.^[5-7] (Table 2)

While the students may graduate with the DMD degree, they will still need to pass the rigors of the written phase and the practical phase of the DLE before they are licensed to practice dentistry in the Philippines. Passing the written phase prior to the practical phase of the DLE is a requirement. In the event that an examinee fails the written phase, taking the practical phase is not

permitted, but a re-test can be sought in the next DLE. The licensure exam is held only in Manila and held twice in a year, one in May and one in December.^[8]

THE REGULATION OF DENTAL PRACTICE

There are two main laws promulgated by the PRC. These are RA 9484 or otherwise known as, An Act to Regulate the Practice of Dentistry, Dental Hygiene and Dental Technology in the Philippines, and PRC Board Resolution No. 14 Series of 2008 or the Code of Ethics for Dentists, Dental Hygienists, and Dental Technologists.^[8,9] (Table 3)

RA9484 repealed RA4419, otherwise known as, An Act to Regulate the Practice of Dentistry in the Philippines, and for other purposes, and RA768, otherwise known as, An Act to Regulate the Practice of Dental Hygienists in the Philippines, and for other purposes. In the Implementing Rules and Regulations (IRR) of RA9484, there is a provision that stipulates, that sixty continuing professional development (CPD) units every three years are needed prior to the renewal of the Professional Identification Card (PIC). The IRR also specifies membership into the Philippine Dental Association (PDA) and of a bona fide dental chapter of the association within the dentist's area of practice as a requirement. Infection control is an important advocacy of the PDA.^[10]

As part of the eight agreed elements of the Association of Southeast Asian Nations (ASEAN) joint coordinating

committee on dental practitioners, the Philippines has established a list of recognized basic and specialist qualifications, domestic regulations, dentist-population ratio, entry requirements, ethical code and guidelines, updates on news and events, contacts, and CPD programs.^[11] There are six recognized specializations in the country, with each specialty being regulated by different organizations accredited by the PRC. These organizations are the Association of Philippine Orthodontists and Philippine Board of Orthodontics (Orthodontics),

the Philippine Pediatric Dental Society, Inc. and the Philippine Board of Pediatric Dentistry (Pedodontics), the Endodontic Society of the Philippines and the Philippine Board of Endodontics (Endodontics), the Philippine Society of Periodontology and the Philippine Board of Periodontics (Periodontics), the Philippine Prosthodontic Society and Philippine Board of Prosthodontics (Prosthodontics), and the Philippine Board of Surgery Inc. and the Philippine College of Oral and Maxillofacial Surgeons (Oral and Maxillofacial Surgery).^[12]

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TABLES:

Table 1. Two-Year Pre-Dental Curriculum

First Year

| First Semester | Second Semester |
|--|--|
| Study and Thinking Skills in English | Writing in the Discipline |
| Komunikasyon sa Akademikong Filipino | Pagbasa at Pagsulat Tungo sa Pananaliksik |
| College Algebra | Organic Chemistry with Biochemistry |
| Integrated General and Inorganic Chemistry | Integrated College Physics |
| General Zoology | Politics and Governance with the New Philippine Constitution |
| Philippine History: Roots and Development | Logic and Critical Thinking |
| Gymnastics | Science, Technology and Society |
| National Service Training Program | Rhythmic Activities |
| | National Service Training Program |

Second Year

| First Semester | Second Semester |
|---|---|
| Philippine Literature | Speech Communication |
| Human Anatomy and Physiology | General Applied Statistics with Demography |
| General Botany | Sociology and Anthropology with Family Planning |
| General Psychology | Rizal's Life, Works and Writings |
| Health Economics and Population Education | Health Ethics |
| Primary Health Care 1 | Philosophy of the Human Person |
| Individual and Dual Sports | Computer Fundamentals 1 |
| | Genetics |
| | Team Sports |

Source: College of Dentistry, Southwestern University PHINMA, June 2017

Table 2. Four-Year Doctor of Dental Medicine Curriculum

First Year

| First Semester | Second Semester |
|-----------------------------------|---|
| General Anatomy 1 | General Anatomy 11 |
| General Microanatomy & Embryology | Oral Microanatomy & Embryology |
| Dental Biochemistry | General Physiology with Family Planning |
| Oral Anatomy | Dental Materials |
| Dental Informatics | Dental Nutrition |
| Dental History & Orientation | Microbiology |
| | Community Dentistry 1 |

Second Year

| First Semester | Second Semester |
|-------------------------|---------------------------|
| General Pathology | Oral Pathology 1 |
| Pharmacology | Restorative Dentistry 11 |
| Restorative Dentistry 1 | Removable Partial Denture |
| Fixed Partial Denture | Complete Denture |
| Oral Physiology | Anesthesiology |
| Roentgenology | Orthodontics 1 |

Third Year

| First Semester | Second Semester |
|-------------------------------------|--|
| Oral Surgery 1 | Oral Surgery 11 |
| Oral Diagnosis & Treatment Planning | Research Presentation |
| Endodontics | Practice Management & Entrepreneurship |
| Orthodontics 11 | Oral Pathology 11 |
| Methods of Research | Dental Jurisprudence & Ethics |
| Principles of Medicine | Pedodontics |
| Periodontics | Forensic Dentistry |
| Clinical Dentistry 1 | Clinical Dentistry 2 |

Fourth Year

| First Semester | Second Semester |
|---------------------------------|----------------------------------|
| Hospital Dentistry 1 | Hospital Dentistry 11 |
| Community Dentistry 11 | Community Dentistry 111 |
| Oral Surgery Seminar | Restorative Dentistry Seminar 11 |
| Ortho-Pedo Seminar 1 | Prosthodontic Seminar 11 |
| Prosthodontics Seminar 1 | Endo-Perio Seminar |
| Restorative Dentistry Seminar 1 | Ortho-Pedo Seminar 11 |
| Current Trends in Dentistry | Clinical Dentistry 4 |
| Clinical Dentistry 3 | Case Studies in Dental Science |
| Frontiers of Dental Science | |

Source: College of Dentistry, Southwestern University PHINMA, June 2017

Table 3. Dental Practice Related Laws in the Philippines

| Law | Description |
|--------|---|
| RA465 | Standardizing examination and registration fees, and requiring professionals, including dentists, to register annually. |
| RA40 | Providing that initial appointment in the Philippines Army Dental Corps shall be in the grade of first lieutenant |
| RA481 | Providing for autonomy and more efficient service in the Army Dental Corps |
| RA546 | Providing for a separate office of the Board of Examiners and making the Board of Examiners presidential appointees. |
| RA914 | Fixing the minimum compensation of dentists and pharmacists employed by the government in positions requiring dental and pharmaceutical knowledge, respectively to the amount of 200 per month |
| RA1054 | Rendering and consolidating Act. No. 3961 providing for free emergency dental service for employees and laborers of commercial, industrial and agricultural establishments and providing penalties for noncompliance. |
| RA1056 | Liberalizing the use of organs or portions of the human body for medical and scientific purposes. |
| RA1082 | Creating the position of public health dentist for every congressional district |
| RA1028 | Completely separating the dental from the medical service of the armed forces. |
| RA951 | Amending Republic Act No. 124 requiring private schools with at least 300 students to provide dental service |
| RA768 | An Act to Regulate the Practice of Dental Hygienists in the Philippines |
| RA4419 | An Act to Regulate the Practice of Dentistry in the Philippines |
| RA9484 | An Act to Regulate the Practice of Dentistry, Dental Hygiene and Dental Technology in the Philippines |

Source: Professional Regulation Commission, December 2017