ORIGINAL RESEARCH Indonesian Nurses' Journey in Passing the Japan National Nursing Licensure Examination

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Background: Despite the significant number of Indonesian nurses joining the Japanese National Nursing Licensure Examination (JNNLE), only a few of those were successful. Indonesian nurses as one of active migration player to Japan's market remain a critical support in supporting human resources for health in Japan. However, the successful nurses' perspectives have yet to be understood entirely. This study aimed to explore the experiences of Indonesian nurses who successfully passed the JNNLE.

Methods: This study used a descriptive qualitative approach. The participants were twenty Indonesian nurses who have passed the licensure examination. This study was carried out by semi-structured interviews conducted virtually. The data were analyzed using thematic content analysis.

Results: Five themes were discovered in this study: language ability as the key to succeeding in the exam, strategies to passing the exam, supporting resources as factors to increase the passing rate, understanding the nature of nursing exam, and internal motivation to be recognized as a professional nurse in a foreign country.

Conclusion: Indonesian nurses who passed the Japanese national nursing licensure examination tend to deploy planned strategies. Honing the language skills while working and living in Japan is very important, while structured support systems in the hospital, government, and social network are imperative to learning the new knowledge in the area of nursing care in Japan. Keywords: Indonesia, Japan, migrant worker, migration, nurse licensure examination, migration policy

Introduction

Most countries worldwide currently experience a shortage of skilled health workers, especially nurses.¹ Recruiting immigrant nurses becomes an attractive option for developed countries, including Japan, to fulfill their nursing personnel's needs.² Japan needs a significant number of nurses because the country currently encounters a shortage of human resources of productive age, given that the birth rate in Japan decreases while the number of elderly increases.³ The fertility rate in Japan declined from around 1.8 in 1980s to less than 1.3 in 2005. Also, the mean age of childbearing for Japanese women increased from 28 years in 1980 to 31 years in 2010.⁴ Meanwhile, the percentage of older adults was estimated to increase from around 11% in 2010 to around 19% and 27% in 2030 and 2060, respectively. Consequently, the dependency ratio was predicted to rise significantly from 36% in 2010 to around 54% in 2030 and 78% in 2060.⁴ To overcome this problem, Japan has established partnerships with countries with a nursing workforce surplus, like Indonesia and the Philippines, to recruit immigrant nurses through economic partnership agreements (EPA). By the end of 2018, 2445 people consisting of 653 nurses (kangoshi) and 1792 caregivers (kaigofukushishi) had been placed in Japanese hospitals and nursing homes.⁵ Recent data showed that 3638 health workforces have been deployed to Japan for both job position. However, from those number, the passage rate for the national exam was only 27%.⁶

Along with Indonesia, Japan established the Indonesia-Japan Economic Partnership Agreement (IJEPA), a government-to-government (G to G) partnership scheme under the auspices of the two countries' representatives, namely the National Agency for Placement and Protection of Indonesian Workers (BNP2TKI), currently known as the Indonesian Migrant Workers Protection Agency (BP2MI), and Japan International Corporation of Welfare Service (JICWELS).⁷

Despite the partnerships, Indonesian nurses who want to pursue a career in Japan still have to pass the Japanese National Nursing Licensure Examination (JNNLE) to obtain a Japanese nursing license.⁸ As such, the IJEPA mandates the Japanese government to equip the Indonesian nurses with training and preparation programs before and while working in Japan, including to prepare their exams.⁹ In Indonesia, a nursing student have to pass similar competence examination to become a nurse; this examination is conducted in Bahasa Indonesia, their national language, so it is easier for them to get the pass.¹⁰ However, to get equal recognition as a nurse practicing in Japan, the foreign candidates must face an exam with the same standard as the Japanese candidates,¹¹ including using complex Chinese (kanji) and Japanese characters (hiragana and katakana) as the writing system.^{12,13} Overcoming this standard is not an easy task for Indonesian nurses who are newcomers to Japan.¹⁴ This obstacle can explain why the pass rate of foreign candidates in the JNNLE is low. In 2011, only 9.6% of Indonesian and Filipino nurses passed the exam.¹⁵ While in 2022, the passage rate of Indonesian nurses for exam was only 22%.

The experience of foreign nurses participating in the JNNLE is not much explored. There was a phenomenology study that discussed the Indonesian nurses' challenge for passing the exam.¹³ This study found that mastering the Japanese language was the main obstacle experienced by the Indonesian candidates. Also, the difference in Japanese dialects could be problem and brought misunderstanding among them.¹³ Another study explored learning problems experienced by Filipino nurse candidates using an exam simulation conducted in English. This study found that, besides language barrier, the difference in nursing education curriculum and basic nursing policies are also pivotal in determining the exam success.¹⁶

The authors' previous study concluded that language barriers and passing the examination were among the two most challenging aspects of working as a nurse in Japan.¹ This study, however, did not capture the struggle of the Indonesian nurses in passing the JNNLE. There is no study that specifically explore the topic and their experiences in getting the pass and how they overcame the struggle were still unexplored. Therefore, this study aimed to explore the experiences of Indonesian nurses who passed the national nursing licensure examination in Japan. The study results are expected to be the basis for improving and enhancing the preparation programs for Indonesian nurses. Thus, they can compete with nurses from other countries who have entered the Japanese job market. Hence, the pass rate number of Indonesian nurses can rise significantly.

Methods

Design

This study used a qualitative design with a descriptive qualitative approach. The descriptive qualitative gives emphasis on describing the phenomenon as it is by examining reality from individual experience.¹⁷ The reflection on essential themes able to describe phenomena experienced by Indonesian nurses who were passing the Japanese National Nursing Licensure Examination in Japan.

Participant and Settings

The participants were selected using snowball sampling, by which twenty nurses were obtained. The participants were contacted via WhatsApp, Line or other social networking sites to collect information regarding the research's purpose. The list of potential participants coming from the online Indonesian Islamic community in Japan. Once the first participants contacted, confirmed and agreed, researcher begun the interview and ask for future potential names to be recruited. The inclusion criteria were nurses who have passed the JNNLE, were currently working as nurses in Japan and were willing to participate as participants in this study. The investigators sent an interview request and provided detailed research procedures, verbally and in writing, to all participants. After the participants signed the informed consent, an interview session was scheduled for each. The interview sessions were conducted in the Indonesian language by JH

through the Zoom meeting application or WhatsApp calls. JH, RI, FE and GEA have had experience conducting qualitative study and exposed to the issue of international migration. The duration of the interviews was about 30–60 minutes each. The list of interview question as attached on the <u>Appendix</u>.

Data Collection

The data were collected within three months, from September to November 2020. An audio recorder was used to record the interviews through the Zoom platform. Interviews were conducted in Bahasa Indonesia by JH via the cloud at participants' convenience. The records were transcribed through an iterative listening and writing process by team members. The questions covered several ranges of topics related to the experience of taking the JNNLE, the support obtained, learning strategies and suggestions for passing quickly or at a specified time.

Data Analysis

The investigators seek to gain understanding and engagement with texts related to the phenomenon in question using content analysis.¹⁸ NVivo was used to analyze the data as this tool can clarify the results of the transcripts. The steps were begun by uploading the Indonesian interview transcripts into NVivo. A coding process was carried out by selecting specific phrases or statements by looking at the text and understanding the overall meaning. From this process, the investigators developed keywords and concepts through the selected sentences. The themes were determined through an iterative process of interpretation and examination toward the participants' answers. If there were no new themes emerged, researched assume that data already saturated as recommended by Meadows and Morse in 2001.¹⁹ All the themes were then translated into English. The results were discussed collaboratively by all authors until the final structure of themes was decided (Table 1). To ensure the trustworthiness of the study, credibility was maintained by inviting three participants to review the transcript summary and provide feedback for verification. The three Indonesian nurses confirmed that the findings reflected their experiences passing the Japanese National Nursing Licensure Examination.

Ethics Approval and Consent to Participate

This study has passed the ethical test conducted by the Health Research Ethics Committee of the Faculty of Nursing, Airlangga University, on August 27th, 2020, with certificate number 2088-KEPK. All methods were carried out in accordance with relevant guidelines and regulations and informed consent was obtained from all participants. All interviews were audio-recorded, with the approval of the participants. The participants participated voluntarily and could end their participation at any time. All the handling of data were confidential and respected ethical principles.

Results

Participant Description

Twenty Indonesian nurses aged between 29 and 46 participated in the study, 13 of whom were female. They were recruited from ten provinces or prefectures: Hyogo, Saitama, Chiba, Nara, Tokyo, Fukuoka, Kanagawa, Niigata, Hokkaido and Osaka. Most participants had a diploma in nursing (three-year vocational nursing education) and had

Themes			
Language ability as the key to succeeding in the exam			
Strategies to passing the	e exam		
External supports as fac	tors to increase the passing rate		
Understanding the natur	re of the nursing exam		
Internal motivation to b	e recognized as a professional nurse in a foreign country		

Table	I	The	Summary	of	the	Research	Themes
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Participant	Age (Years)	Sex
PI	39	Male
P2	34	Female
P3	46	Female
P4	35	Male
P5	33	Female
P6	37	Female
P7	38	Male
P8	37	Female
P9	35	Female
P10	37	Female
PII	35	Female
P12	34	Male
P13	32	Female
P14	40	Male
P15	32	Female
P16	36	Female
P17	30	Female
P18	29	Male
P19	31	Male
P20	37	Female

 Table 2 Participants Characteristics

passed the JNNLE to become registered nurses in Japan. At the data collection time, they had lived in Japan for at least two years with two-year working experience. The participants' details are described in Table 2.

Main Themes

Five themes explained the journey of the nurses passing the JNNLE: (i) language ability as the key to succeeding in the exam; (ii) strategies to passing the exam; (iii) supporting resources as factors to increase the passing rate; (iv) technical factors related to the exam; and (v) internal motivation to be recognized as a professional nurse in a foreign country.

First Theme: Language Ability as the Key to Succeeding in the Exam

The first theme revealed that language ability is essential for communicating in their daily practice as a nursing practitioner, either with patients or co-workers. Hence, these aspects being key for them to succeed in the national licensure examination.

For the requirement, knowing the Japanese language is mandatory. The Japanese language must be understood well. If it is not, it will be difficult to pass the exam. It was around four years when I could not understand exactly the Japanese language. So, I practiced a little by little until I am proficient. (Participant 8, 37-year-old female)

I asked friends who are more experts and understand the language. Translating the medical terms into kanji was very difficult. It is said that medical language in kanji is in level 1 of the Japanese language, so it requires extra efforts to learn it in a short period. (Participant 5, 33-year-old female)

We learned basic Japanese language in Indonesia for approximately six months. It was the daily language in Japan. Then, we were given about six months in Japan to learn a medical language or medical terms in the Japanese language. This was a very different world. (Participant 17, 30-year-old female)

I got language training for three months in Depok, Jakarta. In July 2011, I went to Japan. At that time, we have at least the N4 level after the training session. Because at this level, usually, people can converse with daily topics. The N5 is the lowest level in the Japanese language, and N1 is the highest level. But learning the nursing term requires extra efforts. (Participant 11, 35-year-old female)

If we look at the low number of the pass rate, it should receive attention from Indonesia side. When the candidates apply for the administration requirements, they at least hold N4 or N3 level. Thus, before joining the language training, Indonesian nurses are ready to receive the learning process from the native of Japanese. As a result, the learning and adaptation process to the exam questions will not be such a problem or a fear for the candidates. (Participant 4, 35-year-old male)

Second Theme: Strategies to Passing the Exam

Some participants pointed out that, to pass the exam, they had to have a strong desire to tackle every obstacle, such as enrolling in several learning centers that offer free facilities to learn Japanese or access the exam materials and looking for native nurses who wanted to coach them. They believe their efforts will help them to pass the exam.

If we have intended to pass the exam earlier, studying from the beginning of the year is a must. Do not waste time by playing around, like doing traveling or being busy with social media, Instagram or going out on the razzle. (Participant 10, 37-year-old female)

I was intensive learning for a month before sitting the exam. I did not take a vacation or traveling. I was practicing to solve the questions from morning to the night for every day. (Participant 20, 37-year-old female)

My suggestion is, our nursing knowledge must be well-prepared as we carry our country's image. We come to this country not only for sitting the exam but also for work. So we have to work to make our country's image good. Our skill also should not be the loser. (Participant 19, 31-year-old male)

A friend of mine pinned notes about the materials they do not understand on the wall of bathroom. Then, when he is doing things in the bathroom, he can learn the materials. There are several friends who minimized their sleep duration. (Participant 1, 39-year-old male)

Third Theme: External Supports as Factors to Increase the Passing Rate

Most participants pointed out they obtained several supports from various sources to succeed in the exam. One essential factor influencing their passing rate is the accumulation of external support that facilitated their exam preparation.

In my hospital where I worked, they provided several facilities which support the exam, such as they gave me books, the room with internet connection where I can use, or allowed me to take days off for studying, even they facilitated me with a sensei (coach). When the exam was one month away, they asked me to take days off for preparation and still paid my salary. (Participant 9, 35-year-old female)

JICWELS facilitates visiting Tokyo 4–5 times a year to learn and gather with friends. Those who were from the northern regions gathered in Tokyo, while the southern regions were in Osaka. So we were gathering to share with other friends how to learn in our hospitals, something like that, and discuss exam questions for two days with an overnight. (Participant 13, 32-year-old female)

From the Japanese government, they equipped us with training classes about four times before we sat the exam. So, we gathered with other nurses who will join the exam. For example, several areas would take place in Kansai, and Nagoya and Fukuoka would gather in Osaka. They provided the accommodation as well. (Participant 10, 37-year-old female)

There is a sensei. The sensei provided me with books for study and taught me man-to-man every Sunday. He asked me to solve the questions just like a mock examination. Then, when I made mistakes on my answers, he would explain which was the true answer and why. (Participant 10, 37-year-old female)

My senior said one thing, as far as I remember, 'your main goal is to pass the exam, if you've passed and you want to travel all over Japan, it is possible; for now, please hold it.' So they said, 'now just go around in Niigata first if you want to focus on studying; later when you've passed [you can travel more].' They also said, 'later if you've passed, your salary will be doubled and you can go back home to Indonesia like a vacation. (Participant 13, 32-year-old female)

Fourth Theme: Understanding the Nature of the Nursing Exam

The participants reckon that the national nursing licensure examination was the most formidable challenge to them while working in Japan. They expressed that the comprehensive understanding of JNNLE also influenced their success in overcoming the rigorous exam.

All questions are paper-based. We answered it by circling the answer sheet, just like when we faced an exam at school. The choices used numeral (1234) instead of the alphabet (ABCD). So this is the main difference between Indonesian exam and Japanese exam. (Participant 1, 39-year-old male)

We have two types of exams, hissyumondai and ippanjokyou. Hishumondai is a definite answer, for example, the amount of protein in the human body or the DNA type. However, ippanjokyou is more about the case, such as a case with the same calculation question. So from the third month to the twelve month, I have to do 50 questions a day. Then, for ippanjokyou (case problems and other theoretical questions) it was about one to two hours. I had to read one hour of theory, one more hour; I worked on the questions. I tested myself by using exam questions books for the past ten years. (Participant 17, 30-year-old female)

Numbers 1-25 of the questions were compulsory in the morning and afternoon. So, there were 50 compulsory questions which are 25 in the morning and 25 in the afternoon. The passing grade is 80% and above; if it is less than that, we are not passed. It means we have to correctly answer 40 compulsory questions, so we catch the average that year. For example, this year, the smart ones among the native nurses who participate may have the borderline, for example, as 170 points or 180 points. If we achieve less than that, even though we have to pass the compulsory questions, we still don't pass it. That's how we assume it is based on the national average value, so our mandatory value must be more than the borderline value. (Participant 1, 39-year-old male)

The contents of the exam included knowledge about 20% of midwifery, 20% of gerontology. And they added some recent diseases such as pandemic COVID-19. (Participant 13, 32-year-old female)

It is like having to carry five pieces of pencils; all of them must be crocheted, and when the pencils fall, you cannot take them. You have to raise your hand and ask the officer to get them. For us, it is really uncomfortable, isn't it? The erasers must be more than one, and the whatever paper in it must be removed. (Participant 7, 38-year-old male)

Actually, the contrast material on Japanese nursing exam is the difference between health insurance in Japan and health insurance in Indonesia, but almost 60–70% of the nursing questions are the same as the nursing theory that we learn on campus and what we get during practice at the hospital. (Participant 13, 32-year-old female)

Fifth Theme: Internal Motivation to Be Recognized as a Professional Nurse in a Foreign Country

The participants took a licensure examination in Japan was to get recognition as a professional nurse internationally. They felt that having been licensed as a nurse was a kind of honor that can influence their future career. Hence, they maintained their motivation while struggling for the national licensure exam and trying to pass it.

So, in my opinion, our motivation and goals are also important, what our goals are. If we want to pass the exam and want to work in Japan, we must continue to cultivate it, because it is difficult to speak the language, we do not understand it and becomes a twofold motivation for us to learn. (Participant 16, 36-year-old female)

Let's see what our goals are; if we intend to develop ourselves – skills and knowledge, in Japan, we can pass the test. When our motivation to study drops, we can try to remember what our goals are again. It is okay to take an occasional refresher, but don't be too long, we have to get back on our path. (Participant 7, 38-year-old male)

In terms of salary, it is also different. In the past, to be honest, my salary was around 15 million Indonesia rupiah (IDR) before passing the national exam. If all the nurses were deducted, it would be around 13 million IDR. Now, friends of mine who have graduated are already starting night shifts. They will serve you noodles and eggs, plus more money. For a night shift, we get approximately 3 million IDR to 4.5 million IDR as an incentive aside from our basic salary. So each hospital has a variety in how to pay our salary, some give 30,000 yen, if now it can be 4 million IDR more. (Participant 1, 39-year-old male)

Discussion

This study discovered five themes representing the experiences of twenty Indonesian nurses who had successfully passed the national nursing licensure examination in Japan. The first theme was language ability as the key to succeeding in the exam. The language has influenced how the nurses can answer well the exam questions. All questions in the exam are written in Japanese characters,^{20,21} such as hiragana, katakana and kanji, and this can arise a burden and a challenge for Indonesian nurses,^{8,22–24} even for other foreign nurses who do not use certain characters in their mother language, ie, Filipino nurses.¹³ However, the opposite case was for Vietnam nurses, as they have higher Japanese language level requirements and more well-prepared language skills.²⁴ In Indonesia, the Japanese language preparation program only offers the basic skills, while the more advanced skills, including daily conversation and Japanese medical language, are also needed as the vocabularies are different. The Japanese language has a crucial role in getting through the exam. This finding corresponds with the study stating the language ability determines the success rate of nursing examination for Indonesian nurses,³ which stands at 18% (only 87 out of 481 Indonesian test-takers) between 2010 and 2014,²⁵ 5% in 2015²⁶ and 27% in 2022.⁶ Some adjustments have been applied to help the test-takers, including extending the language training from six to twelve months, adding an extra hour to complete the exam and allowing test-takers to use the simple hiragana instead of the complex kanji characters.¹ However, these adjustments have yet to give a significant contribution to increasing the pass rate. To achieve the Japanese language proficiency threshold, some participants suggested that the Japanese language training should be held longer in the country of origin to ensure they have an upper-intermediate applied language ability before coming to Japan.

The second theme was the strategies for passing the exam. The JNNLE standard and requirements for foreign nurses are no different from the Japanese nurses.²⁷ As a result, many foreign test-takers feel that the examination is quite hard for them.^{1,28} Accordingly, the foreign test-takers need to strategize to succeed in the examination, including maintaining their motivation, balancing working and studying times, searching for more learning facilities and effective learning methods. Some studies revealed that the nurses' motivation to pass the exam was associated with several factors: effective learning strategies, a comfortable study environment, and support from hospital leadership.^{24,29} As lack of preparations can cost them licensure, these strategies are intended to minimize the chances of failing the exam.³⁰ It is suggested that both the Indonesian and Japanese governments provide more training for the candidates, focusing on the Japanese language or exam materials.

The third theme was external supports as factors to increase the passing rate. Most participants revealed that they had accessed facilities, including those provided by the institution where they work, the senior or fellow nurses who had passed the exam, the government through exam simulations and the sensei who coached them. These kinds of supports helped them to master the exam materials. A study found that social supports, ie, peer-group study, mentorship program, and peer-group tutoring, have been considered significant factors to succeed on the exam.³¹ Moreover, the facilities and supports mentioned by the participants have been included in the curricula of Economic Partnership Agreements (EPA) between Indonesia and Japan.³² The agreement stated that the Japanese government is responsible for providing the candidate travel allowance, accommodation and stipend related to the exam and the training tuition fees in collaboration with the employer (the hospital where the candidate works).^{9,33}

Based on the participants' narratives, the fourth theme is understanding the nature of the nursing exam. Not only content and materials of the exam, but also number of questions and some technical aspects. These factors have been

attributed to the success rate of the exam. Some participants elaborated that there were differences in the nursing concepts they understood with the exam contents. As suggested in one study, there might be differences between the Japanese and other countries' nursing curricula regarding the contents and scopes or training mechanisms. This situation creates a gap between the candidates' knowledge and the materials tested on the exam. Thus, it is highly likely for foreign nurses to feel deskilled when facing the exam and practicing their nursing skills in the workplace.^{29,33} The other aspect that is immersed in this theme is the opportunity to retake the exam if they failed. According to the rule, foreign nurses can take the JNNLE three times within three years, in which the exam is held once a year in February. If they still fail to obtain the nursing licensure during these periods, they have to go back to their country. However, they are still allowed to rejoin the program in the future.^{1,27,33,34}

The last theme found is the internal motivation to be recognized as a professional nurse in a foreign country. According to other studies,^{20,33} holding the Japanese nursing licensure can bring out the feeling of being honored among the foreign nurses. In addition, it can increase their salary much higher than before passing the licensure exam. Similarly, when they fail to obtain the licensure through their three-time opportunities, their entitlement to the salary level will not equal the native nurses.^{27,35} Although the amount of salary in Japan is much higher than nurses' salary in Indonesia,^{15,27} passing the exam is a way to get recognized as a professional nurse. Moreover, being a registered nurse in Japan is considered prestigious for many Indonesian nurses¹ as they can experience the renowned nursing practice in Japan and have the opportunity to operate advanced healthcare technology. This professional experience attracts foreign nurses and strengthens their motivation and desire to pass the exam. One study identified two primary reasons why Indonesian nurses abroad include a well-paid salary, supportive working environments, opportunities to be a professional and career development, the advance of technology, safety workplace, and a stable socio-political environment.³⁷ Moreover, Indonesian nurses are preferred by Japanese people over nurses from other countries.⁸ Most Indonesian nurses assumed that their career path in Indonesia would increase after gaining experience working in Japan.¹⁵

This study implies the need of policy intervention to increase the passing rate of the Japan national Nursing Licensure examination in both countries. Better and solid preparation before migration, and various support given to the Indonesian test takers during migration phase is crucial in helping them succeed the exam.

Limitation

The main limitation of this study was that it was conducted with Indonesian nurses only, while there were many foreign nurses coming from others country. Researchers also did not include nurses from different nursing specialties nor concentrate on different levels of the learning process. The interview session was carried out using online media, which was highly likely to expose the connection problems.

Conclusion

The unavoidable obstacle to passing the Japanese nursing licensure exam is the language since few foreign nurses master the Japanese language within a short period of training. The strategies applied to dealing with the exam, supporting system, language matter, and the exam taker's motivation are considering to be more concerned by the stakeholders to increase the success rate of the exam. Specific and structured support should be developed by government to expose all of the candidates with the contents of Japanese national nursing licensure examination. The finding of this study can contribute to formulating a better development for the Indonesia-Japan economic partnership agreements, especially in the nursing profession.

Data Sharing Statement

The authors confirm that the data supporting the findings of this study are available based on request to corresponding author.

Author Contributions

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising or critically reviewing the article; gave final approval of the version to be published; have agreed on the journal to which the article has been submitted; and agree to be accountable for all aspects of the work.

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Disclosure

No potential conflicts of interest was reported by the authors.

References

- 1. Efendi F, Chen CM, Nursalam N, Indarwati R, Ulfiana E. Lived experience of Indonesian nurses in Japan: a phenomenological study. *Japan J Nurs Sci.* 2016;13(2):284–293. doi:10.1111/jjns.12108
- 2. Japanese Nursing Association. Working Condition in Japan. Vol. 2013. Tokyo: Japanese Nursing Association; 2013.
- Arisanova MD, Satyawan A. Peningkatan Daya Saing Indonesia Di Bidang Keperawatan Melalui Implementasi Indonesia-Japan Economic Partnership Agreement (Ijepa) Tahun 2008–2013. Semarang: Repository Fisip UNS; 2013.
- 4. Suzuki T. Low Fertility and Population Aging in Japan and Eastern Asia. In: *Low Fertility and Population Aging in Japan and Eastern Asia*. Tokyo: Springer; 2013:1–87.
- 5. BNP2TKI. Sampai 2020, Jepang Membutuhkan Sekitar 1 Juta Nurse Dan Careworkers. BNP2TKI; 2019.
- 6. BP2MI. Data Penempatan Dan Perlindungan Tenaga Kerja Indonesia Tahun 2022 [Data on Placement and Protection of Indonesian Workers in 2022]. Jakarta: BP2MI; 2022.
- 7. BNP2TKI. Peran BNP2TKI Dalam Pemetaan Dan Harmonisasi Kualitas Tenaga Kerja Luar Negeri [The Role of BNP2TKI on Mapping and Harmonization Migrant Workers]. BNP2TKI, Editor. Jakarta: BNP2TKI; 2012.
- 8. Aminah S, Wardoyo S, Pangastoeti S. Pengiriman Tenaga Perawat Dan Careworker Indonesia Ke Jepang Dalam Kerangka Indonesia Japan Economic Partnership Agreement (IJ-EPA). Bakti Budaya; 2018.
- 9. Naiki Y. Migration of Health Workers Under the Japan-Philippines and Japan-Indonesia Economic Partnership Agreements: Challenges and Implications of the Japanese Training Framework. Vol. 2016. Osaka: Osaka University; 2015.
- Efendi F, Nursalam N, Kurniati A, Gunawan J. Nursing qualification and workforce for the Association of Southeast Asian Nations Economic Community. Nurs Forum. 2018;53(2):197–203. doi:10.1111/nuf.12243
- 11. BNP2TKI. Prosedur Dan Persyaratan Penempatan TKI Nurse Dan Penopang Lansia Jepang [Procedure and Requirement of Recruitment Nurse and Care Worker Migrant to Japan]. In: Penempatan D, editor. Jakarta: BNP2TKI; 2009.
- 12. Itami M, Morooka Y, Itami K. Migration of internationally educated nurses from Southeast Asia to Japan: proposals on educational supports to combat brain loss in Japan. *Kuroshio Sci.* 2010;4(1):81–94.
- Setyowati S, Ohno S, Hirano OY, Yetti K. Indonesian nurses' challenges for passing the national board examination for registered nurse in Japanese: suggestions for solutions. Southeast Asian Studies. 2012;49(4):629–642.
- 14. Rahmi U, Sulastri A. Persepsi perawat Indonesia tentang ujian sertifikasi profesi (kangoshi dan kaigofukushishi) di jepang. *J Keperawatan BSI*. 2019;7(2):32–41. Indonesian.
- 15. Saito A. Problems in accepting Indonesian candidates for nurses and certified caregivers in japan: career achievement of the candidates based on qualitative interviews. *Glob J Polit Int.* 2015;16(1):1.
- 16. Kawaguchi Y, Hirano O, Ogawa R, Ohno S. Exploring learning problems of Filipino nurse candidates working in Japan: based on the results of a practice national board examination of Japan given in English. *Southeast Asian Studies*. 2012;49(4):643–651.
- 17. Graneheim UH, Lundman B. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Educ Today.* 2004;24(2):105–112. doi:10.1016/j.nedt.2003.10.001
- 18. Krippendorff K. Content Analysis: An Introduction to Its Methodology. London: Sage publications; 2018.
- 19. Meadows LM, Morse JM. Constructing evidence within the qualitative project. Nat Qual Evid. 2001;195:1.
- 20. Vilog RBT, Arroyo KHMD, Raquinio TGG. Empowerment issues in Japan's care industry: narratives of Filipino nurses and care workers under the Economic Partnership Agreement (EPA) labour scheme. *Int J Asia-Pacific Stud.* 2020;16:39–69. doi:10.21315/ijaps2020.16.1.2
- Yagi N, Mackey TK, Liang BA, Gerlt L. Policy review: Japan-Philippines Economic Partnership Agreement (JPEPA)-Analysis of a failed nurse migration policy. Int J Nurs Stud. 2014;51(2):243–250. doi:10.1016/j.ijnurstu.2013.05.006
- 22. BNP2TKI. Strategi Mempersiapkan Perawat Indonesia Standar Internasional. BNP2TKI; 2017.
- 23. Higginbottom GMA. The transitioning experiences of internationally-educated nurses into a Canadian health care system: a focused ethnography. *BMC Nurs.* 2011;10(1):14. doi:10.1186/1472-6955-10-14
- 24. Hirano YO, Tsubota K, Ohno S. Factors associated with the recruitment of foreign nurses in Japan: a nationwide study of hospitals. *Hum Resour Health.* 2020;18(1):1–9. doi:10.1186/s12960-020-00532-5
- 25. MoH. Data Pengiriman Perawat Indonesia Ke Jepang [Data of Indonesian Nurse Sending to Japan] (Ed BPPSDMK). Jakarta: BPPSDMK; 2014.
- 26. Shinohara C. Health-care work in globalization: news reports on care worker migration to Japan. Int J Japanese Sociol. 2016;25:7–26. doi:10.1111/ ijjs.12049
- 27. Efendi F, Mackey TKT, Huang MC, Chen CM. IJEPA: gray area for health policy and international nurse migration. *Nurs Ethics*. 2017;24 (3):313–328. doi:10.1177/0969733015602052

- 28. Tabuchi H Japan keeps a high wall for foreign labor. New York Times; 2011.
- 29. Safitri RM Indonesia-Japan bilateral relations: the implementation of Indonesia-Japan economic partnership agreement on the deployment and acceptance of Indonesian migrant workers (nurses) To Japan in 2008–2015. 2018: 1–94.
- 30. Laguador JM, Refozar RFG. Five-year declining performance of private and public schools in the Philippine certified public accountant licensure examination. *Eur J Educ Res.* 2020;2020:1.
- Pike AD, Lukewich J, Wells J, Kirkland MC, Manuel M, Watkins K. Identifying indicators of national council licensure examination for registered nurses (NCLEX-RN) success in nursing graduates in Newfoundland & Labrador. *Int J Nurs Educ Scholarsh*. 2019;2019:1–10.
- 32. JICWELS. Handbook for EPA Nurses and Certified Care Workers. JICWELS; 2015.
- 33. Lan PC. Bridging ethnic differences for cultural intimacy: production of migrant care workers in Japan. Crit Sociol. 2018;44:1029–1043. doi:10.1177/0896920517751591
- 34. Kaneko K. The inflow of southeast asian health- care worker candidates in Japan: Japanese reactions to the possibility of cultural and ethnic diversity. *Copenhagen J Asian Stud.* 2015;33(2):78–96. doi:10.22439/cjas.v33i2.4967
- 35. Ford M, Kawashima K. Temporary labour migration and care work: the Japanese experience. *J Ind Relations*. 2013;55(3):430–444. doi:10.1177/ 0022185613480750
- 36. Ohno S. Southeast Asian nurses and caregiving workers transcending the national boundaries: an overview of Indonesian and Filipino workers in Japan and abroad. *Southeast Asian Stud.* 2012;49(4):541–569.
- 37. Kline DS. Push and pull factors in international nurse migration. J Nurs Scholarsh. 2003;35(2):107–111. doi:10.1111/j.1547-5069.2003.00107.x

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