Review Article

Achieving Best Medical Practice in ASEAN Economic Community Era

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ABSTRACT

The ASEAN Economic Community (AEC) Era is set to be legally formed in 2020 to prepare the ASEAN region in the era of economic and trade globalizations. The ASEAN Mutual Recognition Arrangements (MRAs) expanded into the medical field, allowing healthcare workers to practice in foreign countries. We reviewed the challenges in the medical field relating to the implementation of AEC, including population and geography characteristics, sociocultural and language barriers, epidemiological differences, variations in medical education and system and license examination, as well as maldistribution and shortage of healthcare workers. We concluded that ASEAN countries are not ready to conduct physicians' migration because many improvements are still needed to overcome the medical barriers. Dramatic steps must be taken to ensure plausible goals.

Keywords: ASEAN, economic community area, Southeast Asia, Medical Practice

BACKGROUND

Technology has been advancing and becoming the source power of modern globalization. The widespread technology has reached almost all humankind, including those in developing countries.1 Internet technology has completely changed human communication method. It promotes business development by providing faster access to information and electronic transactions.2,3 The prominent advantage of technology revolution is the opportunity for countries to establish partnerships, such as regional partnership, as well as to compete in the worldwide market.4

The South-East Asia (SEA) region consists of numerous countries, both developed and developing, with a significant proportion of the global disease burden. Health inequities exist in this region and are influenced by various contributing factors. A report by the World Health Organization (WHO) in 2007 stated that factors contributing to inequity include socioeconomic context, health systems factors, intermediary determinants, and socioeconomic political context.5

Although these inequities exist, the SEA region must thrive to reach the Sustainable Development Goals (SDGs) by 2030, in this context especially the third goal: good health and well-being.

The Association of Southeast Asian Nations (ASEAN) was established in 1967 with fundamental belief that all founding members had the same responsibility in accelerating economic growth, keeping peace, and ensuring stability in the SEA region. For the ensuing years, ASEAN has launched many programs that accommodate trade in goods and services, also investment activities.6

In 1997, Asian countries suffered financial crisis that resulted in disruption of stability that had been built by partnership. By this event, ASEAN members were more convinced that economic integrity is essential in creating resilient region. Initiative on ASEAN Integration (IAI) was established in 2000 with the main objective is to reduce economic gap between ASEAN members.6

The ASEAN meeting in 2003 declared that the ASEAN Economic Community (AEC) was going to be legally formed in 2020. The primary purpose of this idea is preparing the ASEAN region in the era of economic and trade globalizations, especially in facing veiled rivalry with other powerful countries in Asia.6

ASEAN members realized they had done several actions in accordance with the aim of AEC. Hence, the ASEAN meeting in 2007 agreed to launch AEC in 2015 with more determined ambitions, which were envisioned in the AEC Blueprint 2015. Realizing region of single market and production base is one of the four AEC pillars, distinguished by unimpeded movement of goods, services, investments, and skillful human resources.6

Achieving optimal cross-border investment and trade must be supported with skilled professionals or labors. Signing of eight ASEAN Mutual Recognition Arrangements (MRAs) on Services is part of the single market and production base pillars, as well as the concrete realizations of ASEAN Free Trade Area (AFTA). Starting with MRA on engineering services in 2005, MRAs had expanded into medical fields: nursing services (2006), dental practitioner (2009), and medical practitioner (2009). With these MRAs, professionals may be qualifiedly allowed to practice in foreign countries.6

Before AEC, medical trade patterns in ASEAN were similar to mode 1-cross border, mode 2-consumption abroad, and mode 3-commercial presence according to 4 modes of supply defined by the General Agreement on Trade in Services (GATS). There were undeniably communication and collaboration between countries to improve medical services and ensuing an establishment of local affiliation or representative office of a foreign-owned medical company. It is common for an upper-income class patient to go abroad, seeking for an esteemed doctor.7 Achieving an agreement on the AEC formation means medical services trade must include mode 4-presence of

natural persons, described by temporary migration of foreign doctors to the host country.8,9

Positive and negative effects of AEC on regional population health

The desired terminal goals of AEC in health aspect is improving regional health and subsequent economic condition. There are undeniably vast differences of health care systems and its advancement in ASEAN. Disease management in Singapore, Malaysia, and Thailand are more forward compared to other ASEAN states. Creating borderless community facilitates more developed countries to support lesser developed one through upskilling and conducting collaboration.10

If AEC is well executed, it provides opportunities to harmonize multiple advancements in different health-related sectors. The establishment of European Union Partnership lead to multisector improvements towards health care in Europe. These may project good examples about things are going to be happened following AEC. The EU established a centralized licensing pharmaceuticals body and hence, medical products can be marketed more rapidly without constraints from local regulations. In addition, the license is valid for longer period. For medical devices, inspection is executed by private companies, which known as notified bodies. Unlike pharmaceutical products, medical devices are loosely regulated at first. However, following serious complications with some breast implants and hip replacements, the European Commission is trying to strengthen the medical device evaluation.11,12

Regional community also provide an opportunity to address specific health problems together. The serious collaboration within EU to eliminate health threats is well represented by the establishment of European Centre for Disease Prevention and Control (ECDC) in 2005, as a response to anthrax alerts and SARS pandemic within 4 years before. This agency has the responsibilities to coordinate monitoring, surveillance, and management on communicable threats.12

On the other hand, increased human mobility in AEC era will inevitably be accompanied by acceleration in animal and vector transports. These may rise a new challenge related to transmittable infectious disease. Countries with untiring efforts to preserve high immunization coverage may be devastated by the rise in incidence of vaccine preventable diseases (VPDs), of which the pathogens are brought by emigrants from low-income countries or low immunization coverage.

The vaccination status of an adult is almost impossible to be assessed since the documentation is usually unavailable or unstandardized. Therefore, the best practicable implementation is re-vaccination, without looking at previous immunization status, for anyone who is going to work in other countries. Furthermore, clinical examination in disembarkation points must be tightly evaluated, including active TB case finding since the manifestation may not appear during physical examination, but can be proven by blood examination or radiology evaluation. Everyone whose signs and symptoms of transmittable infections must postpone their departure until further detailed examinations prove that they are eligible to depart.13

The emerging infectious disease caused by migration is well represented by measles outbreaks in European Union and the European Economic Area (EU/EEA).14,15 Further studies proposed that sub-optimal immunization coverage among migrant population is the main root of these outbreaks.14 Moreover, antibiotic usage in low income countries is not tightly regulated and thus increases the risk of transmitting antibiotic resistance pathogens to host country.16

Medical field challenges related to AEC

In the medical aspect, the main problem is the preparedness of ASEAN countries to adapt with these changes, considering that the medical field does not deal with inanimate objects, but humans whose characteristics are constructed by social and cultural conditions.17

Population and Geography of Southeast Asia

The population of Southeast Asia is about 600 million people, or 9% of the world's population, with nearly half living in urban areas although there are variations between countries. Geographically, the SEA region consists of archipelago and lies near the intersection of geological plates. The Phillipines and Indonesia are part of the Pacific Ring of Fire with high volcanic activity and occurrence of earthquakes. One of the worst natural disasters occurred in 2004, where the Indian Ocean earthquake caused a tsunami affecting Aceh, Indonesia, and countries surrounding the Indian Ocean. On top of that, regular monsoons and typhoons occur in Southeast Asia.18 Thus, doctors must be equipped with the right knowledge and attitude about specific characteristics of the population and geography in ASEAN countries.

Socio-cultural barrier

Patients would prefer to be treated by doctors who understand their culture rather than doctors who know nothing about their culture. An ideal doctor must consider the patient's sociocultural aspect when giving treatment options. This context involves many aspects, from the simplest on how to greet each other, to things that doctors should unconditionally avoid.19 As an example, Hindus and Sikhs do not approve the use of bovine-derived products. Also, Muslims should not be given porcine-derived products if other alternatives are available.20 Even in multicultural nations, many obstacles can be encountered in comprehending the patient's value from different backgrounds. Medical problems incited by certain beliefs, such as diphtheria outbreak in Indonesia precipitated by anti-vaccination movement, may not appear in the homeland of the incoming doctor.21,22

Language barrier

To accomplish an optimal treatment, doctors must ensure that patients have the same perception about their disease and treatment plan. It can be accommodated if both parties grasp the same understandable language.23,24 Interpersonal communication also comprises of non-verbal language, including body gesture and facial expression.25 Native language can be self-taught or learned from a language institution beforehand. However, non-verbal language is more perplexing to be apprehended because it depends on the doctor's experience. As an example, certain tribes of Indonesia speak with a powerful tone, which might be perceived as an angry expression on the first impression.

Epidemiologic differences

In addition, each country has different common diseases, especially regarding child health. Neglected tropical disease, a common disease in extreme poverty population, varies between ASEAN countries. The prevalence of intestinal helminth infection among pre-school age and school-age children is high in Indonesia, Cambodia, and Philippines, but it is almost zero in Singapore. The similar pattern is also observed for lymphatic filariasis, schistosomiasis, and leprosy.26

Differences of medical education system and license examination

Moreover, despite being part of a region, each country has different approaches in carrying out medical education, including the curriculum and duration of study.27,28 Medical technology advancement and facility availability vary across ASEAN countries, reflecting the economic growth.29 These differences inevitably cause difference in physician skills and abilities.

Medical licensing examination (MLE), an exit examination, is essential to assess the readiness of a fresh physician in real-life situation. Ideally, MLE consists of several tests that assess the ability to apply theories and concepts. These tests must also be able to demonstrate fundamental skills needed for treating patient, including flow of practical examination and best choice of treatment in real-life based scenarios. Kittrakulrat J, et al had comparatively analyzed MLE information across ASEAN countries using primary data from national authorities by exploring official website and making additional queries with email or phone, as well as secondary data from medical university official website and international medical student organization. MLE notably vary

across ASEAN countries regarding its organizing body, language, number of steps, methods of examination, and license expiry period. Thailand and Indonesia conduct national-based MLE, while Singapore and Vietnam accept results of university-based MLE. Indonesia and Cambodia use native language for MLE, while other countries use English either entirely or partly. Although most ASEAN countries have a one-step exam, MLE in Thailand, Singapore, and Cambodia comprises of several steps. In some countries, such as Thailand, MLE consists of multiple choices questions (MCQ), modified essay questions (MEQ), and Objective Structured Clinical Examination (OSCE), whereas other countries, such as Indonesia and Malaysia, only require MCQ and OSCE. Regarding license expiry period, Vietnam require license renewal per 5 years, while other countries accept lifetime certification.27

The vast quality difference of medical education, skill, experience, and publication inevitably cause an unevenly balanced competition. Low-quality doctors, who are predominantly expected from developing countries, will not survive in the medical market. Patients are going to find doctors with advance skills and long experience, who usually come from developed countries. This unevenly balanced rivalry has been reflected by the current medical tourism. An estimate of 2 million medical travelers came to Singapore, Malaysia, and Thailand during 2006-2007.30 This success cannot be separated from the government support which created administrative structure and official organizations to coordinate the medical tourism industry.31-33 These countries are taking advantage of their medical popularity, with a total benefit of USD 3 billion accrued from medical tourism.28 Foreign medical tourist are attracted to be treated in these countries because they provide optimal medical services, including simple administration process and skillful polite staff, with competitive prices.34 Thailand has been targeted for cosmetic and sex change surgeries, as well as bone marrow transplantation.29,35 Singapore has developed a niche for advanced treatments, such as neurological surgery, cardiovascular intervention, hematology-oncology treatment, and stem-cell therapy.29

Universal Health Coverage (UHC) challenges

Currently, most countries are having pre-payment, risk-pooling, and tax-based social health insurance.36 However, social health insurances among ASEAN countries are too various. Therefore, foreign health care professionals have to learn it comprehensively before they come to host country. They also need to practice multiple scenarios regarding health insurance problems that commonly faced by host physicians.

On top of insurance coverage for native citizen, health rights for foreign workers must be guaranteed. With the moto of One ASEAN, universal health coverage (UHC) ideally also covers foreign workers. A study about UHC in ASEAN countries revealed that Thailand, Singapore, and Malaysia are generally receiving health workers, while Indonesia and Philippines are generally sending workers. These countries have health insurance for covering foreign workers with varying extents. Thailand has established health insurance scheme for migrants. Singapore and Malaysia are still contemplating to include migrants in national UHC scheme. Philippines provides social health insurance for migrants, but with limited access. Indonesia is beginning to provide health insurance for foreign citizens.36

Ethical issue

The health sector has clear ethical laws, and hence any law deviation increases the risk of being sued. At present, the ethical laws in each ASEAN states are different, according to their respective cultures. To realize the AEC, there must be a clear legal framework and ethical rules, agreed upon by all countries.

Maldistribution of healthcare workers

Many countries in the SEA region face problems related to shortage and maldistribution of healthcare workers, especially low-income ones. Factors contributing to unequal distribution of

health workers include the maldistribution of health facilities, poor working and living conditions in rural areas, and higher opportunities to earn incomes in urban areas.37 Hence, many doctors are reluctant to serve in remote areas and choose to work in private practices in more prosperous areas.

As of AEC launch, foreign medical company may see low- or middle-income countries as a valuable and profitable market to expand business wing. Competition between native and foreign physicians is getting fiercer in urban areas, and for that reason advance medical access will be concentrated in urban areas. Accordingly, the inequities between urban and rural health care become more apparent.

All factors stated above must be taken into account in mapping future plans to ensure an equitable exchange of health professionals across ASEAN countries. The aim of physician exchange and target patients must be determined by appraising current and future situations.

Applying MEA principles with current medical conditions

Experience from physician migration in Europe reveals that both host country and foreign physicians encounter several difficulties. Authorities of host country worry about patient safety and fitness-to-practice of foreign doctors because the difference in medical education, training, language, and health care systems between the host country and abroad. Meanwhile, migrant physicians experience difficulties with the organization of healthcare institution, own competencies, and interpersonal communication due to lack of language, cultural, clinical, and healthcare system knowledge.38,39

The objective of ASEAN mutual recognition arrangement on medical practitioners are facilitating mobility of medical practitioners, exchanging information, enhancing cooperation, promoting best practice on standards and qualification, as well as providing capacity development and training of medical practitioners.40

At present, exchanging information, providing capacity development, and building partnership across ASEAN countries are plausible targets. There are growing regional partnerships in health research and development to address diseases, such as ASEAN-Network for Drugs, Diagnostics, Vaccines, and Traditional Medicine Innovation (ASEAN-NDI).41

Although most MRA goals are plausible, accomplishing optimal mobility of medical practitioners is a beyond practicable target for now. According to the MRA on medical practitioners, the Professional Medical Regulatory Authority (PMRA) of each country has to appoint not more than two representatives to form a committee, named ASEAN Joint Coordinating Committee on Medical Practitioners (AJCCM).37 Despite its function to ensure the implementations of MRA, AJCCM has not addressed the problems mentioned before. AJCCM has to establish a collegium, of which the functions are to construct a curriculum that covers all common disease from ASEAN member states, to ensure all physicians have the same level of competencies, and to establish an examination that can objectively assess the readiness of foreign physicians to work in the host country. The PMRA from the host country must ensure the foreign physicians have sufficient knowledge of local language (plus English), culture, and healthcare system.38,42 Another option is using international reference standards to overcome accreditation and cultural barriers. Instead of establishing a single uniform accreditation system throughout the region, identifying the minimal standards for practice may solve medical licensing issue. Special education and training to learn host language, as well as the use of technology, may address language barriers.

The government and stakeholders must also take part in policy-making related to distribution of healthcare workers. Measures must be taken to attract health workers to rural and remote areas.37

MRA on nursing services

Since nurse is a profession which closely contact to patient, nurse migration may have a bigger

impact than physician migration. Many challenging aspects are faced by migrating nurses. With new work environment, they have to adjust their skills and values. Migrating nurses commonly feel depressed and frustrated because they are treated like children and have limited opportunities to upgrade their skills. The vast difference in nursing technique and language from origin countries may result in patients distrust towards nurse works.43

Conclusions

ASEAN countries are not ready to conduct physicians' migration because many improvements are still needed to overcome the medical barriers. The current plausible targets for MEA are improving information exchange, promoting partnership to address diseases, ensuring even distribution of health workforce, and providing capacity development and medical practitioners training.

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