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ORIGINAL ARTICLE

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Nursing qualification and workforce for the Association of Southeast Asian Nations Economic Community

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Abstract

International nurse migration among Association of Southeast Asian Nations (ASEAN) countries has the potential to increase the effectiveness of health services and access for the ASEAN Economic Community. Providing equivalent nursing qualifications and licensure standards and increasing the availability of the nursing workforce has become a challenge for ASEAN members. The purpose of this study is: 1) to comparatively analyze information on nursing licensing examinations (NLE) across ASEAN countries; and 2) to present information on the human resources required for a successful nursing workforce. This study reviews all documents published on the subject within the ASEAN Economic Community. NLE systems exist in all ASEAN Member States (AMSs)s except Brunei, Vietnam, and Lao PDR. Nursing education systems also vary across ASEAN countries. Language as a means of general communication and nursing examinations also differs. The availability of a qualified health workforce at the regional level is above the threshold in some areas. However, at the national level, Indonesia, Myanmar, Cambodia, and Lao PDR fall below the threshold. Professional licensure requirements differ among ASEAN nurses as a part of the process to become a qualified nurse in host and source countries. Mutual Recognition Agreements on nursing services should address the differences in NLE requirements as well as the availability of nurses.

KEYWORDS

ASEAN Economic Community, nursing qualification, nursing workforce

1 | INTRODUCTION

The Association of Southeast Asian Nations (ASEAN) was initiated by five countries, namely, Singapore, Malaysia, Indonesia, Philippines, and Thailand. During its development, Brunei Darussalam, Vietnam, Lao PDR, and Myanmar joined, and the association now consists of 10 member states.[1] The ASEAN Member States (AMSs) have a strong commitment to enable a free flow of goods, services, investment, capital, and skilled labor in what is known as the ASEAN Economic Community (AEC).[2] Measures to facilitate migration among health professionals are in place in the form of Mutual Recognition Agreements (MRAs),[3] which recognize the professional qualifications of ASEAN nurses.[4] Health worker mobility under the ASEAN integration continues to grow with distinctive features of each AMS.[5]

Literature on nurse migration has shown that there are two reasons to move to other countries: nurses are either pushed by home countries or pulled by recipient countries.[6] The conditions that drive nurses to emigrate to recipient countries represent a pull factor, while the circumstances that encourage nurses to leave their home countries represent a push factor. Better salary, better working conditions, professional and career development opportunities, international recruitment, safety, technology and stable sociopolitical environment are representative of the pull factors that attract nurses to destination countries.[7–10] The push factors in nurses' home countries include lower salary, limited career and educational opportunities, poor working environments, unstable political environments, and a lack of health and safety.[7–9,11–14]

There have been few studies on health workforce migration across AMSs. The first study discussed the regulation of health professionals under AEC and found that regulation set ups for the health care sector varied and were much more restrictive compared to the IT sector.[15] This aspect of workforce migration may require particular attention when MRAs are considered within AMSs.[15] Further, descriptions of the actual policy space in health services gave an indication that a nondiscriminatory policy would be quickly established in each AMSs, and that the progressive removal of barriers to ASEAN integration was expected to be achieved by the end of 2015.[16] The third study, published by the Economic Research Institute for ASEAN and East Asia

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in early 2015, showed that the actual migration of nurses under this policy only works in a few countries. When foreign nurses apply for a license in the host country, the immigration or employment regulations may hamper them.[17] This study noted some interesting points, namely, special arrangements for visas, best practices and improvements in the quality of professionals, commitment to the movement of natural persons, and engagement of all stakeholders.

According to the ASEAN MRAs on nursing, to be a nurse, one must complete the compulsory professional training and be acknowledged by the Professional Nursing Regulatory Authority in the source country. In addition, nurses should ethically and legally perform the nursing services that are licensed or registered by the designated authority of the source country.[4] However, as noted in the MRAs document, to be eligible as foreign nurses, ASEAN nurses must apply for registration or license in the receiving country.[4]

In the health workforce, nurses are active players in international migration.[18–21] In ASEAN, the international migration of nurses is led by the Philippines.[22,23] Indonesia has also prioritized employing nurses in an effort to become a source of that can help in meeting global demand, as reflected by its current policies.[24,25] On the other hand, uneven distribution and shortages in the health workforce in ASEAN countries has been reported by some researchers.[5,26] The ASEAN region is very diverse in terms of health systems, disease burdens, population, and health transitions.[27] This diversity needs to be noted during any stakeholder meetings.

Comparable nursing and workforce qualifications are critical to ensure the current progress and future direction of regional agreements. Regulations and systems that facilitate the mobility of the health workforce need to be harmonised. The aims of this study are to provide a comparison analysis on nursing licensing examinations (NLE), analyze the latest findings of the nursing workforce and propose policy options on cross-border harmonization. This study is particularly important because of the slow progress in implementing nursing labor mobility in the AEC era.

1.1 | Data and methods

Methods primarily involved a literature review; analysis of existing regulations, policies, and procedures associated with licensure standards in ASEAN countries; policy/legal analysis of nurse-related country-specific laws/regulations; and policy analysis of regional and bilateral trade agreements that impact the nursing profession. Nursing workforce data were taken from the latest publication by Global Health Workforce Statistics 2014. The authors utilized Google Scholar, PubMed, Scopus, and websites of international and national bodies associated with intra-ASEAN countries nursing mobility. Data extraction and critical review were conducted from January to April 2017.

2 | RESULTS

Some similarities and differences existed in NLEs. The similarities included the national authority, duration of bachelor's degree nursing courses, and the steps and methods in an examinations. In the majority of AMSs, their respective nursing councils or nursing boards carried out the NLE. The regulatory authority for ASEAN nurses takes the lead on registration, certification, and enrolment and regulating standards throughout the country. The role of this regulatory body has become critical as the flow of foreign nurses among AMSs requires approval from the host country.[4] The requirements for registration and enrolment of nurses vary among countries. For example, in Singapore, foreign nurses need to undergo a medical examination and participate in an induction program and competency assessment.[28]

Nursing education systems differ within AMSs and shape the professional construction of the NLE system. The duration of nursing courses for a bachelor's degree is commonly 4 years, with the longest being 5 years in Indonesia. In Indonesia, there are two phases of the nursing education system-the academic phase for 4 years and the clinical phase for 1 year.[29] For the nurses pursuing a bachelor degree, the duration of courses vary from 1 year to 4 years of training. The shortest course is 1 year and it runs in Vietnam and Cambodia. In the Socialist Republic of Vietnam, the length of training of primary level of nurses is 1 year with entry level from 9 years basic education.[30]

The process to take the NLE is a one-step approach that aims to assess comprehensive knowledge in nursing. The NLE utilizes a multiple choice question (MCQ) format, except in Myanmar where testing is completed verbally and in writing.

Language diversity is found across AMSs, both in common communication and in the language used to administer the NLE. The Philippines, Singapore, and Malaysia conducted NLE in English, which is their second language. A complete comparison of NLEs among AMSs can be seen in Table 1.

The Human Resources for Health (HRH) situation in AMSs vary greatly, and as the basis of calculation, the authors used the minimum threshold recommended by the WHO, which is 2.28 doctors, nurses, and midwives per population of 1000.[26] Four countries fall below this threshold, including Indonesia, Myanmar, Cambodia, and Lao PDR. The other countries have a sufficient number of healthcare professionals. The aggregate number of HRH in AMSs depicts no shortage, showing 2.62 doctors, nurses, and midwives per population of 1,000 (Table 2).

3 | DISCUSSION

The NLE system among AMSs is diverse in many aspects, including the fundamental characteristics of nursing education and the language used to administer the exam. This diversity needs to be considered as a part of the effort to harmonize requirements among AMSs. Upon examination of the latest situation of HRH in AMSs, some countries suffer from a shortage of professional health personnel. These shortages also need to be approached and discussed when preparing the health workforce to be mobile across AMSs. The discussions addressing the current efforts were done by the ASEAN Joint Coordinating Committee on Nursing (AJCCN), which is a body responsible for facilitating MRAs in nursing services.

TABLE 1 Comparison of nursing licensing examination among ASEAN member states

	Professional Nursing Regulatory Authority (PNRA)	National authority	Language of examination	Official language	Duration of nursing courses (years)	Steps	Methods of examination
Indonesia (Kariasa et al., 2011)[48]	Ministry of Health, Republic of Indonesia	Indonesian Health Care Worker Assembly	Bahasa Indonesia	Bahasa Indonesia	3, 4 (Diploma) 5 (Bachelor)	1	Multiple choice question (MCQ)
Brunei (Brunei Darussalam Government, 2014)[49]	Nursing Board of Brunei	Nursing Board of Brunei	NA	Malay	3 (Diploma) 4, 4.5 (Advanced Diploma) 4 (Bachelor)	NA	NA
Thailand (Thailand Nursing Council, 2015)	Thailand Nursing Council	Thailand Nursing Council	Thai	Thai	4 (Bachelor)	1	MCQ
Philippines (PRC of Philippines, 2015)[50]	Professional Regulation Commission, Board of Nursing	Board of Nursing	English	Filipino, English	4 (Bachelor)	1	MCQ
Singapore[28]	Singapore Nursing Board	Singapore Nursing Board	English	English, Malay, Chinese, Tamil	3 (Diploma) 3.5 (Bachelor)	1	MCQ
Malaysia (World Health Organization, 2014)[51]	Malaysia of Health & Midwifery Boards	Malaysian Nursing Board	English	Malay	3 (Diploma) 4 (Bachelor)	1	MCQ
Vietnam[30])	Ministry of Health, Socialist Republic of Viet Nam	Ministry of Health/ Provincial Agency	NA	Vietnamese	2 (Secondary Level) 3 (College) 4 (Bachelor)	NA	NA
Myanmar (MNMC, 2015)[52]	Ministry of Health & Myanmar Nursing and Midwifery Council	Myanmar Nursing and Midwifery Council	Burmese	Burmese	3 (Diploma) 4 (Bachelor)	1	Writing and verbal
Cambodia (CCN, 2015)[53]	Ministry of Health, Kingdom of Cambodia	Cambodian Council of Nursing	Khmer	Khmer	1 (Primary) nurse), 3,4 (Secondary nurse) 4 (Bachelor)	1	MCQ
Lao PDR[30]	Ministry of Health Lao People's Democratic Republic	Ministry of Health	NA	Lao	1, 2.5 (Technical nurse) 3 (Associate Nurse) 4 (Bachelor)	NA	NA

TABLE 2 Selected indicators of nursing workforce among ASEAN members

		Number			Density per population of 1000		
	Population (millions)	Nursing personnel[a]	Nursing and midwifery personnel[b]	Physician	Nurse and midwife	Physicians	Combined
Indonesia	246.8	217,417	338,501	49,853	1.38	0.2	1.58
Thailand	66.8	138,710	138,710	26,244	2.08	0.39	2.47
Philippines	96.7	352,398	488,434	93,862	5.05	0.97	6.02
Singapore	5.3	30,553	29,340	8,819	6.39	1.92	8.31
Malaysia	29.2	90,199	90,199	32,979	3.28	1.2	4.48
Vietnam	90.8	84,533	100,972	102,925	1.14	1.16	2.3
Myanmar	52.8	28,254	48,871	29,832	1.0	0.61	1.61
Cambodia	14.8	8,979	11,736	3,393	0.79	0.23	1.02
Lao PDR	6.6	5,581	5,581	1,160	0.88	0.18	1.06
Brunei	0.4	2,850	3,323	596	7.73	1.5	9.23
ASEAN	610.2	959,474	1,255,667	349,663	2.05	0.57	2.62

[a]Disaggregated data on nursing personnel from the World Health Organization (2014a)[54]
[b]Absolute number (aggregated) data by country from the World Health Organization (2014a)[54]

3.1 | Limitation of current efforts

MRAs on nursing services were signed in 2006 by a representative of 10 AMSs. The purpose of the MRAs is to facilitate, exchange, promote, and provide opportunities for AMSs to strengthen professional capabilities in the migration of health workers.[4] At the meeting in 2006, the AJCCN agreed on five core competencies for ASEAN nursing, namely, ethics and legal practices; education and research; leadership and management; professional nursing practices; and professional, personal and quality development.[31] There is little literature describing the current situation of MRAs in nursing services, and the lack of new progress

TABLE 3 ASEAN Member States country classification based on income level (World Bank, 2017)

High-income country	Upper-middle-income country	Lower-middle-income country
Singapore Brunei	Malaysia Thailand	Indonesia Lao PDR Philippines Vietnam Cambodia Myanmar

may hinder the implementation of these policies. A study conducted by Fukunaga[17] stated that MRAs for nursing services would not establish a regional registration system. The current system defers to the host country and other laws requested by the destination country. This regulation, in addition to other regulations in host countries such as immigration and employment rules, might hamper the migration of health professionals.[17] Other critics of MRAs for nursing services come from the Institute of Southeast Asian Studies; they argue that these agreements are futile because nurses need to comply with the host countries' regulations.[32] The remaining barriers to trade-in services and restrictions on the movement of professionals should be addressed.[32] Since the MRAs were signed in 2006, there has been no new information issued by AJCCN on its website on the subject.

3.2 | Reassessing solutions: policy options

The migration of nurses has become a global issue and cannot rely solely upon certain proposals unless a sustainable and comprehensive approach to migration has been implemented. Therefore, we propose three policy options, which are outlined below.

3.3 | European union model

The European Union (EU) has the same scheme and allows the migration of natural persons throughout member countries, including health professionals.[33] The EU framework allows for high portability among health personnel as their qualification levels and training periods are automatically acknowledged.[34] According to EU Directive 2005/36/EC, doctors, nurses responsible for general care, dental practitioners, veterinary surgeons, midwives, pharmacists, and architects are able to move and work freely across the EU.[47] Automatic recognition is a simple process that only requires proof of formal qualification or a certificate from competent authorities in a member state.[47] With each member state in charge of the quality of their own educational processes, a policy like this may significantly remove barriers and allow health personnel to easily migrate.[33] The advantages of the EU's policy have been discussed in a study[35] that identified benefits such as simplified procedures, a short wait time for employment in a host country, encouragement of cross-border movement and increased clarity on telemedicine. The disadvantages ranged from brain drain issues, continuing education requirements, cross-border reimbursement, language differences, ethical issues, and discrimination.[35]

Health workforce migration within the EU provides a lesson learned for the nursing profession. The mobility patterns and motivations between nurses and physicians are different.[36] Nurses tend to migrate to a neighboring country that offers a higher salary than their home country; in other words, economic drivers remain the main factor for nurses but not necessarily physicians. The pattern of migration also varies, in that the EU's nurses are more likely than physicians to return or immigrate on a temporary basis.[36] Nurses who have resources and networks also tend to move to another country. The involvement of recruiters is paramount in the case of Germany, where Slovak recruiters actively recruit nurses for home care needs.[36] The pros and cons above, along with a lesson learned from the EU, can inform an appropriate model for MRAs on nursing services.

3.4 | Regional registration system

Another option is for AMSs to establish a one-step regional registration system for ASEAN nurses. Regardless the quality of their nursing education, AMSs should establish a designated authority or body to take over this position. AJCCN might be appointed as the authority to create a mutually agreed upon one-step regional registration system. Nursing qualifications established bya regional registration system should be based on a minimum standard agreed upon by AMSs; for example, minimum education, a requirement for 3 years of working experience, or having a certificate of good standing. The AJCCN could functions as registration and licensure for ASEAN nurses and it has a representative in each ASEAN country. The language of the examination should be in English with MCQ format. Nurses who pass this exam should be recognized as qualified nurses among AMSs.

3.5 | Joint accreditation system

The idea of establishing a joint accreditation system is not new. At the very least, this idea could be a good starting point for AMSs to remove barriers and limitations on the migration of health professionals. The ASEAN Consultative Committee on Standards and Quality formed the Working Group on Accreditation and Conformity Assessment (WG2) in 1993.[37] The focus of this working group was the development of an accreditation and conformity assessment that could be recognized by national, regional, and international bodies. In 1995, 13 ASEAN universities agreed to establish an association, namely, the ASEAN University Networks (AUN), which, at this time, consists of 30 member universities.[38] AUN has made substantial progress on the harmonization of quality assurance system across higher education in the ASEAN region.[39]

A joint accreditation system on nursing study programs is very possible, as most of the AUN members also have open health sciences majors. This policy option is also efficient in terms of budget and long-term program sustainability.

3.6 | Challenges across AMSs

Health systems, economic development and progress in the ASEAN countries vary considerably.[27] Consequently, the challenges and experiences in international health service provider migration also vary. As the most high-income countries, Singapore and Brunei are

well-known destinations for foreign-trained nurses.[5] According to the latest data, 50% of nurses in Brunei are from a foreign country, and 7,000 nurses in Singapore are foreigners.[17] Among upper middle-income countries, Malaysia and Thailand are recognized as countries with strong medical tourism.[40] Among the lower middle-income countries, the Philippines is recognized for exporting doctors and nurses, while Indonesia exports many nurses.[5,41] By contrast, low-income countries, such as Cambodia and Myanmar, are not engaged extensively in the cross-border movement.[5]

It was predicted that any agreement regarding health workers among AMSs would increase the migration of health professionals.[5] Several studies have noted that nurses tend to move from a developing country to a developed country.[42,43] The push and pull factors across regions also play a significant role in nurse migration.[44] Responding to the global shortage of health personnel and the serious effect of their movement across the globe, the WHO launched the ‘Code’ in 2010.[45] The WHO global code of practice on the international recruitment of health personnel was a voluntary code adopted by WHO member states to facilitate circular migration. Responsibilities, rights, and the ethical recruitment of health workers to diminish the negative effects of health workers migration was recognized by this Code. Measures were also recommended to strengthen developing countries with complex health systems that were suffering a shortage of health workers.[45,46]

4 | CONCLUSION

There are various NLE systems that exist among ASEAN countries. These differences need to be addressed as a part of the effort to harmonize practices. Some ASEAN member states still suffer a shortage of essential health workers; therefore, this issue needs to be addressed in the early stage of AEC implementation. Further assessment of proposed policy options needs to be considered. The WHO Code is an available tool for mutual dialogue and negotiation among AMSs that can help minimize the negative effect of nurse migration and strengthen the ASEAN health system.

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