Indonesian Nursing Workforce on the Era of ASEAN Economic Community

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ABSTRACT
The goal of the Association of Southeast Asian Nations (ASEAN) Economic Cooperation is directed at the economic integration of the member states in to a single highly competitive and equitable production base market in the global economy. Therefore, free trade agreement related to the services sector, including nursing will eliminate the barriers for service suppliers across the member states while maintaining adhering autonomy of their national rules and regulations. This study will illustrate the nursing situation in Indonesia in terms of the anticipation regarding quality and quantity levels and global opportunities. We describe the distribution of the current local nursing workforce, current regulations and other factors which may influence their competitiveness. The qualitative methods were used to analyse jurisdictional policy review in legislation and relevant literature, then an in-depth interview and Focus Group Discussion with stakeholders and professional organization was carried out. Finally, triangulation of sources and methods of the collected information was performed supplemented the quantitative description needed of the nursing workforce. In anticipated quality and quantity, the Indonesian nurses were able to meet the demands necessary for the domestic nursing standards and service distribution. We anticipate that the strengthening of existing regulations related to foreign nursing workers and improvement of nursing quality, were not an issue. The surplus of the nurses in Indonesia provide both the government and Indonesian nurses with an economic opportunity to cover the skill shortages in the other ASEAN members. Indonesian nurses are skilled which makes them competitive at the regional and global level. The government should further improve by strengthening relevant legislation; harmonizing the curriculum and nursing education to a world class standard. Ministry of Health Rep of Indonesia and National Nurses Professional Organization should be designing a road map to internationalized strategy to promote the nursing workforce. Existing regulations need to be strengthened in relation to the acceptance of foreign nurse admissions. In order to remain competitive, the training and curriculum needs to be improved to ensure the nursing competence is aligned with international or regional standards.
Keywords: *nurses, MEA, liberalization, service sector*

1. INTRODUCTION

The Association of Southeast Asian Nations (ASEAN) Economic Community (AEC) goals for the economic integration to all ASEAN member states in its blueprint. This will ensure free market competition among ASEAN countries. The primary goal of the AEC is to have one identity and one community [1]. That would require Indonesian standards to be aligned with other ASEAN members. This has its opportunities and challenges. The Indonesian population makes up 40 % of the total ASEAN population which creates an opportunity for it to become a productive and dynamic economic power in terms of market and investment control [2]. Indonesia also needs to maximize these opportunities. The liberalization process of trade under the free market goal of the AEC includes health services, workforce and goods.

The AEC is a hybrid free-trade area and economic agreement that falls short of full economic integration, which is defined as ‘a staged process through which a group of countries gradually coordinate or merge their economic policies over time [3]. The AEC is unlike the European Union or the European Economic Area in that it does not aim to offer ‘free’ flow of skilled labour [4]. Rather, the AEC is designed to facilitate only a ‘free’ flow [5,6]. A challenge arises from the existing patterns of health worker mobility within ASEAN, which demonstrate a movement of

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health professionals from lesser to more developed Member States such as Brunei Darussalam, Malaysia, Singapore and Thailand [7-10].

Globally, there are also concerns about the impact of health workforce migration and trade in health services on the health systems of origin countries [11-13]. Base on those fact, we will focus on the AEC opportunities for the local Indonesian health workforce, in particular the nursing workforce, and strategies to improve its competitiveness. This paper will describe the current situation in the local nursing workforce; determine its readiness to face economic integration; analyse expert opinion from key stakeholders; and identify possible strategies to maximize their competitiveness with other ASEAN countries.

2. METHOD

Qualitative methods were applied in this study. Statistical data on distribution and characteristics (i.e. training and curriculum) of the nursing workforce was collected from official sources to provide some baseline data. Review of literature, existing ASEAN agreements, existing legislation and regulations related to the health workforce was performed initially. A focus group discussion and in-depth interviews with experts from relevant key stakeholders, such as Ministry of Health and institutions representing health workers.

These institutions included the PPSDM Agency, the Indonesian Medical Council, the Indonesian Health Workers' Assembly, and Professional Organizations. Triangulation of the data was performed to produce the results.

3. RESULTS AND DISCUSSION

Our results showed that there are several factors which influence the future strategies to cope with the AEC impact on the Indonesian nursing workforce. These include distribution and characteristics of the nursing workforce in Indonesia; and related legislation, regulations and agreements which affect the competency, quality and standards of the nursing workforce. It is as presented in the following sections.

Ratio of Nurses in Health Services

The presence of nurses in Primary Health Centre (PHC) and hospitals is one of the parameters that needs to be examined to determine its adequacy. Below are table of the number of nurses in PHC and hospitals.

Table 1. The Number and Ratio of Nurses in PHC

Year	PHC		Nurse Number of		
	Inpatient	Outpatient	Standard	Available	Ratio
2014	3,378	6,353	58,789	104,273	1.77
2015	3,396	6,358	58,958	73,311	1.24
2016	3,411	6,356	59,068	98,864	1.67
2017	3,454	6,371	59,487	118,249	1.99
2018	3,623	6,370	60,834	147,388	2.42

Sources: Indonesia Health Profile 2014 – 2018

Based on the Minister of Health Regulation #75 of 2014, the minimum number of nurses is five nurses for outpatient PHC and eight nurses for inpatient PHC. Therefore, the ratio of nurses to PHC has exceeded the standards that set by the regulation. The smallest ratio value occurred in 2015, 7.52 nurses in each PHC. This ratio tends to expand from year to year.

Table 2. The Number and Ratio of Nurses in Hospital

Year	Number of Hospital	Number of Nurse		
		Standard	Availability	Ratio
2014	2,406	71,772	122,689	1.71
2015	2,488	83,542	147,264	1.76
2016	2,601	75,731	195,503	2.58
2017	2,776	77,333	223,257	2.89
2018	2,813	77,653	245,407	3.16

Sources: Indonesia Health Profile 2014 – 2018

There are 7 methods in calculating the number of nurses needed in a hospital, namely the Douglas method, the ratio method, the Gillies method, the PPNI method, the MOH method, the Ilyas method, and the WISN method. Because of the availability of data, the table above uses the ratio method to calculate the number of nurses needed in each hospital class and the values obtained were summed. In 2014 to 2018, the ratio of the number of nurses in hospitals was always greater than the standard value by the ratio method. This ratio tends to grow from year to year. This indicates the number of nurses in the hospital was enough.

Table 3. The Number of Nurses Graduate from Diploma and Speciality in Health Polytechnics

Year	Nurse Graduate		Total
	Diploma (D3)	Specialty (D4)	
2014	6,909	358	7,267
2015	6,835	174	7,009
2016	6,364	244	6,608
2017	5,592	1,101	6,693
2018	6,053	1,437	7,490

Sources: Indonesia Health Profile 2014 – 2018

Health Polytechnics (Poltekkes) is an educational institution which is directly under the Ministry of Health and is managed by the Ministry of Health. Based on the above table, it was known there were 6,600 – 7,490 graduated nurses per year. The nurse needs employment either at the PHC or in the hospital.

Legislation and Regulations Related to the Nursing Workforce:

a. Law No.36 of 2009 concerning Health
b. Law No.44 of 2009 concerning Hospitals regulating positions that are prohibited for Foreign Health Workers (TKWNA)
c. Perpres No. 8 of 2012 concerning the Indonesian National Qualification Framework
d. Decree of the Coordinating Minister for People's Welfare Number 54 of 2013 concerning Health Workforce Development Plans for 2011 - 2025
e. Minister of Health Regulation No.46 of 2013 concerning Health Worker Registration
f. Minister of Health Regulation No. 67 of 2013 concerning Utilization of Foreign Health Workers, currently under revision
g. Law no. 36 of 2014 concerning Health Workers
h. Law No. 38 of 2014 concerning Nursing
i. Minister of Health Regulation No. 56 of 2014 concerning Hospital Classification and Licensing
j. Minister of Health Regulation No. 75 of 2014 concerning Primary Health Care
k. Minister of Health Decree Number 756 / Menkes / SK / VI / 2014 concerning Preparation of Trade and Service Liberalization in the health sector
l. Minister of Health Regulation No. 37 of 2015 concerning Utilization of Health Workers Overseas
m. Presidential Regulation Number 131 Year 2015 Regarding Determination of Remote Areas
n. Letter from the Directorate of Special Regions and Underdeveloped Regions, Ministry of National Development Planning / BAPPENAS no 2421 / Dt.7.2 / 04/2015

Related agreement with ASEAN

a. ASEAN MRA on Nursing Services

Training and Curriculum of Nurses

Educational Institution Accreditation via Bachelor and diploma nursing programs were 659. It's accredited an only 1.4% and accredited C were 82%. Most accredited study programs A and B were at State Universities with subsidized facilities from the government. The education of health personnel under the auspices of the ministry of health through the Health Polytechnic was 38 health polytechnics with 259 in the D3 study programs and 135 for the D4 study programs, where 57.5% of them were study programs in nursing. The number of graduates outweigh the demands of the domestic labour market. Therefore, it is necessary to consider using the AEC to provide job opportunities for the new and current graduates in ASEAN countries experiencing a nursing shortage.

Indonesia has also delivered a Diploma and Bachelor curriculum for nursing consisting of 5 main nursing competencies, aligned with Thailand who had coordinated the harmonization of minimum competencies. That is the basic requirement in all ASEAN countries for the preparation of the nurse education curriculum. The competency map of nurses at the basic professional level in each member country for the National Qualification Framework (NQF) which Indonesia has been completed. The KKNI (Indonesian National Competency Qualification) level for Indonesian Nurses has been submitted to the ASEAN team and is being reviewed.

The problem of the existence of Nursing D IV graduates included in level 6 KKNI. It was not yet included in the professional category. It will be done by bridging D IV graduates to become nurses (professions) that were included in level 7 KKNI. Improving the quality of domestic health workers is carried out through the professional foreign language skills training; as well as, encouraging the involvement of professional organizations and colleges in improving competence. There are already 5 Health Polytechnics were able to open D3 study programs in International class nursing. Its target market share is not ASEAN but European, American, Middle Eastern and Advanced Countries in Asia such as Japan and Korea.

The current supply nurses in Indonesia is sufficient to meet domestic needs. This was not in line with research conducted by Sade, et al (2014) which states that the need for nursing staff in the inpatient room of North Mamuju Regional Hospital based on formulas from the PPNI workshop results as many as 38 nursing staff. The number of workers currently available is 25 people, it is still necessary to add 13 nurses (34.21%). For treatment room I still need to add 9 nurses, treatment room II needs to add 2 nurses, and treatment room III still needs to add 2 nurses. [14]

Improving, maximizing, implementing existing regulation is must. Nursing is the profession most restricted by

domestic regulations; all the 10 Member States impose language requirements, and 9 require foreign nurses to pass national licensing exams [15]. Nursing, however, is the sole health profession for which intra-regional mobility has been reported [16]. This might be because there was market demand, nurses are the most needed health workers, and nurse migration is commonly a workforce priority [17]. At the same time, a sense of caution about the impact of the MRAs on the national health workforce has delayed implementation for each professional group. In some countries, there has been uncertainty about whether the MRAs may create an inflow or outflow of health professional staff and whether the use of foreign health workers may improve or damage the quality of health service delivery.

The introduction of ethical codes for recruitment as well as improved retention policies for source countries have been advocated [18], supported by policy to improve the management of communication issues within ASEAN [19]. Another proposal is for a special ASEAN visa that is truly temporary in nature, which would allow cross-border migrants to gain knowledge, expertise and experience while ensuring their timely return to the home country [8].

Based on this study, there is an urgent need to increase the competence of Indonesian nurses to be more competitive for the maximized use of the AEC. Other research that is in line was conducted by Andriani, 2015 explaining that to improve the quality of human resources, mastery of science and technology was very much needed to be more competitive and become a quality human being, because mastery of science and technology will affect the development of the industry in the future [20].

The results of this study also emphasize that the need to increase the ability of nurses to use English. Other research that is in line conducted by Agianto, 2016 states that English played an important role as the basis of communication in the AEC era [21], besides competence in terms of skills, attitude and knowledge also influences especially those related to transcultural nursing. The use of English language in ASEAN is one of the challenges in the implementation of the health related MRAs. While this is intended to help communication between Member States, the use of local languages in the medical examination process in each country continues to provide an obstacle to full MRA implementation [22]. In Vietnam and Indonesia, no English is used in any stage of the MLE, whereas the examinations in Cambodia, Lao PDR and Myanmar may include English examination questions in addition to questions in local languages.

The continued use of local languages may reflect anxiety by some Member States about the unintended effects of MRA implementation on the local health workforce. Evidence from Kittrakulrat et al. 2014 suggests that the MLE in each Member State may have been designed to promote the national interest rather than regional benefits, and, according to Peterson et al. 2014, licensure regulations can implicitly, but effectively, serve as a barrier to the inflow of skilled migrants under the pretext of public interest [22],[23]. Even so, five Member States (Brunei Darussalam, Malaysia, Myanmar, Singapore and the Philippines) have institutionalized English in school curricula and five other Member States have emphasized the important role of English through their curricula [24].

The divergences in language and qualification standards influence the quality of care through the provider– patient relationship [22], particularly when communication and trust between provider and patient are interrupted. The occupational need for nurses to interact closely with patients therefore needs to be at the heart of the MRA-nursing arrangements [7]. Divergent professional qualification standards also remain a central issue, a result of the different education and training systems across the Member States [25].

Regarding nurse competence, based on the results of the study it still needs to be improved. Other research in line was also revealed by Khanisa, 2016 which stated that regarding employment, it was found that 41.5% of respondents felt ready to compete with workers from other ASEAN countries [26]. Other studies that are not in line are conducted by Fernandes and Andadari, 2012, which conducted research on 113 students. The most of respondents (63.7%) agreed with the implementation of the AEC, they argued that the AEC operation would advance the national economy and bring a positive impact on people's welfare [27].

4. CONCLUSION

The number of nurses in Indonesia was sufficient for domestic needs. Every year there is an increase in the number of nurses because new nurses have entered the workforce. Nurse distribution is not evenly distributed in all provinces in Indonesia. Existing regulations still need to be improved, for example regulation of competency tests for foreign nurses who will enter Indonesia and harmonizing policies on the mechanism for accepting foreign nurses. Existing regulations need to be maximized in their implementation. To be able to compete with other ASEAN countries, Indonesian nurses need to improve their competence.

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