Radiology in ASEAN: An Outsider's Perspective

A Journey from Bhutan to ASEAN

Kinley Sangay Dorji, M.D. (1)
Dechen Pema, M.D. (1)
Tashi Gyeltshen, M.D. (1,2)
Sonam Choki, Radiotechnogist (2)

1) From the Department of Radiology, Faculty of Medicine,
Prince of Songkla University, Hat Yai, Songkhla, 90110, Thailand.
Address correspondence to K.S.D. (e-mail: kinleykai23@yahoo.com)

(2) Current address: Department of Radiology, JDWNRH, Thimphu, Bhutan.

"Oh...King Jigme". This is the response I always get from Thai people when I answer their question about where I am from. If you are a Thai and you are reading this, you must have already figured it out. For those who are still confused and uncertain about what I am trying to convey, all I am trying to say is that I come from Bhutan. Bhutan is a small Himalayan kingdom sandwiched between two giants, China in the north and India in the south. Bhutan is sometimes called the Last Shangri-La which is translated to "the last paradise". Bhutan is known to outside world for four reasons: firstly, its religion (Mahayana Buddhism) and culture, secondly its pristine environment, thirdly its unique GNH (Gross National Happiness) concept which puts people's happiness before the economic growth and finally our monarch, His

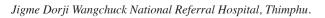
 ${\it His\ Majesty, the\ King\ Jigme\ Khesar\ Namgyel\ Wangchuck\ attending\ the\ royal\ funeral.}$



Majesty King Jigme Khesar Namgyel Wangchuck. His Majesty, the King Jigme Khesar Namgyel Wangchuck, popularly known as "King Jigme" in Thailand is the fifth king of Bhutan who is known for his compassion, wisdom and humility.

Although Bhutan and Thailand may differ in terms of area, population and economy, but they do share some similarities. Both countries are blessed with wise and humble monarchs, have resisted European colonization and engorgement, have rich cultures and most importantly, share a great bond of friendship.

Bhutan is a small landlocked country with population less than a million and with very limited resources. We do not have a medical college and the government send students to study medicine in other countries like India, Sri Lanka, Thailand and Bangladesh. Recently, Bhutan set up post-graduate/residency in Internal Medicine, Surgery, Pediatrics, Gynecology and Obstetrics, Ophthalmology, Anesthesia, Orthopedics and Family Medicine. Although the success of these programs is yet to be seen, it is a huge step towards self-sufficiency in healthcare. However, for other specializations like pathology, ENT and radiology the government continues to send doctors, including me, to other countries. The Ministry of Health is the parent organization responsible for announcing and selecting individuals for the specialization. Depending upon the requirements and scholarships provided by other agencies, the Ministry announces the scholarship. Then the Ministry conducts a competitive interview among the short-listed doctors and then based on the result, the individuals are selected for the scholarship. The scholarship basically covers the tuition fees, stipend, airfare and book allowances. The ministry then looks for the admission and at the same time, encourages the selected individuals to look for the admission themselves as well with a few conditions attached.





I feel utterly thankful to god for everything including where I have ended up now. After I finished my 12th standard, I got a full government scholarship to do MBBS in Sri Lanka. Once I completed my undergraduate program in Sri Lanka, I did my internship in Jigme Dorji Wangchuck National Referral Hospital (JDWNRH) in Thimphu. I worked in Eastern Regional Referral Hospital in Mongar for 1 year as a general doctor. Initially, I was interested in both radiology and internal medicine but later on when I worked as a general doctor in Mongar, I was intrigued by radiology. I saw how much radiology can change and contribute to patients' management. Being a radiologist, you come across all sorts of cases from surgery, medicine, pediatrics and so on. In March 2017, the ministry announced the scholarship for specializations which also included radiology. Ten doctors competed for 2 slots and luckily, I got through. Within the same year, I received an admission to pursue my dream in Prince of Songkhla University in Hat Yai where I am a first-year resident now.

Currently, the health care of the Bhutan mainly focuses on primary healthcare level. As a result, Bhutan doesn't have advanced sophisticated laboratories and radiological facilities nor human resources. To cite an example, Bhutan has only one CT (16 slice) and one MRI (1.5T) machine which are in the national referral hospital. There are only six radiologists, of whom one is based in the army hospital. All other radiologists work in the national referral hospital in Thimphu. These radiologists have been trained in Myanmar, India and Bangladesh. Currently, there are only three radiology residents including myself training to be radiologists. However, things are looking bright. This year, Japan is donating three CT machines (two 16 slices and one 64 slice), a mammography machine and digital X-ray to Bhutan. The two 16 slice CT machines are planned to be installed in the regional referral hospital and the one 64 slice CT to be installed in national referral hospital. There is an ambitious plan to build a cancer hospital and the national referral hospital has already started radiotherapy. There are already selected general doctors to be sent for radiology training and plans to send radio-technologists for medical physicist training, thus, improving the human resources as well.

During this stage of transition from primary to tertiary healthcare, Bhutan will benefit immensely from the guidance of its neighbors and friends. As mentioned earlier, Myanmar, Bangladesh, India, Japan and Thailand have contributed in varying capacities in the health sector development especially radiology. They have contributed not only in terms of human resources and technologies but also in the form of culture, ways of thinking and moving forward.

Finally, I would like to conclude my saying that Thailand has always been a great ally and a friend to Bhutan, helping in the development in various sectors including health. With overwhelming plans and indomitable ambition, Thailand highly likely plays a major role in helping Bhutan achieve self-sufficiency in healthcare.

In the table below, I, along with the co-authors, have rated some of the facilities we have experienced while undergoing our training both in undergraduate and residency. These ratings are purely subjective without implication or meaning.

	THAILAND	MYANMAR	SRI LANKA	BANGLADESH
INFRASTRUCTURE	4	3	3	2
INTERNET ACCESS	5	3	3	4
COST OF LIVING	2	3	4	4
ACCOMODATION	2	3	4	4
COMMUNICATION (MEDIUM OF INSTRUCTION IN ENGLISH)	2	3	4	3
HOSPITALITY	4	4	4	3
TRANSPORTATION	4	3	3	3
FACULTY/TEACHING	3	3	4	3

1-very poor, 2-poor, 3-good, 4-very good, 5-excellent, in terms of cost of living and accommodation-the lower score means high living standard and vice-versa)