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IJEPA: Gray Area for Health Policy and International Nurse Migration

Ferry Efendi
National Cheng Kung University, Taiwan, ROC; Airlangga University, Indonesia

Timothy Ken Mackey
Global Health Policy Institute, USA; University of California, San Diego, USA

Mei-Chih Huang and Ching-Min Chen
National Cheng Kung University, Taiwan, ROC

Abstract
Indonesia is recognized as a nurse exporting country, with policies that encourage nursing professionals to emigrate abroad. This includes the country's adoption of international principles attempting to protect Indonesian nurses that emigrate as well as the country's own participation in a bilateral trade and investment agreement, known as the Indonesia–Japan Economic Partnership Agreement that facilitates Indonesian nurse migration to Japan. Despite the potential trade and employment benefits from sending nurses abroad under the Indonesia–Japan Economic Partnership Agreement, Indonesia itself is suffering from a crisis in nursing capacity and ensuring adequate healthcare access for its own populations. This represents a distinct challenge for Indonesia in appropriately balancing domestic health workforce needs, employment, and training opportunities for Indonesian nurses, and the need to acknowledge the rights of nurses to freely migrate abroad. Hence, this article reviews the complex operational and ethical issues associated with Indonesian health worker migration under the Indonesia–Japan Economic Partnership Agreement. It also introduces a policy proposal to improve performance of the Indonesia–Japan Economic Partnership Agreement and better align it with international principles focused on equitable health worker migration.

Keywords
Global health policy, healthcare delivery ethics, healthcare worker migration, Indonesian nurse, trade and public health

Introduction

A global nursing shortage in developed countries has led to active recruitment of nurses, particularly from low- and middle-income countries.[1–3] Globally, foreign nurse recruitment is recognized as a quick and simple

Corresponding author: Ching-Min Chen, Department of Nursing and Institute of Allied Health Sciences, College of Medicine, National Cheng Kung University, No. 1, Daxue Rd, East District, Tainan City 70101, Taiwan, ROC.
Email: chingmin@mail.ncku.edu.tw

strategy to meet the growing needs of aging populations and increasingly resource-intensive healthcare services in high-income countries by ensuring acceptable staffing levels in these destination countries.[4] Through international recruitment, developed countries do not need to wait for qualified nurses to be trained in-country and instead can leverage investments in healthcare worker education and training in source countries where the costs may be substantially lower.[5] Conversely, source countries may struggle to meet their own demands for health personnel and service capacity due to this form of outward migration in a highly skilled and professionalized workforce.[5]

Hence, liberalization of trade, globalization, and increased international travel have enabled greater access and availability to nurses and other healthcare workers with migration policies also creating strong economic incentives for outward migration.[5] This includes "pull" factors from developed countries (e.g. greater demand for healthcare workers, higher wages) and "push" factors in source countries (e.g. low wages, fewer opportunities for professional growth) that have exacerbated the estimated global shortage of 7.2 million healthcare professionals that includes physicians, nurses, caregivers, and other allied healthcare workers.[6] This situation is at odds with the World Health Organization[7] Global Code of Practice on the International Recruitment of Health Personnel (WHO Code) adopted in 2010, which discourages active recruitment of health staff from countries facing shortages of human resources related to health.

Nurse migration is a critical component of the phenomenon of international movement in healthcare workers and has been identified to occur within a country's borders and across countries with different healthcare workforce priorities.[4] Nurses migrate for a variety of economic, social, professional, personal, and even political reasons.[8] Between countries, the number of health personnel, including nurses, leaving low-income countries for developed countries continues to increase significantly.[9] Within country, migration of the health workforce commonly occurs in the form of migration from rural to urban areas and represents a common challenge in low-income and high-income countries alike.[5] Ongoing debate on the benefits and detriments of the current flow of transnational nurse migration has been the subject of international attention, a dilemma also more broadly referred to as the global "brain drain" of healthcare workers.[2,3]

Indonesia is a country that has been significantly impacted by the free movement of nurses globally, particularly through domestic and international policies that have encouraged this mobility.[10] This has led to a significant outward flow of Indonesian nurses from 2008 to 2012, with more than 3000 nurses posted to developed country settings.[11] These trends may severely compromise access to healthcare services within Indonesia, especially given its classification by the WHO[12] as a country suffering from health worker shortages. Indeed, nursing shortages are part of a broader regional challenge in South-East Asia, an area of the world that is experiencing the greatest shortage of health personnel according to WHO[12] with acute shortages in countries including Indonesia, India, and Bangladesh.

An important factor that may further impact the outward flow of nursing professionals from Indonesia to other international destinations is the influence of international trade agreements and their treatment of health worker migration. Hence, this article will describe and critically assess the impact of a unique bilateral trade and investment agreement, known as the Indonesia–Japan Economic Partnership Agreement ("IJEPA"), which facilitates a pathway for Indonesian nurses to immigrate to Japan. Though much has been written about the IJEPA from the perspective of Japanese researchers and policy makers, little has been written from the viewpoint of the source country, Indonesia. We aim to fill this gap in the literature by first discussing the current Indonesian nurse human resource environment, describe factors influencing the country's shortage of nursing professionals, and assess how Indonesia's participation in international and regional agreements impacts health worker migration and recruitment. We then describe and assess the compatibility of the IJEPA with Indonesian national policy on emigration and health services and workforce development. We also explore some ethical considerations for nursing professionals related to the IJEPA and assess the agreement's

overall operational effectiveness. Finally, the article sets out a framework for a policy intervention to potentially improve operational performance of the IJEPA that could be pursued in current renegotiation efforts between the two countries and that could better balance the costs and benefits of this form of transnational nurse migration.

Methods

This study conducted a literature review and analysis of secondary and primary documents related to the regulations, policies, and procedures associated with the IJEPA and how it impacts the cross-border migration and international recruitment and practice of nursing professionals. The inclusion criteria for documents reviewed in this study comprised peer-review literature discussing the IJEPA between Japan and Indonesia published in English; trade association documents from Indonesian nurse professional groups; reports issued by regional or international organizations discussing the IJEPA or nurse migration between the two countries; and policy documents issued by the Indonesian government discussing/assessing the impact of the IJEPA. In retrieving these documents, we utilized general online *Google* searches for keywords associated with the IJEPA and cross-border migration of nurses between Indonesia and Japan, searched for literature on the subject from PubMed/Medline databases, and also searched for documents on websites of international and regional organizations as well as from Indonesian government agencies. Given the emphasis on providing needed data on the source country perspective, we did not emphasize review of documents from Japanese sources, though remained objective in our assessment of the information reviewed. Document extraction and review was conducted from July 2014 to January 2015.

Nursing human resource environment in Indonesia

Ensuring adequate supply and balanced distribution of nurses throughout Indonesia is a significant challenge, given current and projected nursing shortages.[13] This crisis in health systems capacity has been recognized domestically by the Ministry of Health (MoH) of Indonesia, who acknowledged a deficit in health personnel, especially in regard to nurses.[13] Emblematic of this crisis, in 2014, the MoH[14] reported a deficit of 10,370 nurses in public hospitals and 4213 in community health centers throughout Indonesia. Without any fundamental changes to health workforce policies, the projected nurse deficit is predicted to worsen to a deficiency of 87,618 nurses in public hospitals, 602 nurses in military hospitals, and 20,230 nurses in community health centers by 2019.[15] In addition, Indonesia is facing complex health problems linked to several off-track indicators related to the Millennium Development Goals' (MDGs) targets[16] and a growing dual burden of infectious as well as non-infectious diseases.[17] Conversely, Indonesia remains a worldwide resource for migrant health workers and has directly contributed to alleviating shortages through nurse exportation to other countries.[11,18]

Nationwide, the ratio of nurses was 96 per 100,000 people, equating to an estimated total of 235,496 nurses in 2012.[19] Even though there is no standard norm for the ideal ratio between nurses and the patient population, a nurse-to-population ratio gives a general overview of the level of availability of professional nursing staff in a country, region, or locality.[20] The province that has the highest ratio of nurses was Maluku (275.5 nurses per 100,000 people) with the lowest ratio of nurses in the Jawa Barat province (49.3 nurses per 100,000 people), illustrating an existing imbalance in in-country nurse distribution.[19] Additionally, though there are no documented statistics of the actual availability of nurses in rural and remote areas of Indonesia, it is surmised that there is a general lack of access to health personnel in these underserved areas.[21] This is despite the fact that more than half of the population in Indonesia resides in rural settings.[22]

Complicating this situation is the high unemployment rate among Indonesian nurses, where only one third of 22,000 new nurses were estimated to be employed annually based on data collected from 2005.[18] Limited fiscal capacity of public and private healthcare providers is mentioned as a contributing factor for nursing recruiting, employment, and retention.[18] Further reports indicate that Indonesia is at high risk of having a larger nursing workforce than its health capacity can manage,[23] though no specific study has detailed exact unemployment rates of Indonesian nurses due to lack of reliable human resource information systems.[24–26] Though Indonesia's health profile report in 2013 showed that it had an annual production of 32,461 nursing graduates,[19] this data might be underestimated as it only collected information from nursing education institutions supervised by the MoH and did not integrate with Ministry of Education (MoE) data. In 2011, the MoE released information on the rapid growth of nursing education institutions reporting that 600 nursing study programs offered diplomas and 309 nursing study programs were available at the bachelor level.[23] The government also had concerns regarding the quality of nursing education institutions following this rapid expansion and predicted higher rates of unemployment for nursing graduates leading to a moratorium on creation of new nursing study programs.[23] Despite these efforts, unemployment problems among the nursing workforce continue to be a problem in health resource management in the country.

As an indication of active Indonesian nurse migration, data available from the National Board for the Placement and Protection of Indonesian Overseas Workers (BNP2TKI) found that more than 3.9 million Indonesian workers migrate to foreign countries, with 3080 Indonesian nurses sent to high-income countries.[11] This human movement has generated an estimated US$7.35 billion in remittances by migrant workers as reported in 2013, with the exact value of remittances sent back by Indonesian nurses unknown.[27] The lack of published data on the economic impact of international nurse mobility brings into question the overall benefit that could be derived from this form of economic offset for loss in healthcare access and capacity. Evidence from African countries indicates that Health and Human Resources (HHR) emigration has a more positive effect when the level of economic growth in the source country is low.[28] Hence, given Indonesia's relative positive economic growth and outlook from 2010–2013 as reported by the World Bank,[29] the positive impact of remittances may be limited, further supporting the need for more robust economic analysis to measure the health and economic consequences of Indonesia's nurse export economy.

Beginning in 2014, the government of Indonesia (GoI) also launched Universal Health Coverage (UHC) for the Indonesian people, effectively increasing the need for nursing and other healthcare professionals.[14] However, Indonesia's commitment to a national health policy to ensure UHC may be hampered by its overall shortage of nursing professionals as well as its continued promotion of their migration in different forms, including when incorporated into international trade agreements.

WHO Code and other international and bilateral agreements impacting Indonesian nurse migration

Acknowledging that adequate and accessible health personnel are critical, the World Health Assembly (WHA)[9] has endorsed a "code" to protect nations involved in international migration. This WHO Code recommended a set of non-binding guidance for state and non-state actors involved in international recruitment of health staff.[9] The WHO Code[7] was developed based on fundamental principles recognizing the human right to health that emphasizes that everyone should have the right to the highest attainable standard of health and that all individuals, including health workers, have the right to migrate from one country to another in search of employment.

The WHO Code contains 10 clauses covering the following: objectives; nature and scope; guiding principles; responsibilities, rights and recruitment practices; health workforce development and health systems sustainability; data gathering and research; information exchange; implementation of the code; monitoring and institutional arrangements; and partnerships, technical collaboration and financial support.[7] As a WHO

member state, Indonesia has adopted the spirit of the code and has started the process of implementing it into national policy. The WHO Code was warmly welcomed by the GoI as a means of raising awareness to ethical recruitment of its domestic healthcare workers and seen as an opportunity for advocacy among relevant stakeholders engaged in health workforce mobility. The MoH, as the designated national authority in charge of implementation of the Code, has already taken some important measures including translation of the Code into national language (*Bahasa Indonesia*), dissemination of information regarding the code to relevant stakeholders, and has made changes to its national migration policy regarding mobility of nurses.[30]

In 2012, in reference to the WHO Code, the MoH issued the ministerial decree number 47 addressing the management of the Indonesian nurse migration. The ministerial decree contained a national migration policy, the technical guidelines on sending Indonesian nurses to work abroad, and the requirements to ensure qualification standards for nursing professionals. This regulation resulted in a shift in national migration policy, which in theory should also translate to compliance by a foreign country that has or enters into a trade or migration agreement with Indonesia or that has its own laws on protection of migrants.[31] Through the use of this policy, the GoI is attempting to ensure that the receiving country protects the rights of Indonesian migrants and guarantees them the same opportunities offered to their domestic health workforce. Indonesia's recent policy stance also reflects acknowledgment of the basic principles of the WHO Code and earlier efforts by the government (e.g. including in the 2004 law (number 39/2004) titled "the Placement and Protection of Migrant Workers Abroad in 2004") to ensure that the country supports the process of adopting an international standard in protecting the rights of migrants as well as protecting its own citizens that emigrate abroad.[32]

However, most of Indonesia's bilateral and regional agreements that impact health workforce mobility, including the IJEPA, precede the country's adoption of the WHO Code. Besides the IJEPA, the GoI also has a bilateral agreement with East Timor for migration of Indonesian midwives in place since 2010.[33] Concerns regarding the individual rights and privileges of health professionals in East Timor resulted in a technical arrangement between both governments that also aligns with the spirit of the WHO Code.[33] The technical arrangement establishes principles, technical assistance, and administrative matters needed to regulate the deployment of midwives outlined by a memorandum of understanding between the two countries. The arrangement also ensures that Indonesian midwives receive fair treatment during recruitment and deployment. In addition, Indonesia has also been involved in a regional agreement among the Association of Southeast Asian Nation (ASEAN)[34] on nursing services which has been in place since 2006.

Indonesia–Japan Economic Partnership Agreement (IJEPA)

The IJEPA is a bilateral investment and trade agreement agreed upon by Indonesia and Japan in 2008 and was structured to result in trade liberalization policies and practices that could benefit the economic relationship between the two countries. Through this cooperative agreement, trade diversification was pursued and included a provision (Annex 10 in Chapter 7, Section 6) that allows nurses from Indonesia to work in Japan's healthcare system under certain conditions.[35] This program under the IJEPA includes specific commitments and requirements associated with the migration of Indonesian nurses and certified caregivers (*kaigo fukushishi*) to enter into personal employment contracts with public or private Japanese hospital organizations. The provision creates 200 nurse slots pre-screened and recruited by the BNP2TKI[36] per year, with an initial entry period of 1 year which can be extended for up to 3 years, provided that the candidate pursues a course of training (including Japanese language training) or other activities needed to qualify as a registered Japanese nurse (看護師, *kangoshi*).

A long journey awaits Indonesian candidates hoping to qualify as a *kangoshi* in Japan under IJEPA, including a 1- to 4-year transition phase beginning in Indonesia and ending in either Japan or Indonesia

should the candidate fail to meet stated requirements.[37] In order to join this program, Indonesian candidates are required to undergo a 6-month pre-departure training program within Indonesia and are also required to undergo intensive language training in order to help them pass the Japanese Nursing License Examination that is conducted in writing in the Japanese language. Within Japan, Indonesian nurses work as nurse assistants at a host institution until they pass the national exam (with candidates allowed to take the test a maximum of three times); otherwise they must return home after a 3-year contract is completed. A similar scheme is also applicable to certified caregivers under the IJEPA.[37]

The process required by the IJEPA introduces many significant professional hurdles prior to qualification, including a spoken and written language barrier, cultural differences, and the most difficult aspect, successfully passing the national qualification exams in Japanese as required for Japanese nurse nationals.[38] Specifically, the nurse qualification test comprises some 240 questions conducted over 7 h.[39] Under the IJEPA program, the passage rate for the exam is only 18%, which means that only 87 out of 481 Indonesian test takers have succeeded in passing the Japanese Nursing Examination from 2010–2014 (see Table 1).[40,42] Though the passage rate has shown some improvement from the first year, the *kangoshi* exam was first administered to the IJEPA candidates in 2010; acknowledging the low passing rate, the designated authority of Japan revised the requirements to allow an additional year for candidates to stay in Japan and re-take the test.[41] Other adjustments have also been carried out including extending Japanese language training from 6 months to 1 year (implemented since 2013) to help the candidates better address language barriers/challenges.[42] Furthermore, changes to the examination by allowing extra time to complete the exam and attaching more simplified "hiragana" characters to the complex "kanji" (Chinese characters) have arguably helped improve candidate passage rates.[43] However, the overall and continuing low passing rate of Indonesian nurses under the IJEPA in Japan has invited criticism both within and outside the country.[38,44]

In fact, the problems faced under the IJEPA are similar to those experienced by Filipino nurses under a similar bilateral investment and trade agreement between Japan and the Philippines (the "Japan–Philippines Economic Partnership Agreement" or the "JPEPA"), which includes a very similar provision and requirements for nurse migration. In a separate study examining the JPEPA, it was reported that only 7.18% of Filipino had passed the Japanese Nursing Examination from 2009 to 2011.[45] Others studies evaluating the IJEPA program from the perspective of Indonesian nurses have found that a lack of understanding of the working conditions in Japan led candidates to become dissatisfied with their work and may have led to non-completion of the program.[46]

The IJEPA was built around the premise of providing mutual benefits for both source (Indonesia) and destination country (Japan) and was also aimed at improving the economic and employment benefits between the countries specific to skilled migration. However, given current challenges faced by Indonesian nursing candidates, the low rate of examination passage, and questions regarding the operation of the IJEPA nursing provision, it is clear that the fundamental structure of the IJEPA requires further scrutiny. This includes assessing whether the stated goals of the IJEPA are compatible with Indonesia's overall emigration policy, whether they help address the country's health workforce development and sustainability needs, and whether individual nurse practitioners benefit from the program.

Compatibility of the IJEPA at the Indonesian national emigration policy, health services, and individual practitioner level

Assessing whether the IJEPA is compatible to Indonesia's overall goals and operational policies aimed at addressing health workforce development and health systems sustainability can be measured at three levels: the emigration policy level (inter-government), the health services level (MoH), and the individual level (the nurse practitioner). Important to examine are key Indonesian national governmental agencies participating under the leadership of Ministry of Trade (MoT)—including the Ministry of Manpower and Transmigration

Table 1. Indonesian nursing applicant passage rates under the Indonesia–Japan Economic Partnership Agreement.[42]

		2010 test		2011 test		2012 test		2013 test		2014 test		Overall	
Entry year	Total number of candidates	Test takers	Number passed	Test takers	Number passed	Test takers	Number passed	Test takers	Number passed	Test takers	Number passed	Number passed	Percentage of those who passed
2008	104	100	2	91	13	31	9	n/a	n/a	n/a	n/a	24	23.1%
2009	173	95	0	159	2	152	22	72	14	n/a	n/a	38	22%
2010	39	n/a	n/a	35	0	33	3	32	3	29	7	16	41%
2011	47	n/a	n/a	n/a	n/a	41	0	44	3	33	6	6	12.8%
2012	29	n/a	n/a	n/a	n/a	n/a	n/a	25	0	27	3	3	10.3%
2013	48	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	33	0	0	0
2014	41	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total	481	195	2	285	15	257	34	173	20	122	16	87	18.1%
		1.03%		5.26%		13.2%		11.6%		13.1%			

The above data include the IJEPA candidates who issued a "re-challenge" and went back home to Indonesia to pursue further *kangoshi* exam testing under their own expenses.

(Kemnakertrans), the BNP2TKI, the MoH, the Ministry of Foreign Affairs (MOFA), and the Ministry of National Education (MoE)—who are key domestic stakeholders of the IJEPA.

As IJEPA is primarily focused on bilateral economic trade and development, the MoT's primary concern as the lead agency for the agreement is to ensure a balance of trade and assistantship in capacity building for Indonesia's domestic industries. Similarly, as the agency focused on diplomatic relations with other nation states, the MOFA[47] also welcomes the IJEPA, given its goals to maintain a history of good relations between the countries. Recent evaluation of the trade facilitated under the IJEPA indicates that in terms of export and import activities, both countries have received benefits from more open and free trade.[48] However, trade benefits derived from the IJEPA do not appear to be significant enough to provide Indonesia more leverage and influence on trade activities at the macro level as was hoped.[48]

At the emigration policy level, Kemnakertrans is responsible for the promotion, policy making, and protection of Indonesian migrants, including regulating and evaluating the practices of private recruiters.[49] Meanwhile, the BNP2TKI has the responsibility to implement migration policies by coordinating existing government services on the issue and ensuring the active protection of the rights of migrant workers. Collectively, the role of these two institutions is to promote migration by seeking out niche labor markets with an emphasis on government involvement (e.g. government-to-government or government-to-private relationships) in order to facilitate migration and economic opportunity.[49] From this context, Kemnakertrans and the BNP2TKI both viewed the IJEPA as an opportunity to promote Indonesian trade by gradually transforming the country's image from a major unskilled worker exporter economy (non-formal sector) to a skilled labor exporter in the healthcare sector.[36] Similarly, the role of the MoE is to prepare high-quality nursing graduates during pre-service training by acting as the regulatory body for managing the quality and quantity of nursing educational institutions.[50] The MoE worked closely with various stakeholders to ensure that nursing graduates meet certain global standards for licensure and employment, and hence, similarly supported the IJEPA as an opportunity to further promote Indonesian nurses as high-quality healthcare workers abroad.

From the health services level, the overseas movement of Indonesian nurses has been a point of concern for Indonesian health ministers and policy makers even prior to the IJEPA. In 2005, the MoH established a specific division to oversee Indonesian health worker migration. However, as stated in Indonesia's Human Resources for Health (HRH) strategic plan, the policy of sending health workers abroad has two primary objectives: addressing global demand and creating job opportunities for Indonesian health workers.[13] Within this context, the deployment of the health workforce abroad is focused on the benefits derived by Indonesia through the transferring of technology and knowledge rather than encouraging nurses to permanently emigrate.[31] Therefore, the MoH[51] views the IJEPA as *both* potentially beneficial for Indonesia in terms of creating job opportunities for Indonesian nurses but also expects Japan to lend its expertise to help strengthening the medical competencies of Indonesian nurses.[30] Although the MoH generally supports the idea of sending nurses abroad, it is specifically concerned about losing experienced workers that could be utilized for domestic needs as well as the potential for returning nurses to deskill as they are required to work in Japan below their scope of practice as nursing assistants. At the same time, the MoH is concerned about the potential negative impact of the IJEPA to overall domestic HRH policy, as well as its impact on managing health workforce planning and resulting imbalances between production and demand.[52]

At the individual level, nurses under Indonesian law are guaranteed the right to freely migrate regardless of their motivation.[32] The recently issued Nursing Act (number 38/2014) also specifically acknowledges the expanded role of Indonesian nurses in meeting the global demand in health workforce shortages and notes that nurses are consistently among those Indonesian migrants who commonly leave the country.[53] Freedom of movement also means freedom to choose in which route nurses would like to migrate abroad, including potentially utilizing the IJEPA program. However, reports by the MoH indicate that currently there are only a small number of interested nursing candidates in the IJEPA due to concerns over the long recruitment process

and the risks of failing the nursing exam in Japan.[54] We explore additional ethical considerations that may impact individual nursing professionals related to the IJEPA in the next section.

Hence, the case of the IJEPA illustrates that though the trade agreement may not have a profound impact on the overall domestic nursing shortages, given the relatively small number of Indonesian nurses involved, it nevertheless represents a misalignment of trade and economic priorities with national health workforce development and health systems sustainability objectives. It further indicates that although the agreement's intended purpose is to bring mutual benefits to both countries by improving healthcare employment opportunities while also enabling capacity building and enhanced training, this has not been realized at the operational level. As an example, although the MoH HRH strategic plan clearly states that the main purpose of sending nurses abroad is for the transfer of knowledge and skills, existing IJEPA initiatives have fallen short of this goal.[13] Specifically, the GoI took steps to actively negotiate the IJEPA with the Japanese government, which resulted in an agreement for technical assistance and financial support through the multi-year Japan International Cooperation Agency (JICA) project designed to enhance nursing competency through in-service training.[55] However, the actual benefits of the JICA project have been difficult to ascertain and may instead be viewed as a strategy of "compensation policy" in response to pressures of both countries to balance potential trade benefits with that of its impact on healthcare worker recruitment success. Furthermore, while HRH has emerged as a policy priority for the MoH, there appears to be a lack of coherence in the immigration and policy approach to addressing nurses' utilization when returning to the home country.

Finally, there appears to be misalignment between the WHO Code and health worker migration under the IJEPA from a health systems sustainability aspect. Article 3.5 of the WHO Code notes that "International recruitment of health personnel should be conducted in accordance with the principles of transparency, fairness, and promotion of sustainability of health systems in developing countries." The Code places the obligation of promoting sustainable health systems on member states, especially for developing countries. For Japan, promoting health systems sustainability should involve developing a sustainable domestic health workforce and creating effective HRH management to reduce reliance on other countries such as Indonesia. From the Indonesian side, promoting sustainability should involve capacity building at home while promoting responsible health worker mobility that does not significantly impair its own access and delivery to healthcare. Given the policy direction set out by the WHO Code, both countries should derive benefits from the mobility of health workers and collaborate in promoting health system sustainability. However, policy makers from both countries have failed to even agree on the definition of health workforce sustainability or how to measure it under the IJEPA.[56] Therefore, negotiation and implementation of the IJEPA appears to lack sufficient consideration of the agreement's potential impact on health system sustainability and could be improved upon.

Ethical considerations

Despite some potential positive economic benefits resulting from the international movement of nurses between countries, which includes remittances sent back to source countries and additional training for nurses abroad, the public health impact of nurse migration on populations already lacking adequate access to healthcare services raises certain ethical considerations that need to be explored.[5] Specifically, the loss of skilled labor and its impact on healthcare capacity, notably in Indonesia, have not been effectively addressed through domestic policy or international agreements that could better balance economic opportunity, the mutual benefits of international trade, and local health capacity and workforce needs. Ethical considerations that need to be assessed in this context are focused on the operation of the IJEPA and overall impact on individual nurse practitioners and include: the overall cost of the IJEPA program; balancing freedom of movement with source country health needs; and cost versus patient safety considerations. This section explores these questions from the view of the source country Indonesia.

Cost of IJEPA and ethical recruitment

Whether appropriately recognized or not, the nursing profession has become a multibillion dollar global industry in the international economy.[1] This international labor market encourages nurses from low- and middle-income countries to seek opportunities abroad in the hopes of achieving greater professional and economic opportunities in high-income settings. However, relying on the international market for labor capacity likely distorts the balance of human resources in the domestic market. The market created through Government-to-Government (G-to-G) cooperation or by private recruiters seems to be an unequal exchange, where one country loses and the other country gains or does not receive the full benefit of the labor commodity. In the context of G-to-G cooperation in health worker migration, the source country is often enticed to open up its nurse labor market to a developed country in exchange for possible economic benefit in other sectors or indirect economic stimulus in the form of remittances.[5,57]

For example, under the IJEPA, the Japanese government developed a quota of 200 nurse candidates per year that could be sent by Indonesia.[10] However, the infrastructure and G-to-G cooperation mechanisms necessary to implement this process of recruitment and deployment are extremely costly for the source country in terms of time and resources. Based on the authors analysis of the IJEPA databases from the MoH, more than 50% of the IJEPA nurse candidates were trained in public nursing schools in Indonesia, meaning that public taxes and resources have been used to subsidize the export of these professionals to other countries. Another critical point is that nursing candidates recruited under the IJEPA regime are mostly better prepared and represent a higher skilled migrant labor workforce compared to other nurse cadres, given the robust selection process required under the trade agreement. This specifically includes the IJEPA requirement for at least 2 years of working experience, meaning that the source country employer likely bears the cost of the initial training of these candidates and the indirect cost of employment turn-over. This may create an even higher potential for loss of skilled human capital when they leave for a developed country.

From the Japanese perspective, recruiting Indonesian nurse migrant candidates also has costs, including high expenditures incurred by the Japanese government and host facilities/employers to operationalize the IJEPA program.[45] In fiscal year 2010 (the third year of the IJEPA), the Japanese government allocated US $8.7 million for the funding on foreign care workers which was eight times higher than the previous year.[58] Furthermore, in a recent study conducted by Tsubota et al.,[59] it was estimated that the total economic cost for hiring migrant nurses for the 3-year contract period was 12.9 million Japanese yen. It should be noted that this study did not explore whether this cost represents a lower cost compared to the training and employment of domestic Japanese nurses to meet shortages.[60]

Additionally, ensuring standards of ethical recruitment of foreign nurses is also a critical component to ensuring fair balance in health worker migration. Active recruitment, such as offering soft loans and aggressive advertisement of vacancies in a foreign country, are often the driving "pull" economic factors leading to exiting of nurses from a source country and act as enabling factors for migration to high-income markets.[61] Therefore, transnational recruitment practices and marketing must also be closely monitored, scrutinized, and regulated in order to ensure that expectations of nursing candidates and source country needs are properly aligned.

Balancing the right to mobility and community health needs

The GoI recognizes and respects the autonomy and the right of individuals to seek employment abroad as is suitable for his/her degree of competency. This concept of individual autonomy and the right to migrate as a human right is also strongly supported by the International Council of Nurses (ICN).[62] Driving individual decisions by healthcare workers to migrate outside of Indonesia are typical "push" factors including limited professional opportunities/status, unclear career pathways, and poor working environments.[8] On the other hand, the GoI has a responsibility to supply an adequate number of nurses to meet the needs of the entire

population especially in the context of its recent policies promoting UHC. Domestic public health needs should also be considered within the context of nurses' oath and code of practice. For example, the Indonesian nurses' oath and code of practice implies that nurses must first prioritize the public interest but the Nursing Act of 2014 also recognizes the right of nurses to refuse to provide care under limited circumstances.[63]

This implies that the GoI and the MoH have a primary obligation to recruit, retain, and distribute competent nurses to meet the needs of the Indonesian people. However, complex challenges in the Indonesian health sector as previously discussed may make it difficult to prioritize or meet these public goals. These challenges include limited capacity and resources of domestic public and private health stakeholders to employ nurses trained in-country;[18] reports of over production of nursing graduates;[19] and domestic unemployment rates for nurses.[64] As a result, the Indonesian government should carefully manage nurse migration in appropriate ways, which involves strong policy development directed toward prioritizing the needs of UHC, providing economic stimulation for the domestic healthcare sector and hiring of skilled healthcare workers, and also conducting Health Impact Assessments (HIAs) on the impact of national policies and trade agreements like the IJEPA on the domestic health workforce.

Additionally, the GoI should assert its position of both welcoming nurses who wish to take advantage of the IJEPA program while also working with the Japanese government to ensure that the labor rights of Indonesian nurses are protected. This position has been stated in the GoI's ministerial decree number 47 in 2012, which stated that sending nurses overseas is intended to expand working/professional opportunities and advancing the knowledge, skill, and experience of nurses in alignment with the national policy of health workforce management. However, the GoI's implementation of its ministerial decree may be lacking. For instance, though the GoI reaffirms the autonomy of free movement of nurses, it does not adequately facilitate utilization of their capital (knowledge and skill) for domestic health needs. This specifically includes an inability to successfully fill vacant posts of health staff in rural and remote areas, which is crucial in embarking on UHC in Indonesia. Hence, efforts to better implement the ministerial decree should be complemented with any IJEPA reform. This includes possibly redirecting resources utilized on operating the IJEPA program for the support and development of the national health system, especially among populations that currently lack adequate healthcare access. Technical assistance, financial support, and achieving a balance in terms of "brain power" under this doctrine could then become priority policy options.

Policy priorities and translation of the ministerial doctrine into tangible benefits for Indonesian nurses should also focus on the issue of "brain waste" (when an emigrating healthcare worker becomes unemployed, underemployed, or employed below their skill level) that accompanies this type of migration.[5,57] Specifically, under the JPEPA between the Philippines and Japan, Filipino nurse candidates are not allowed to perform professional nursing care until they pass the *kangoshi* exam.[45] This is the same situation faced by the IJEPA candidates who are required to reduce their scope of practice to perform nursing duties while they work as a nurse's assistant until their exam passage. Similarly concerning, a separate study found that returnees of ex-IJEPA candidates who experienced this "brain waste" confronted professional uncertainties and had difficulty finding jobs (e.g. 18 out of 20 nurse returnees were unemployed upon return to Indonesia).[10]

Cost of care versus patient safety

Prior to passing the Japanese Nursing Examination, Indonesian nurses are recruited as assistant nurses, meaning they are paid less than qualified Japanese nurses. Even though the monthly salary of a nurse's assistant in Japan is much higher than that in Indonesia for a fully employed nurse, there are still negative repercussions of this form of brain waste or downward task shifting.[5] Japanese salary discrepancy between these two positions is significant, with the average starting salary for a nurse candidate or trainee ranging from US$1000 to US$1800 per month (gross total), and the salary ranging from US$1300 to US$2000 per month after they are recognized as a qualified *kangoshi*.[51]

As previously mentioned, the low passing rate of Indonesian nurses hampers them from fully practicing their licensed nursing profession. As long as this situation exists, their salary remains that of a trainee until they pass the Japanese Nursing Examination. Candidates are given three chances to take the exam in order to get promoted to a fulltime qualified nurse position within the 3 years afforded by the IJEPA program. From the perspective of Indonesian nurses, this represents a difficult situation given their temporary labor status and the fact that though this salary is higher than an equivalent salary in Indonesia, it may not be competitive given the high cost of living in Japan, particularly in large urban cities.

Brain waste concerns appear to be a major issue for Indonesian *kaigo fukushishi* as all caregivers under the IJEPA who work in Japan graduated from a nursing school preparing students to be employed as professional nurses. Currently, there are 167 Indonesian nurses working as and paid the equivalent of a certified caregiver in Japan.[42] The IJEPA requirement for certified caregivers to have at least a Diploma level 3 in nursing largely led to nurse applicants participating in the IJEPA *kaigo fukushishi* program. Hence, Indonesian nurses are clearly not maximizing their training, scope of practice, or maintaining their nursing professional skills that could potentially be utilized more optimally in Indonesia where they are trained.

Additionally, in the interest of Japanese society and patient safety, nurse quality and safety competencies must meet a minimum standard as defined by designated authorities in Japan. This is a critical concern that has been raised in other studies that suggest that emphasizing patient safety must be the first priority for nurses in the transition into a foreign healthcare environment.[65,66] However, the current low morale in the overall Japanese nursing industry due to long hours, low wages, and undesirable working conditions may already represent a difficult environment for Indonesian nurses to succeed in, given the added challenges of language and cultural barriers they experience.[67] Hence, developing a mutual mechanism to improve working conditions and enhance language and cultural exchange is equally important in promoting shared patient safety goals and the success of Indonesian migrant nurses under the IJEPA.

Policy proposal

The international debate regarding nurse recruitment and migration will continue as long as disparities in healthcare access, economic development, and migration policy still exist. This specifically includes the case study of Indonesia and its national and international healthcare worker migration policies, including the IJEPA, with its relative high cost and questionable economic and public health benefit. What is clear from this assessment is that there needs to be constructive dialogue regarding improvement of this trade and investment framework within the context of ensuring that both Japan and Indonesia, as well as individual nursing professionals, benefit. From Japan's standpoint, a rapidly aging demographic and a critical domestic shortage of approximately 43,000 nurses is a clear case for urgency and reform of its current restrictive migration and nurse qualification policies. From Indonesia's standpoint, proper implementation of the IJEPA that ensures the success of Indonesian nurses and their ability to generate economic opportunity, while also reinvesting resources gained from this economic partnership into initiatives designed to meet local public health needs, needs to be prioritized.

Another policy option is circular migration or "brain circulation," as mentioned by other researchers, which may help to address some of the concerns raised in this piece.[68,69] Facilitating circular migration or return migration would be one of the appropriate ways to develop a mutually beneficial migration scheme under the IJEPA and also align with Indonesia's HRH strategic plan. After working several years in destination countries, recruiters, either private or governmental, should be responsible in assisting the return of these healthcare professionals and reintegration of their skills and training into the local healthcare system. This could be facilitated through formal partnerships and mechanisms supported and funded by fees generated through the IJEPA. Implementing this type of policy reform would not only help Indonesia in retaining

critical health workers but would also transform nurse migration into a sustainable strategy of international training and income generation for candidates.

Ethical recruitment of Indonesia's nurses should also be a core principle in any renegotiation of the IJEPA or related economic/trade agreements and should be based on both transparency and fairness principles. This includes adequate disclosure to candidates of the performance of the IJEPA program, a candidate's labor rights, expected salaries and benefits, cultural issues they may face, as well as the challenges faced in sustaining employment in the destination country early on in the recruitment stage. Discrimination, racism, and marginalization must be taken seriously on the part of both institutions and the governments themselves and be subject to robust monitoring, evaluation, and enforcement for potential violations.

These common sense reforms should be pursued in ongoing discussions regarding renegotiation and reevaluation of the IJEPA between Indonesia and Japan. One of the most critical elements of the program that needs immediate attention is the low passage rate of Indonesian nursing candidates and the appropriateness of the qualification exams. Focusing on maintaining patient safety is paramount, but equally, both governments should explore more collaborative training programs both in Indonesia prior to departure and while in Japan as nursing trainees. Furthermore, exploration of alternative licensure options within a change of scope in practice model in the event candidates are unsuccessful in meeting the requirements of the IJEPA should also be considered.

Conclusion

Recruitment of nurses from a developing country such as Indonesia through international trade agreements introduces several complex policy, operational, and ethical issues that need to be carefully considered. Partner governments must consider both the national public health needs and individual interests of healthcare workers, but also structure policy to minimize the negative effects and maximize the positive effects of international nurse migration. Addressing lessons learned from the case study of the IJEPA may be a good starting point to develop policy implementation mechanisms better aligned with the WHO Code, positively frame future negotiation of trade agreements that contain provisions/programs addressing healthcare worker migration, and establishing policy coherence across local, national, and global policy to ensure more ethical and efficient healthcare worker migration.

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