The development of medical education in Thailand.

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Medical Education in Thailand originated at the same time as Medicine. It had its foundation in “Ayurveda” of India and was understood to come to Thailand with Buddhism. The impart of knowledge in ancient time was by apprenticeship.

At the time of the founding of Siriraj Hospital in 1888, Thailand’s first medical school called the Bhaedayakorn College, was also established at the hospital. The College taught both ancient and modern medicine at the beginning, but later the teaching of ancient medicine gradually faded out, till it disappeared completely from the curriculum.

The turning point for a full-fledged modern medical education came in 1922 when Prince Mahidol of Songkla donated his personal funds to construct buildings and sent young instructors to study abroad. The Rockefeller Foundation came to the assistance at Prince Mahidol’s request by funding the curriculum development programme.

Medical education in Thailand secured its roots ever since and right now there are 8 medical schools across the Country.

The National Medical Education Conferences, which were held 5 times in the past 30 years, had the most influential impact upon the development of Thai medical education. Important changes such as curriculum innovations originated as the Conferences’ recommendations.

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แพทยศาสตรศึกษาในประเทศไทย เวลาพ้นครึ่งปีก่อนการแพทย์แผนโบราณมีพื้นฐานมาจาก "อาชุวัติ" ของประเทศอินเดียและจีนก่อนว่าได้พัฒนามาด้วยเรื่องไทยพระขอปราชญ์ศาสตร์ การศึกษาแพทย์ในยุคพ้นนี้เป็นการศึกษาแบบฝ่ายแพทย์ทรงต่ำทางพ่อค้าใหญ่ที่ชื่นชมหรือคุณครูถึงศีษ์

โรงพยาบาลสรรพยากรณ์และโรงเรียนแพทย์แผนโบราณได้รับการสถาปนาในปี ค.ศ. 1888 (พ.ศ. 2431) โรงเรียนแพทย์แผนโบราณเป็นโรงเรียนนักศึกษาแพทย์แผนโบราณแผนปัจจุบัน ค่อนข้างหลังจึงเริ่มใช้คือ นักเรียนเรียนแพทย์แผนโบราณ การเรียนแพทย์แผนโบราณจึงทำลายไม่ได้ไปจากหลักสูตร

ปี ค.ศ. 1922 (พ.ศ. 2465) เป็นหัวเริ่มทางการปรับหลักสูตรการศึกษาแพทย์แผนโบราณกับแนวทางใหม่ โดยผู้บริหารศึกษาตามหลักสูตรใหม่นี้จะได้รับปริญญาแพทยศาสตรบัณฑิตจากมหาวิทยาลัยและประกาศการศึกษาตามหลักสูตร ปี 2 นักเรียนปรับปรุงหลักสูตรการศึกษาแผนแผนโบราณที่มีอยู่ในปัจจุบันของประเทศไทย ทรงเป็นที่มาสืบสานไปในวิทยาศาสตร์และแพทย์ไปในคัดค้านทาง ประเทศไทยและไทยจึงยังคงไว้ยิ่งใหญ่ที่ใช้ศึกษาถึงศักราช 30 ปีแล้ว นักเรียนแพทย์แผนโบราณจะได้รับปริญญาแพทย์แผนโบราณและแพทย์แผนแผนโบราณกับแนวทางใหม่ 30 ปีแล้ว นักเรียนแพทย์แผนโบราณจะได้รับปริญญาแพทย์แผนโบราณและแพทย์แผนแผนโบราณกับแนวทางใหม่ 3 เบื้องหน้าประเทศ ประเทศไทย
Ancient Medical Education

Medical Education in Thailand originated at the same time as medicine. Ancient medicine in Thailand had its foundation in "Ayurveda" of India, and was understood to come to Thailand with Buddhism. Every old treatise in ancient Thai medicine referred to Shivok Komarabhaj who was the personal physician to the Lord Buddha and who wrote the medical treatise. (1)

The impart of knowledge in ancient time was by apprenticeship, in the form of direct transfer among relatives, from father to son or grandfather to grandchildren. The method was by memorizing texts and practices of elders or teachers. Pupils had to memorize by themselves or follow the teachers to their households. Later the pupils would be proficient enough to practice alone this marked their graduation.

At the time of the founding of Siriraj Hospital in 1888, education at Bhaedhayakorn Medical College still included both traditional and modern medicine. However, there was a lack of systematic education methodology in traditional medicine. Traditional treatise did not change while in modern medical education, diagnoses and treatments adhered to scientific principles so that understanding was easier and the practice more systematic. Modern medical treatises, furthermore, were always adapted and revised with knowledge. Medical students therefore became more and more disinterested in traditional medicine, which eventually disappeared from the medical school. (2)

Modern Medical Education

Modern medical education started when Siriraj Hospital was founded in 1888. The curriculum was three years and the first group of students entered the school in 1889. The turning point for a full-fledged modern medical education started in 1922 when Prince Mahidol of Songkla (The father of the Present King) donated his personal funds to construct buildings and sent young instructors to study abroad. The Rockefeller Foundation came to the assistance at Prince Mahidol's request in 1922 by funding the curriculum development program. The improved curriculum was a 6-year program, after a secondary school diploma (Mathayom 8). The first class of M.D. graduated in 1928, and the Thai medical education spread from its secure root at this point.

The ideas and concepts of our medical education at the start in 1923 were undoubtedly influenced by American medical education since Siriraj Medical School was supported by the Rockefeller Foundation. The Foundation had a contract to send medical professors from universities in the United States to become deans and heads of important departments, such as anatomy, physiology, medicine, surgery, gynaecology ....etc. The structure of the curriculum greatly resembled the American one, which was 2 - years of basic science and English, 2 - years of pre-clinical sciences and 2 - years of clinical subjects. This was slightly different from its American counterpart, which had 4 - years of basic science and college education before the study of pre-clinical and clinical subjects at medical schools.

Chronological Events of Medical Education in Thailand.

To understand medical education in Thailand better, important events can be summarized as follows:-

Undergraduate Education

up to 1888 : Ayurveda Traditional Medicine Transfer of knowledge by apprenticeship
1888 : Siriraj Hospital and Bhaedhayakorn Medical College founded
1915 : Chulalongkorn University (The First University) established
First Faculty of Medicine was founded at Siriraj
1922 : Contribution of Prince Mahidol of Songkla and The Rockefeller Foundation lead to the modern curriculum development at Siriraj
1923 : New medical curriculum developed
1928 : First batch of M.D. graduated
1942 : Siriraj Medical School transferred to University of Medical Sciences (later Mahidol University)
1947 : Second Medical School established at Chulalongkorn Hospital in the University of Medical Sciences (later transferred to Chulalongkorn University in 1967)
1956 : First national Medical Education Conference (Emphasis on roles of Pediatrics, Preventive Medicine and Psychiatry in curriculum)
1960 : Third Medical School at Chiang Mai in the University of Medical Sciences (later transferred to Chiang Mai University)
1961 : 1 - year Compulsory Internship
1964 : Second National Medical Education Conference (Teacher's Training encouraged, Medical Education Unit was recommended to be set up in all medical schools)
1965 : Fourth Medical School at Ramathibodi, Mahidol University
1968 : Medical council founded
1970 : Unit of Medical Education founded at Chulalongkorn
1971 : Third National Medical Education Conference (Increase number of medical schools, Teacher’s Training emphasized, Health Service and Manpower Development; HSHD concept was introduced)
1972 : Fifth, Sixth and Seventh Medical Schools established at Khon Kaen, Songkla and the Army (Phra Mongkutkla) hospital (Khon Kaen announced integration of pre-clinical subjects)
1973 : Curriculum committee, appointed by the Medical Council, proposed new Curriculum approaches leading to strong discussion on relevancy
1974 : Mahidol started rural medical education program
1975 : Chulalongkorn started Medical Education for students in Rural Areas Program (MERSAP)
1977 : Chiang Mai started new curriculum similar to that of Khon Kaen
1979-80 : All Medical Schools curriculum followed Khon Kaen and Chiang Mai
1979 : Fourth National Medical Education Conference (HFA/PHC concepts introduced) Community Health Programs recommended in all medical schools. Compulsory Internship abolished
1985 : Eighth Medical School at Srinakarinvirot University founded
1985-1986 : Department of Family Medicine founded at Chiang Mai
1986 : Fifth National Medical Education (Community-Oriented curriculum and Problem-Based Learning Concept were introduced)
1987 : Chulalongkorn Started the third track program, The Community-Targeted Problem-Based Program.

Post - Graduate Education

Professional program
1969 : Medical Council accredited 13 specialist programs
1976 : New accreditation regulation implemented (Limit number of candidates for some specialties and promote those working in provincial or rural areas)
1987 : Accreditation extended to cover 30 specialist and sub-specialist programs.

Academic Program
Since 1930 there have been several academic M.S., M.Sc., DTM and H., Ph.D programs developed, mainly at Mahidol.

Curricular Change
Since the modern medical curriculum was established in 1923 there has been few changes in the structure and duration of the study except some reorganizations of the subjects taught and of the teaching-learning processes.

Figure 1 Structure and Duration of Study in Medical-Schools.
### Figure 2  Structure and Duration of Study in Medical Schools (cont’d)

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<tr>
<th>Year</th>
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**COMPULSORY INTERNSHIP**

(Started 1961)
It is noticeable that the newly developed medical schools usually planned their curricula according to the pattern of the Siriraj model which was first developed in 1923. It was only 8 years ago that the curricular structures of all medical schools had changed somewhat by contracting the 2 - premedical years to 1 year and adding one more year to the clinical experience. Because of this the compulsory internship was abolished since 1985. The reason for this change was that students from secondary schools had already acquired adequate basic scientific knowledge for further studies at universities and medical schools.

**Innovations in Medical Education.**

Several innovations in the Thai medical education lie in the area of teaching and learning methods and were influenced by the recommendations of the National Medical Education Conferences which were held periodically since 1956.

The First National Conference in 1956 brought about clearer concepts on roles of pediatrics, preventive medicine and psychiatry in medical education. As a result, pediatrics as a subject had been emphasized in the curricula, and departments of preventive medicine and psychiatry were founded in the then two existing medical schools.

The second National Conference in the year 1964 recommended integrated teaching within each discipline and among disciplines. It was suggested that teachers should encourage students to acquire attitude of self - learning; thus, teacher's training in area of pedagogy and establishment of a medical education unit in every medical school were recommended. Chulalongkorn in 1970, with WHO supports, established the first ever medical education unit to fulfill the needs for teacher's training.

Ramathibodi was founded in 1965 and the renewal of the relationship with the Rockefeller Foundation was sought. The outstanding program of Ramathibodi with the assistance of Rockefeller Foundation was the Community Medicine Program, which the medical school, affiliated to the Ministry of Public Health, sent students and interns to work and study at Bang-Pa-In District Hospital. Staff at the District Hospital acted as supervisors of the program.

In 1971, the third National Conference recommended integration of the subjects in the curriculum and re-emphasized the teacher's training. HSMD concept of the WHO was first introduced and medical schools were encouraged to revise curriculum in such a way that they were relevant to the needs of the society. In 1972, three more medical
schools were established at Khon Kaen, Songkla and Phra Mongkutklao Army Hospital. Khon Kaen was the first to develop an integrated curriculum of the pre-clinical subjects and, therefore, the clinical experience was extended to three years.

In 1973, after the student's demonstration, there was an increasing awareness of the importance of relevancy of the medical curriculum. A curriculum committee, appointed by the Medical Council, proposed 3 models of curricular approaches which brought about widespread discussion on the relevancy of the curriculum to the needs of the community. Mahidol University started the rural medical education program in 1974 by recruiting a number of medical students from rural areas. The University set-up a selection committee composed of university staff and staff of the Ministry of Public Health to select suitable candidates by considering school performances, attitudes toward medical profession, and willingness to return to serve their villages as criteria for admission. Chulalongkorn followed the same pattern (MESRAP) in 1975, but instead of training the rural students in Bangkok, they sent them to Chonburi and Chantaburi Provincial Hospitals for the whole period of their clinical training. They are also required to work in district hospitals and health stations in the rural areas as well.

Since 1979 Chiang Mai, Khon Kaen and Songkla had emphasized the importance of community medicine and required their students to study community medicine programs and clinical clerkship programs in district hospitals and health posts in the rural areas close to the medical schools.

Sriraj and Ramathibodi strengthened their regular programs in community medicine by extending their affiliation projects with the Ministry of Public Health to the district hospitals in Nakornpathom, Rajburi and Nakornrajima areas.

The Fourth National Conference, held in 1979, had first introduced the Health For All and Primary Health Care concepts to all medical schools and had also re-emphasized the relevancy of the curriculum. Community health programs were then encouraged. The affiliation with the Ministry of Public Health has become more and more systematic and popular. The Department of Family Medicine was first established at Chiang Mai. The 8th medical school was founded at Srinakarinpairoj University in Bangkok in 1985.

In 1986, the Fifth National Conference was held and the concepts of problem-based learning and community-based education were introduced. In 1987, Chulalongkorn, co-operated with the Royal Thai AirForce, to develop a new M.D. program so that the concepts of problem-based learning and community-based education are fully implemented.

References