

## Education, Vision and Challenges in Dentistry of Lao PDR

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To meet the appropriated learning-teaching system in dental education and offer quality education and to keep the dental curriculum up to date with the international standards, the faculty of Dentistry (FOD) needs to improve the undergraduate curriculum to be more efficient for the development of Laos' people's oral healthcare. Together, FOD also wants to increase the capability of faculty members, which will be crucial in the development of dentistry. For achieving this goal, FOD has a development plan for the dental curriculum to increase the competency of dental students and faculty members as well. Seven articles have been written regarding FOD's policies concerning the development plan; these are intended to be enacted in the years 2019 to 2023. Nonetheless, the actions suggested by seven articles are challenging and will require much time to go from policy to reality. Besides, the author proposed some issues in dental educational development and dental education status.

In conclusion, this document would be helpful for the understanding of Laos' dental education situation and for the cooperation with an international dental organization to improve dental school and the competency of oral health professionals.

**Keywords:** Dental Education, Dental Development Plan, Lao People's Democratic Republic.

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## Introduction

Currently, rapid socioeconomic growth of Laos is mainly due to the increased foreign investment, extraction of natural resources, and hydroelectric power<sup>1)</sup>. Nonetheless, the majority of the people of Laos are low/low-middle income, so public health and dental education are not well developed<sup>2)</sup> due in part to shortages in the budget and funding. Consequently, Laos lacks human resources in both the quantity and quality of health professionals<sup>3-5)</sup>. Therefore, the Ministry of Health (MOH) established a policy for the development of health tasks and health professionals in both capacity and quality<sup>6)</sup>.

To implement a policy planned by the MOH. Faculty of Dentistry (FOD) has prepared a development plan for equipment, facilities and particular, the oral health professionals, since the production of human resources is an essential task of society to provide health care services to the Lao people. As De Paola mentioned<sup>7)</sup>, an essential aim of undergraduate dental education is to improve and promote the oral healthcare status of the population. Likewise, educational institutions should prepare their graduates to maintain and further develop their competencies over their lifetime of professional practice<sup>8)</sup>.

To achieve these goals, the FOD needs to ensure that new practical, encouraging, and useful curricula to enable students to become competent, safe, and independent practitioners committed to continuing to develop their professional knowledge, understanding, and skills. Hence, FOD was instructed to address the seven issues of (1) vision, mission, and education objectives, (2) dental curriculum development plan, (3) student services and support, (4) student clinical placement, (5) partnership, exchanges, and network-

ing, (6) a staff capacity development plan, 2019-2023, and (7) an educational resources development plan. However, the author willing to give detail on three issues of the development plans comprised of (1) vision, mission, and educational objectives, (2) dental curriculum development plan, and (3) the staff capacity development plan, 2019- 2023. Because three issues were directly relevant to education as well as improving the teaching ability of the faculty members in FOD, the author would like to add the current issues and challenges at the faculty of dentistry before moving to the discussion and conclusion section.

## Results

### Vision, mission, and educational objectives

#### 1. Vision

To be one of the regional leading dental institution in teaching, scientific research, and services.

#### 2. Mission

- (1) To produce adequate high-quality dental human resources to serve to the whole country.
- (2) To provide academic and dental services to society and achieve efficacy and patient satisfaction.
- (3) To conduct and apply innovative research for dental services.

#### 3. Education objectives/Outcomes

##### 3.1. Education

- (1) To produce graduates of all levels to meet the quality requirements of the country and the region.
- (2) Continued development in the faculty regard-

ing potential, virtue, morality, and ethics.

- (3) To ensure the faculty responds to both domestic and international students.

### 3.2. Research/Scholarship

- (1) Provide an environment for the teaching staff and students to promote, encourage, and support scientific research.
- (2) Research outputs applied to improve oral health and oral services.

### 3.3. Patient care

- (1) Provide a fully accredited dental center that ensures comprehensive and patient-centered dental care.
- (2) Provide diagnosis and treatment of oral and dental diseases.

### 3.4. Services

- (1) Address dental health problems, provide dental health promotion, and provide appropriate knowledge of dental education.
- (2) Provide leadership and service through staff

and student participation in faculty, community, and professional activities.

## 2. Dental curriculum development plans

### 2.1. Design

Competency-based<sup>9)</sup>, the content composed of 2 parts in table 1:

### 2.2. Delivery

Student-centred learning; Lecture / small group discussion; Hand-outs; Videos for visual learning.

### 2.3. Assessment

Multiple-choice questions used to allow the students the opportunity to receive timely feedback on theory and patient communication and care in a more authentic clinical situation than that provided by the more frequently. The objective structured clinical examination is used to evaluate student performance in clinical practice. A comprehensive exam includes an oral examination and written and internal assessments by faculty members of each department.

**Table 1: Dental curriculum development plans were divided into 2 parts.**

Part 1	Part 2
<ul style="list-style-type: none"> <li>- The content of the dental curriculum should be directly related to and contribute to the profile and competence of the ASEAN dentist.</li> <li>- The dental school should ensure that the content of the dental curriculum is evidence-based and reflects current best practices throughout the program.</li> <li>- Early contact between patients and dental students should occur. In particular, it is necessary for first- or second-year dental student life to have some contact with patients.</li> <li>- Infection control should be integral to all clinical activities with effectiveness.</li> <li>- Combined patient care should be a fundamental part of clinical education<sup>9</sup>).</li> <li>- A research project should be integral as a part of the dental curriculum.</li> <li>- The basic and biomedical subjects should be learned in an integrated manner.</li> <li>- Education is advocated to give dental students hands-on training in basic life support skills. This is necessary because of its important practice in clinical and preclinical activities.</li> </ul>	<ul style="list-style-type: none"> <li>- Study of medical and other conditions that have relevance for dental student in treatment of patients<sup>10</sup>).</li> <li>- Education in the behavioral, respectful and social sciences is encouraged to certify that dentists communicate effectively with their patients, co-workers, and other health professionals<sup>10,11</sup>).</li> <li>- Education in preventive, promotional, and community dentistry is advocated.</li> <li>- Recommendation to provide education in ethics and professional conduct.</li> <li>- Practice in administration and information and computer technology should be included in the dental curriculum.</li> <li>- There should be increased emphasis on teamwork with some elements of integration between the educational programs for the different dental team members.</li> <li>- Electives in the dental curriculum should form an integral part of the undergraduate curriculum.</li> </ul>

**3. Staff capacity development plan, 2019 to 2023**

3.1. Projection for student enrollment

Based on the MOH annual student admission

quota 2017-2023, the number of students enrolled by the FOD will decrease from 333 in 2016-17 to around 200 in 2019-2023 (Table 2).

**Table 2: Student number projections, 2019-2023.**

Program	Year	2016-1 7	2017-1 8	2018-1 9	2019-2 0	2020-2 1	2021-2 2	2022-2 3
Specialist: Oral and maxillofacial surgery	1	4	1	1	1	1	1	1
	2	2	4	1	1	1	1	1
	3	0	2	4	1	1	1	1
	Total	6	7	6	3	3	3	3
Master science of dental public health	1	8	1	1	1	1	1	1
	2	0	8	1	1	1	1	1
	3	0	0	8	1	1	1	1
	Total	8	9	10	3	3	3	3
Master sciences of preventive medicine	1	4	1	1	1	1	1	1
	2	0	4	1	1	1	1	1
	Total	4	5	2	2	2	2	2
Master clinical science of periodontology	1	5	1	1	1	1	1	1
	2	0	5	1	1	1	1	1
	Total	5	6	2	2	2	2	2
Bachelor dental surgery	1	53	24	24	24	24	24	24
	2	50	53	24	24	24	24	24
	3	50	50	53	24	24	24	24
	4	50	50	50	53	24	24	24
	5	50	50	50	50	53	24	24
	6	50	50	50	50	50	53	24
	Total	303	277	251	225	199	173	144
Dental technician	1	7	5	5	5	5	5	5
	2	0	7	5	5	5	5	5
	3	0	0	7	5	5	5	5
	Total	7	12	17	15	15	15	15
Dental assistant	1	0	0	30	30	30	30	30
	2	0	0	0	30	30	30	30
	3	0	0	0	0	30	30	30
	Total	0	0	30	60	90	90	90
<b>Total</b>		<b>333</b>	<b>316</b>	<b>288</b>	<b>250</b>	<b>224</b>	<b>198</b>	<b>169</b>

### 3.2. Academic staff capacity development plan

#### 3.2.1. Number of academic staff requirements, 2019 to 2023

Estimated full-time faculty requirements given are based on the MOH recommended the ratio of 10 students to one faculty (e) minus existing faculty

numbers in 2017 (a) and those returning from sabbatical (b), with an added 10 % attrition (c). Based on the above- mentioned calculation  $(250 \times 10 / 100) - (33 + 8 - 3)$ , a total of 8 full-time academic staff will be needed each year for the next 5 years (Table 3).

**Table 3: Requirements for full-time faculty members, 2019-2023.**

2017-18		2019-23 Plan				
Number of Faculty members (a)	(Ratio students to faculty)	Number of Back from study (b)	Number of Attrition (10%) (c)	Number of Total (d=a+b-c)	Number of Faculty members* (Ratio 10 to 1) (e)	Requirements (f= e-d)
33	(10.1 to 1)	8	3	38	25	(-8)

\*Estimation based on a projected 250 students a year in 2019-23 A total of 08 staffs on overseas study leave: Master degree=5 (females 5), PhD training = 3 (female 1).

#### 3.2.2. Training requirements for existing full-time academic staff in 2019-23

Training requirements for existing academic staff are based on gap analysis/need assessment exercises during their Planning Workshop in 2018 and on school survey findings. Short-term training in En-

glish and on teaching skills is required for about one-third of existing academic staff needs, whereas long-term education for a higher academic degree (Master and Specialty) is required for five faculty members (Table 4).

**Table 4: Requirements for capacity development of full-time and dental clinic staff.**

Category	Degree	2018	# Requirement for training in 2019-2023					Acad.Edu
			English	Computing	Pedagogy	Clinical	Management	
Dentist	Bachelor	13	5	0	10	0	0	5 Mas/pec.
	Mas	20	5	0	3	0	0	0
	Spec	0	0	0	0	0	0	0
	PhD	0	0	0	0	0	0	0
total		33	10	0	13	0	0	5

Mas: Master; Spec: Specialist.

3.3. Staff capacity development plan

3.3.1. Academic

Ph.D. degree (Oral Biology; Microbiology; Oral Pathology; Dental Anatomy; Occlusion; Dental Epidemiology; Oral Pain; Oral Physiology; Bio Dental Material).

3.3.2. Clinical/ Practical

Specialist I: Oral Maxillo-Facial Surgery; Dental Radiology; Operative Dentistry; Endodontic; Periodontics; Restorative Dentistry.

Specialist II: Oral-Maxilla Facial Surgery; Dental Radiology; Operative Dentistry; Endodontic;

Periodontics; Restorative Dentistry.

3.4. Capacity development plan for clinical instructors

3.4.1. Requirements for clinical/Practical instructors (Affiliated hospitals)

Out of the existing 45 clinical instructors at the dental faculty hospital, 20 had been trained as clinical instructors, and a remaining 25 need such training in 2019-23. Also, an additional 5 clinical instructors would be required in 2019-23 if the following student to clinical instructor ratios were applied: Dentistry: 5 to 1 (Table 5).

**Table 5: Requirements for capacity development of clinical instructors (Dental Faculty Hospital).**

Academic year 2017-18			Academic years 2019-23		
Number of Existing instructors (a)	Number of Trained instructors (b)	Number of Training gap (c=a-b)	Number of Students (estimated) (d)	Number of Required instructors (e)*	Number of Needed instructors (f=e-a)
45	20	25	250	50	+5

**4. Current issues and challenges in faculty of dentistry**

Here, the author would like to share the current issues and challenges in the FOD.

4.1. Academic staff/Faculty

The faculty comprises 33 full-time teachers out of 98 total staff (excluding deans and vice-deans, who also lecture). There are 72 teachers from hospitals outside the FOD (namely from Mohosot, Setharthritis, and Friendship Hospitals) who work as part-time guest teachers for basic sciences, medicine, and pharmacy subjects. The hospital/full-time academic staff ratio in 2017-18 was 2.2 to 1, which is four times higher than the MOH recommended ratio

of 0.5 to 1 (Table 5). Another issue is the limited faculty qualifications such as PhDs and specialists of pediatric dentistry, endodontics, periodontics, oral radiology, and oral maxillofacial surgery.

4.2. Students

4.2.1. Didactic teaching

The student/full-time academic staff ratio in 2017-18 was 10 to 1, as per the MOH recommendation (Table 5).

4.2.2. Clinical training

The FOD has its own Dental Clinic which will be upgraded as a Dental Hospital in the near future, located within the UHS compound. The faculty has

three practical labs, 35 manikin heads, and 50 dental chairs. For 2019–23, one simulation lab with dental chair will be needed. In addition to clinical practice at the Faculty clinic, dental students are also sent to provide dental hygiene practice to three primary schools.

#### 4.2.3. Dental hospital clinics

With space needed for oral surgery, restorative dentistry, periodontal, pediatric dentistry, oral medicine, prosthodontics and orthodontic, dental radiology, and community dentistry, the limited facilities of the FOD need to be properly managed. This involves a clear policy and objectives, an organizational structure with clearly defined functions which applied in standards and guidelines in each area. There is a committee responsible student practical study. However, the dental clinic does not have enough chairs for each student (one dental chair to eight students) and has inadequate laboratory space (only one laboratory available).

#### 4.2.4. Curriculum

The proposed curriculum is committee-approved and meets the approval curriculum standards of Ministry of education and sport. Core competencies have been reviewed; there is an ongoing review of curricula based on the results of graduation evaluations. These issues and challenges illustrate the need to revise curricula and develop curriculum-reviewing guidelines.

#### 4.2.5. Internal quality assurance (QA) system

An additional issue in need of modification is the internal QA system. The faculty has had a limited functioning QA system in place since the MOH 2015 QA policy. Following issuance of the MOH Decree on QA/Accreditation in 2017, MOH 2015 QA stan-

dards were revised with guidelines for implementation of the standards being developed, leading to the development of an Accreditation System for Health Professional Education Institutions in the coming years.

## Discussions and conclusion

In accordance with the development plan, the dental committee has been established in pursuit of education, and development in various aspects, to create a consistency between FOD development and the development plan that appears to be realistic in the future.

The authors were interested in discussions regarding missions which could be an obstacle to a development plan. Dental surveys are very important in designing oral health plans and oral health policies through statistical analysis of oral status. Many countries have conducted oral health status surveys in a nationwide program<sup>12-14</sup>. Our faculty has been providing a curriculum emphasizing the concern on these issues becomes crucial information in establishing an oral health plan in a nation<sup>15</sup>. Nevertheless, there was a shortage of oral health survey examining the oral health status in Laos. This is a critical concern in the health sector, and some of these studies have demonstrated that the incidence of dental caries, periodontitis, and tooth loss in children and adults remains high in Laos<sup>16-19</sup>. This evidence reveals that the preventive oral health strategy and promotion program in Laos was not appropriate or regularly planned. The comprehensive dental health program should be conducted at the governmental level to promote the oral health of Lao people. Furthermore,



it revealed that dental proficiency did not garner satisfaction with the prevention and promotion of oral health<sup>19,20</sup>. Therefore, our curriculum development plan has to highlight the purpose and importance of dental surveys, and it can help improve strategies and promote the oral health care of people in the future. Research has played an important role in the areas of liability, planning, strategy, preventive oral hygiene, and provision of high-quality oral health care<sup>8</sup>). Conversely, FOD had the limited academic research capacity of faculty members because of a paucity of understanding of the importance of research, and in the future, FOD needs to make more efforts to encourage and assist the faculty members to recognize the research importance. Additionally, the FOD's still lack of appropriate research infrastructure and funding, compounding the problem. The dental education program is also affected by a shortage of qualified teaching staff; few faculty members have a postgraduate and doctoral degree or have received advanced training. Also, new generation of faculty members has limited skill and experiences in clinical practice and dental research. While the proportion of faculty members with a Ph.D. degree is as low as 3 of 33 as shown in Table 3, but currently, there are three faculty members continuously on their study in the Ph. D program in Korea and Japan in a different major of dentistry. Furthermore, the FOD requires capacity development of full-time faculty and faculty members studying for a doctoral degree in the majors of oral biology, microbiology, oral pathology, dental anatomy, occlusion, dental epidemiology, and oral medicine. If FOD can motivate enough faculty members to earn a higher degree, further educational development will follow. Additionally, the FOD can

offer more courses for masters or doctoral degrees, which will have a significant impact on educational development.

To achieve our development plan, we focus on achieving a sufficient number of faculty members who will act as good role models with solid dental knowledge, and excellent teaching ability. Moreover, dental educators and faculty members need to ensure that students not only achieve competency in undergraduate education but also establish essential foundations that enable them to progress or at least maintain their professional competencies<sup>10,21,22</sup>). Additionally, a dental educator has to profoundly understand and be able to utilize a variety of educational strategies to aid students in different stages of development<sup>23</sup>).

In the past, FOD has assisted and supported by international organizations, which shows potential educational and facility development. FOD has collaborated with many countries such as Vietnam, Thailand, Korea, Japan, France, China, Cambodia, and the United States of American. Currently, FOD gives high consideration for sharing, exchanging knowledge, experiences, and cooperating with international organizations. These can create a better understanding of the environments and conditions of FOD and promote more interactions such as research, exchange of information, and training of faculty members.

Presently, the FOD is striving to acquire the level of quality of international dental education. There are numerous obstacles to dental curriculum development, including the demands of human resources, appropriate dental instruments, and equipment, and well-equipped educational campuses subsequently

will promote the competency and skill of dental students and, eventually, the oral health of Lao people. Hence, the FOD maintains human resources as a critical priority and reinforces the quality of dental education.

In conclusion, the dental educational development plan must be in line with the actual oral health status in Laos, and the needs of society. As all aforementioned, if we can follow the actual plan, we certainly believe that FOD will improve significantly the successful and educational development effectiveness.

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### References

1. World Bank. Lao People's Democratic Republic-Country partnership strategy for the period FY12-FY16 (English). Washington, DC: World Bank; 2012. <http://documents.worldbank.org/curated/en/665731468045572057/Lao-Peoples-Democratic-Republic-Country-partnership-strategy-for-the-period-FY12-FY16>.
2. World Health Organization. World health statistics.; 2015. At: [apps.who.int/iris/bitstream/10665/170250/1/9789240694439\\_eng.pdf?ua=1](https://apps.who.int/iris/bitstream/10665/170250/1/9789240694439_eng.pdf?ua=1). Accessed 9 Sept 2016.
3. Phouthone V, Paphassarang C, Theppanya K, Phathamavong O, Arie R. Analysis of health workforce retention and attraction policies in Laos. Washington, DC: World Bank. © World Bank; 2014. <https://openknowledge.worldbank.org/handle/10986/22109> License: CC BY 3.0 IGO.
4. Tangcharoensathien V, Patcharanarumol W, Ir P, Aljunid SM, Mukti AG, Akkhavong K, Banzon E, Huong DB, Thabrany H, Mills A. Health-financing reforms in southeast Asia: challenges in achieving universal coverage. *Lancet*. 5;377(9768):863-73, 2011. doi: 10.1016/S0140-6736(10)61890-9.
5. World Health Organization. Achieving the health-related MDGs. It takes a workforce!; 2017. [http://www.who.int/hrh/workforce\\_mdgs/en/](http://www.who.int/hrh/workforce_mdgs/en/), Accessed 10 January 2017.
6. Sonoda M, Syhavong B, Vongsamphanh C, Phoutsavath P, Inthapanith P, Rotem A, Fujita N, The evolution of the national licensing system of health care professionals: a qualitative descriptive case study in Lao People's Democratic Republic. *Hum Resour Health* 15, 51, 2017. doi:10.1186/s12960-017-0215-2.
7. De Paola, DP. The revitalization of U.S. dental education. *J. Dent. Educ.* 2008;72(Suppl. 2):28-42. doi:10.1002/j.0022-0337.2008.72.2\_suppl.tb04476.x
8. Field MJ. Dental education at the crossroads: challenges and change. Washington, DC: National. Academies. Press. Institute of medicine; 1995.
9. Chambers DW. Competency-based dental education in context. *Eur J Dent Educ.* 1998;2(1):8-13. doi:10.1111/j.1600-0579.1998.tb00029.x.
10. Manogue M, Mc Loughlin J, Christersson C, Delap E, Christin Schoonheim K, Meta Plasschaert A. Curriculum structure, content, learning and assessment in european undergraduate dental education - Update 2010. *Eur. J. Dent. Educ.* 2011;15(3):133-141. doi:10.1111/j.1600-0579.2011.00699.x.
11. Yun SW, Shin SC, Chang YS, Kim HK, Sohn SJ, Kim JK, et al. A survey of dental caries in Mongolia in 2014. *Int J Clin Prev Dent.* 2014;10(3):165-178. doi.org/10.15236/ijcpd.2014.10.3.165.
12. Senesombath S, Nakornchai S, Banditsing P, Lexomboon D. Early childhood caries and related factors in Vientiane, Lao PDR. *Southeast. Asian J Trop Med*

- Public Health. 2010;41:717-725. doi: 10.12691/jfnr-7-11-7
13. Seo JH, Cho BK, Chang YS, Jwa SK. The recognition for the dental profession on the students in Korea, Japan, Laos, and Mongolia. *Int J Clin Prev Dent.* 2013;9:169-178.
  14. Paik DI, Kim HD, Shin SC, Cho JW, Park YD, Kim DK, et al. *Clinical. Preventive. Dentistry.* 5th ed. Seoul: Komoonsa, 2011.
  15. World Health Organization. Strategy for oral health in South-East Asia 2013-20; 2016. At: [apps.who.int/iris/bitstream/10665/205929/1/B5099.pdf](https://apps.who.int/iris/bitstream/10665/205929/1/B5099.pdf). Accessed 9 Sept 2016.
  16. Besseling S, Ngonephady S, van Wijk AJ. Pilot survey on dental health in 5-12-year-old school children in Laos. *J Investig Clin Dent.* 2013;4(1):44-48. doi:10.1111/j.2041-1626.2012.00136.x.
  17. Motohashi M, Nakajima I, Aboshi H, Honda K, Yanagisawa M, Miyata T. et al. The oral health of children in a rural area of the Lao People's Democratic Republic. *J Oral Sci.* 2009;51(1):131-135. doi:10.2334/josnusd.51.131.
  18. Phommavongsa N, Senesombath S, Lim JH, Kim NY, Park WR, Eun Joo N, et al. Dental Survey of Vientiane City Children in Laos. *Int J Clin Prev Dent.* 2015;11(1):33-38. doi.org/10.15236/ijcpd.2015.11.1.33.
  19. World Health Organization. Everybody's business-strengthening health systems to improve health outcomes: WHO's framework for action. World Health Organization; 2007. <https://apps.who.int/iris/handle/10665/43918>.
  20. Global Health Workforce Alliance. A universal truth: no health without a workforce. Report of Third Global Forum on Human Resources for Health, Recife, Brazil. Geneva: World Health Organization; 2014. <http://www.who.int/workforcealliance/knowledge/resources/hrhreport2013/en/>. Accessed 25 May 2016.
  21. Diane RB, Richard AD, Peggy SO, Pharm D, Ian VM, John T. Inter professional collaboration: three best practice models of inter-professional education. *Medical Education Online.* 2011;16:6035. doi: 10.3402/meo.v16i0.6035.
  22. Lysaght RM, Altschuld JW. Beyond initial certification: the assessment and maintenance of competency in professions. *Eval Program Plan.* 2000;23:95-104.51. doi: 10.1016/S0149-7189(99)00043-9.
  23. Chuenjitwongsa S, Oliver RG, Bullock AD. Competence, competency-based education, and undergraduate dental education: a discussion paper. *Eur J Dent Educ.* 2018;22(1):1-8. doi:10.1111/eje.12213.

## 한글초록

### 라오스 치의학 교육과 비전, 도전 과제

포네파세우스 시따판<sup>1,2</sup>, 보운홍 시다퐁<sup>1</sup>, 찬타비사오 판타날레이<sup>1</sup>, 이승표<sup>2</sup>

<sup>1</sup>라오스 보건과학대 치과대학, <sup>2</sup>서울대학교 치의학대학원 구강해부학교실

국제 사회 치의학 교육 커리큘럼의 최신 흐름에 맞추어 나아갈 뿐 아니라 치의학 교육에 적합한 학습-교수 시스템을 구축하고 양질의 교육을 시행하기 위하여, FOD (Faculty of Dentistry)는 학부 커리큘럼을 시대의 흐름에 맞게 적절히 개선하고 발전시켜 라오스 국민의 구강건강 관리에 이바지해야 한다. 또한, FOD는 치의학 교육의 발전에 결정적인 역할을 하는 교직원의 역량을 강화하여야 한다.

이를 위하여, FOD는 치의대 학생 및 교수진의 역량을 높이기 위한 치의학 커리큘럼 개발 계획을 세웠다. 이에 따라 FOD는 본 발전 계획에 관한 연구를 진행하고 2019년부터 현재까지 7개의 학술논문을 작성했으며, 이는 2023년까지 지속될 계획이다. 그럼에도 불구하고, 지난 연구에서 제안된 방안들을 실현하는 것은 도전적인 과제이며, 정책에서 현실로 옮겨지기까지 많은 시간을 필요로 할 것이다. 따라서, 이 연구를 통해 치의학 교육의 발전 현황에 대한 몇 가지 문제를 논의하고자 한다.

이 연구를 통하여 라오스의 치과 교육에 대한 이해가 형성되고 국제 사회 치과계와의 협력이 강화되어, 치의학 교육기관과 구강 건강 전문가들의 역량을 효과적으로 개선하는 데에 도움이 되기를 기대한다.

**주제어:** 치과 교육, 치과 개발 계획, 라오 인민 민주 공화국.