

Twenty-five Years of Medical Education in Khon Kaen

It is an honour to be invited by Doctor Pisake Lumbiganon, Editor-in-Chief of the Srinagarind Medicine Journal and former Associate Dean for Research in the Faculty of Medicine, to write this editorial on the history of the Faculty on the occasion of its Silver Jubilee. In the limited time available on my visit to Khon Kaen it was impracticable for my Thai colleagues to provide English translations of all the original documents related to the development of the Faculty, so I have had to rely on various other publications, particularly the report published by the Faculty to commemorate its Twenty Fifth Anniversary.

The present

The Faculty of Medicine at Khon Kaen University is now one of the most highly regarded and rapidly developing faculties in the Kingdom of Thailand. Its 21 clinical and preclinical department are administered by the Dean and seven Associate Deans, including those for Academic Affairs, Administration, Hospital Affairs, International Relations and Special Activities, Planning and Development, Research Affairs, and Student Affairs. The Faculty administers a 750 bedded hospital and provides undergraduate and postgraduate education for its own students and for those from other health science faculties within Khon Kaen University. Teaching and training are provided in 21 preclinical and clinical departments. The former are the Departments of Anatomy, Biochemistry, Community Medicine, Forensic Medicine, Microbiology, Parasitology, and Physiology. The clinical departments are those of Anaesthesiology, Blood Transfusion, Internal Medicine, Obstetrics and Gynaecology, Ophthalmology, Orthopaedics, Otorhinolaryngology, Pediatrics, Psychiatry, Radiology, Rehabilitation Medicine and Surgery.

The Faculty also offers short-term training for healthcare professionals in North East Thailand (Isan) and provides financial support for individually conducted and collaborative biochemical, clinical, health service, health planning and medical education research.

Emphasis is placed on areas of research relevant to the healthcare needs of the people of the North East. These include research into nutritional disorders and antenatal care in deprived areas; tropical diseases, such as fascioliasis, gnathostomiasis and especially opisthorchiasis and its relationship to cholangiocarcinoma; HIV and opportunistic infections; and the effects of trace metal pollution in the Nampong River. Much research is carried out in collaboration with universities abroad and support is obtained from national and international funding agencies. Last but not least, the Faculty publishes the bilingual Srinagarind Medical Journal.

The past

The facilities and activities in Khon Kaen were not always as highly developed as they are at present. Khon Kaen is situated in the centre of North East Thailand in a large arid plain bordering the People's Republics of Laos and Kampuchea. In this area agriculture is difficult, because of poor soil fertility, erratic rainfall and drought and there is little heavy industry. The 19 provinces in the North East have a population of about 19 million people (a third of the population of Thailand) but, as the North East is the least developed part of the country, there is much unemployment and poverty. In fact, the per capita income in Isan is only a third of the national average. As well as poverty there is also, as in other developing countries, a high rate of illiteracy and a poor overall standard of healthcare. Tragically, there was a setback in Thailand's attempts to deal with these social problems due to the insurgency of 1973.

To help contribute to the solution of these enormous interrelated problems, the University of the North East was founded in 1964 as one of three regional universities established under the National Development Plan (the other two being the University of Chiang Mai and the Prince of Songkla University in Hat Yai). The University of the North East changed its name by Royal

Decree to Khon Kaen University in 1966. The Faculty of Medicine was established in 1972. This, together with the previously established Faculty of Nursing, marked the foundation of the University's Health Science Centre. The first intake of medical students was in 1973.

The name most closely associated with the inception and early development of the Faculty of Medicine is Professor Kawee Tungsubutra (Figure 1). He graduated in medicine from Mahidol University in Bangkok and later trained in radiation oncology in the Royal Marsden Hospital, London. He worked in Khon Kaen for twelve years and served as Dean of the Faculty of Medicine for two terms of office - from March 1973 to June 1976 and from September 1978 to January 1980.



Figure 1 Professor Kawee Tungsubutra

Prior to establishing the Faculty, Professor Kawee and his colleagues carried out an appraisal of the healthcare needs of the North East and, recognising that poverty, poor education and illness were closely interrelated, emphasised that these problems should be addressed as a whole. It was noted that only 16% of students admitted to Chulalongkorn, Thammasat and Kasetsart Universities in Bangkok, and a similar number of those admitted to Khon Kaen University, were from the North Eastern provinces. It was noted also that the curriculae in primary and secondary schools in

the North East were not as effectively administered as those in Bangkok and, as a result, students from Isan were at a disadvantage in competing for places in university. Professor Kawee made an agreement with the (then) State Bureau of University Affairs that 60% of places at the Faculty of Medicine of Khon Kaen University should go to students from the North East, with open competition for the other 40% of places as in other universities.

The proposals for the new Health Science Centre, which comprised the Faculties of Medicine, Dentistry, Nursing, Pharmaceutical Sciences, Public Health and Associated Medical Sciences, were supported by the Ministry of Foreign Affairs of the Government of New Zealand and in 1974 the Faculty was granted an annual budget by the Thai Government.

To begin with, preclinical subjects were taught in the Faculty of Science by staff with MSc and PhD degrees, while clinical subjects were taught by only nine medically qualified staff. It was clear that a modern hospital which would attract more high quality staff was of paramount importance. Such a hospital would take a long time to be built, equipped and fully staffed, so a field hospital known as the Hut Hospital (Figure 2) was opened on 15 September 1975. On 23 September 1975 three additional 'huts' were added to the hospital - one for 18 male, and one for 18 female, inpatients and a hut containing two operating theatres and an instrument room.



Figure 2 The "Hut Hospital"

The Hut Hospital was eventually replaced by a new hospital and on 8 September 1979 this was named Srinagarind Hospital by His Royal Highness King Bhumiphol the Great to honour Her Royal Highness the Princess Mother. The building of the hospital was completed in mid-1982. The new Faculty of Medicine moved into premises within the hospital and was officially opened by His Majesty the King on 10 December 1983 (Figure 3).

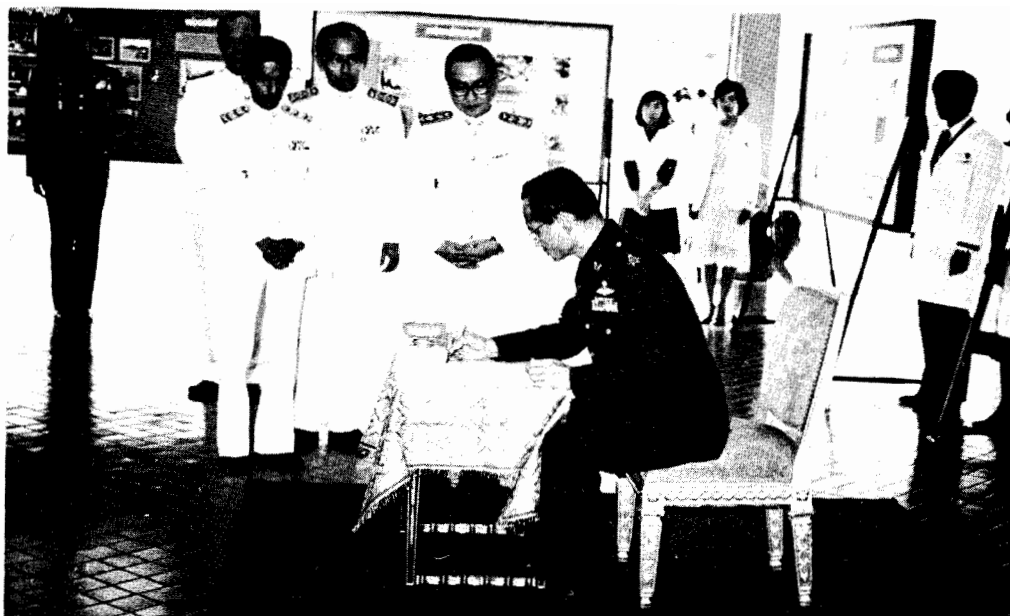


Figure 3 The Faculty of Medicine was officially opened by His Majesty the King on 10 December 1983

On 21 December 1989 a new four storey annexe was added to the hospital. This increased the number of inpatient beds from 600 to their current number, 750, and operating theatres from 12 to 21. It also added four rooms for outpatients. The Foundation Stone for the annexe was laid by His Majesty the King in memory of the 89th birthday of Her Royal Highness the Princess Mother and the annexe was named '89 Pansa Somdej Ja'. It was officially opened by His Royal Highness the Crown Prince on 24 January 1994.

When the Faculty of Medicine was first established only 16 students could be admitted, but with further development of the Faculty the number of students increased to 48 in 1974, 60 in 1978, 88 in 1983, 100 in 1988 and 150 (the current number) in 1994. To begin with the curriculum lasted seven years. Two of these were premedical, two preclinical and two clinical. They were followed by a one year internship. However, as there was overlap between the secondary school curriculum and the premedical year, the education programme for the premedical year was changed so that students were taught psychology, sociology, political science, economics, music appreciation and physical education. The internship was also dropped and the curriculum was restructured to include three years of clinical teaching. The new six year curriculum was evaluated and approved by

the Committee of the Thai Medical Council in 1976 and, at a later date, the other medical schools in Thailand changed their curriculae to that which had evolved in Khon Kaen.

Since its inception the aims of the Faculty of Medicine have been not only to provide a broad general education in medicine but also to produce doctors and other health service personnel with a holistic approach who would address specifically the needs of the rural population of the North East. This involves work within the community and practising modern medicine alongside more traditional methods alongside of healing. In fact, the Faculty was the first in Thailand to train village health volunteers to undertake primary care activities in rural areas.

The hospital itself acted as a high technology, regional, referral centre for medical services in North East Thailand. From the outset research was encouraged, especially that which provided data on, and technology suitable for, the healthcare needs of the population as a whole.

Professor Kawee, who it will be remembered undertook his postgraduate training in the United Kingdom, stressed the importance for staff development of working in more affluent and more highly developed countries, so he applied for and obtained scholarships for students and staff to obtain experience abroad. Most of these were in the Universities

of Nottingham in England; Otago in Dunedin, New Zealand; and Southern California in Los Angeles, USA. The links forged with universities abroad have continued to the present time and have grown from strength to strength.

The future

The past and present cannot be separated from the future. The Faculty of Medicine continues to develop and a building is currently being erected to accommodate 80 patients for the Orthopaedic and Rehabilitation Department. The funding for this was provided by the National Lottery Organization in celebration of His Majesty the King's Golden Jubilee. It is anticipated that the building will be completed in 1998.

Even more ambitious is the development of the 19 storey Srinagarind Memorial Building which will provide a further 700 inpatient beds for the Faculty of Medicine (Figure 4). The Foundation Stone for the building was laid by His Royal Highness the Crown Prince on 10 July 1997. It is anticipated that this building will be completed in 1999.



Figure 4 The new 19 storey Srinagarind Memorial Building

Hand in hand with these structural developments, there are plans to expand on what has already been achieved in many other areas. It is hoped to further increase the intake of medical students, extend post-graduate training and develop new collaborative a

profeds with medical schools in Thailand, its neighbouring countries and countries further afield. Khon Kaen is ideally placed geographically to do this as it is on the crossroads of traffic between China, Laos, Vietnam, Kampuchea and Myanmar. Of particular interest are the Faculty's plans for helping in the development of clinical services and education in neighbouring Laos, Kampuchea and Vietnam.

Acknowledgement

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Appendix

Chronology of historical events

- 1964 Foundation of the University of the North East; establishment of Department of Community Medicine.
- 1966 University changed its name by Royal Decree to Khon Kaen University.
- 1971 Establishment of Faculty of Nursing (the first of its kind in Thailand).
- 1972 Establishment of the Faculty of Medicine; this with the establishment of the Faculty of Nursing marked the foundation of the Health Science Centre.
- 1973 Professor Kawee Tungsubutra appointed as Dean of Faculty of Medicine (served as Dean until 1976); establishment of Department of Obstetrics and Gynaecology; first intake of 16 medical students.
- 1974 Faculty of Medicine granted an annual budget; student intake increased to 48.

- 1975 Opening of the Hut Hospital, establishment of Departments of Otorhinolaryngology and Paediatrics.
- 1976 Establishment of Blood Transfusion Centre and Department of Orthopaedics; expansion of Hut Hospital; Foundation Stone for new hospital laid by His Majesty the King; six year curriculum approved by Committee of Thai Medical Council.
- 1978 Establishment of Department of Surgery; Professor Kawee Tungsubutra appointed to second term of office as Dean (served until 1980); intake of medical students increased to 60.
- 1979 Hospital named Srinagarind Hospital to honour Her Royal Highness the Princess Mother; establishment of Faculties of Public Health, Dentistry and Associated Medical Sciences.
- 1980 Introduction of MSc in Community Medical Nutrition course in collaboration with University of Queensland (and later Mahindol University, Bangkok, and Kabangsan University, Malaysia).
- 1981 Establishment of Faculty of Pharmaceutical Sciences.
- 1982 Completion of building of Srinagarind Hospital; Faculty of Medicine moved into premises in Srinagarind Hospital.
- 1983 Faculty of Medicine officially opened by His Majesty the King; establishment of Clinical Epidemiology Unit; intake of medical students increased to 88.
- 1984 Establishment of Divisions of Pulmonary and Renal Medicine.
- 1986 Establishment of Cancer Unit.
- 1988 Intake of medical students increased to 100; establishment of Cancer Registry.
- 1989 New four storey annexe added to Srinagarind Hospital; Foundation Stone for annexe laid by His Majesty the King; hospital named '89 Pansa Somdej Ja' in memory of 89th Birthday of Her Royal Highness the Princess Mother.
- 1990 Introduction of MSc in Pharmacology course.
- 1991 Introduction of pilot programme of problem-based learning into pre-clinical course; introduction of MSc course in Biochemistry.
- 1992 Establishment of Queen Sirikit Heart Centre; Centre officially declared in Royal Charter; problem-based learning incorporated into preclinical course; introduction of MSc in Physiology course.
- 1993 Introduction of MSc in Medical Microbiology course.
- 1994 Srinagarind Hospital annexe officially opened by His Royal Highness the Crown Prince; establishment of Department of Rehabilitation; opening of Monks Ward with support of Monk Teska Tesrungsee; intake of medical students increased to 150.
- 1997 Foundation Stone for Srinagarind Memorial Building laid by His Royal Highness the Crown Prince; establishment of Sleep Centre.
- The future
- 1998 Anticipated date for completion of 80 bedded Orthopaedic and Rehabilitation Department funded by National Lottery Organization to celebrate His Majesty the King's Golden Jubilee.
- 1999 Anticipated date for completion of 700 bedded Srinagarindaranusorn Memorial Building. 