

P-ISSN: 2987-8071 | E-ISSN: 2987-8063 | DOI: 10.53955/jsderi.v2i3.51

### Journal of Sustainable Development and Regulatory Issues (JSDERI)

http://journal.contrariusactus.com/index.php/JSDERI/index



#### | Research Article |



# Legal Issues of Health Frontier in Two Countries: Challenges from Indonesia and Singapore

#### Patria Bayu Murdi \* 1, Rahimah Embong 2

- <sup>1</sup> Tasikmadu Health Center, Karanganyar, Indonesia.
- <sup>2</sup> Universiti Sultan Zainal Abidin, Gong Badak, Malaysia.

Received: March 20, 2024/ Revised: August 20, 2024/ Accepted: September 12, 2024.

Abstract: Foreign medical personnel are needed to overcome the challenges of a shortage of medical personnel. However, the current issue lies in the ineffective regulations governing foreign medical personnel in Indonesia, which hinder the country's ability to enhance its health services. This research aims to conduct a comparative study with Singapore, which has superior health services, to examine the use of foreign medical personnel in improving the quality of health services in Indonesia. This research uses normative juridical research, employing a conceptual, statutory, and comparative approach. The research results show that, first, the utilization of foreign medical personnel in Indonesia has not been able to improve the quality of health services in Indonesia due to weaknesses in legal structure in the supervision and licensing process, the substance of regulations that do not yet provide legal protection and the condition of the Indonesian people who are not yet able to use such personnel foreign medical. Second, the Singapore government's mechanism for utilizing foreign medical personnel is easy and successful. Singapore strategically utilization foreign medical personnel to meet its healthcare needs. In addition, foreign medical personnel have several rights, including a basic salary and monthly allowances, health insurance, and income tax, which are not deducted from their pay. Therefore, Indonesia needs to adopt a policy system that is not limited to lex generalis but also becomes a guide that provides certainty in law enforcement and is not just a reference or boundary line for derivative regulations.

**Keywords:** Foreign Medical Personnel; Health; Policy; Services;



This is an open-access article under the CC-BY 4.0 license

#### INTRODUCTION

Human rights are inherent, universal, and enduring, necessitating protection, respect, and enforcement. They cannot be ignored, undermined, or revoked by any individual. Among these rights, the right to health is not only fundamental but also serves as a crucial investment in the advancement of national development. This is affirmed by Article 28H, paragraph 1 of the 1945 Constitution, which mandates the state to provide healthcare services for all citizens. Additionally, Article 25 of the Universal Declaration of Human Rights (UDHR) declares that every individual has the right to an adequate standard of living, ensuring the health and well-being of themselves and their families. This encompasses access to food, clothing, housing, healthcare, and necessary social services, as well as the right to security in cases of

<sup>\*</sup>Correspondence: bayumurdi72@gmail.com

<sup>&</sup>lt;sup>1</sup> Arush Lal and others, 'Fragmented Health Systems in COVID-19: Rectifying the Misalignment between Global Health Security and Universal Health Coverage', *The Lancet*, 397.10268 (2021), 61–67 https://doi.org/10.1016/S0140-6736(20)32228-5



unemployment, illness, disability, widowhood, old age, or other circumstances beyond one's control that lead to a deterioration in living conditions.<sup>2</sup>

Ensuring the availability and adequacy of essential healthcare services, such as general practitioners, dentists, basic surgical care, midwifery, and medical record management, is one way to safeguard the right to health. Healthcare professionals play a vital role in assisting providers in delivering these essential services.<sup>3</sup> As such, they are expected to deliver high-quality care without being overburdened in their roles.<sup>4</sup> According to data from the Ministry of Health in 2021, Indonesia had a total of 123,691 doctors and dentists across its 34 provinces, including 37,473 specialists and 67,147 general practitioners. With a population of approximately 268,074,565, there is a clear imbalance between the population size and the distribution of healthcare professionals. For instance, in DKI Jakarta, the ratio of general practitioners and dentists to the population is 1:65 and 1:19, respectively, meaning 65 general practitioners and 19 dentists per 100,000 people. In Aceh, the ratio stands at 1:30 and 1:6, indicating 30 general practitioners and six dentists per 100,000 residents. By contrast, in West Sulawesi, the ratio is 1:12 and 1:3, reflecting 12 general practitioners and three dentists per 100,000 inhabitants.

The shortage of medical professionals, particularly doctors and dentists, in Indonesia is evident from the data. According to the World Bank, Indonesia has the second-lowest number of physicians per 1,000 people in Southeast Asia, with only 0.4 doctors per 1,000, ranking just above Cambodia. This means there are only four doctors available to serve every 10,000 individuals in Indonesia. In stark contrast, Singapore boasts two doctors per 1,000 people. On a global scale, Singapore ranks highest in terms of healthcare quality, scoring 86.89 points out of 100. This comparison highlights the significant gap in medical resources between Indonesia and its regional counterparts. Moreover, data from the Indonesian Medical Council (KKI) indicates that as of mid-July 2022, there were 254,894 registered doctors in Indonesia holding valid registration certificates (STR), consisting of 161,779 general practitioners, 48,167 specialists across 36 fields, and 39,953 dentists. Despite these numbers, Indonesia still faces a shortage of approximately 85,000 physicians to meet the healthcare needs of its population effectively.

The uneven distribution of doctors further exacerbates Indonesia's shortage of medical personnel. Moreover, there has been insufficient coordination in planning for the appropriate number of physicians in hospitals and healthcare facilities, especially in remote regions and on islands. This imbalance is a significant barrier to achieving health development targets, with the COVID-19 pandemic over the past three years further complicating progress. In this context, the government's role is crucial in improving and expanding healthcare services to ensure they are both equitable and of

<sup>&</sup>lt;sup>2</sup> The Lancet, 'Health as a Foundation for Society', *The Lancet*, 397.10268 (2021), 1 https://doi.org/10.1016/S0140-6736(20)32751-3

<sup>&</sup>lt;sup>3</sup> Bronwyn McBride, Sarah Hawkes, and Kent Buse, 'Soft Power and Global Health: The Sustainable Development Goals (SDGs) Era Health Agendas of the G7, G20 and BRICS', *BMC Public Health*, 19.1 (2019), 815 https://doi.org/10.1186/s12889-019-7114-5

<sup>&</sup>lt;sup>4</sup> Christian Gulden and others, 'RecrulT: A Cloud-Native Clinical Trial Recruitment Support System Based on Health Level 7 Fast Healthcare Interoperability Resources (HL7 FHIR) and the Observational Medical Outcomes Partnership Common Data Model (OMOP CDM)', Computers in Biology and Medicine, 174 (2024), 108411 <a href="https://doi.org/10.1016/j.compbiomed.2024.108411">https://doi.org/10.1016/j.compbiomed.2024.108411</a>



high quality, ultimately aiming to enhance public health outcomes across the country. <sup>5</sup> In addition, the health sector is undergoing significant transformations driven by rapid advancements in technology and information, as well as diminishing global boundaries. For instance, the ASEAN nations are actively working to promote technological and informational progress across various sectors, including healthcare, particularly within the medical industry. One notable collaboration within this framework is the ASEAN Economic Community (AEC), which facilitates economic integration among ASEAN countries. The AEC has established the Mutual Recognition Arrangement (MRA) to regulate and promote technological and informational developments in the services sector, ensuring that these advancements are effectively integrated.<sup>6</sup>

The 2021 Indonesian Health Profile projects that by 2022, the total number of healthcare workers at facilities in Indonesia will reach 2,019,438. Of this figure, 1,440,130 (71.3%) are health workers, while 579,308 (28.7%) serve as support staff. Among the 176,110 medical personnel, general practitioners account for the largest proportion at 60%, reflecting their crucial role in healthcare services. The provinces of DKI Jakarta (23,788), East Java (23,851), and West Java (23,973) host the majority of medical personnel, comprising 62.13% of the national total. In contrast, West Sulawesi (512), North Kalimantan (600), and Gorontalo (648) have the fewest medical professionals. Nationally, 11.3% of community health centers were found to lack physicians, while 29.8% were without dentists—an increase from 2021, when 9.6% of centers were without doctors and 32.4% without dentists. Additionally, 33.7% of community health centers are adequately staffed with doctors, while 55% have more physicians than the minimum standard requires. However, in six provinces—Papua, Maluku, West Papua, East Nusa Tenggara, Central Kalimantan, and West Sulawesi—fewer than 80% of community health centers meet the minimum standard for doctor availability.

The shortage of dentists in community health centers is considerably more pronounced compared to the deficit of physicians. In Indonesia, out of 34 provinces, 12 experience a deficit of over 50% in community health centers, whereas only 4% of these centers lack physicians. As of 2022, the number of specialist physicians in Indonesian hospitals reached 44,485, marking an increase from 43,558 the previous year. Among these, essential specialist physicians represent the largest proportion (39%), while specialist dentists account for the smallest share (6%). Internal medicine specialists represent the highest percentage (12.0%) within their specialty. Despite a projected 29% increase in the global health workforce from 2020 to 2030, a shortage of 10 million health workers is anticipated, with the most severe impacts expected in the world's lowest-income regions. The migration of physicians from developing nations to high-income countries exacerbates the global disparity in the distribution of doctors. This workforce shortage arises from the inability of many countries to effectively recruit, train, and retain health and care workers (HCWF), and

<sup>5</sup> Lal and others

<sup>&</sup>lt;sup>6</sup> G. V. Artamonova and others, 'The Personnel Policy in Health Care Institutions in the Light of Tasks of Provision of Medical Care Quality and Medical Activity Safety', *Problems of Social Hygiene Public Health and History of Medicine*, 31.2 (2023) https://doi.org/10.32687/0869-866X-2023-31-2-270-277



is compounded by challenges in the allocation and distribution of personnel with the necessary expertise and numbers.<sup>7</sup>

This significant migration of health professionals has far-reaching economic consequences, including increased mortality rates in developing countries due to a shortage of physicians. In 2012, Indonesia employed 147 foreign health professionals, as reported by the Ministry of Health. Of these, 92 were registered as employees in private hospitals, clinics, and other healthcare facilities, nine were employed as educators at health polytechnics, 12 participated in education and training programs, and 34 were involved in social service activities. By May 2013, 50 recommendations were issued for foreign health workers (TK-WNA), with 10 employed in private hospitals and 40 engaged in social service roles. However, this number does not fully capture the actual number of TK-WNA in Indonesia, as some enter the country through alternative cross-ministerial licensing channels. Moreover, in 2015, the number of foreign national health workers employed in Indonesia rose to 107.

The Asian continent represented the largest share of foreign health workers (TK-WNA) at 39.25%, while New Zealand accounted for the smallest proportion at 1.87%. In Southeast Asia, foreign health workers were distributed as follows: Malaysia (7 individuals), Singapore (5 individuals), the Philippines (4 individuals), and Cambodia (1 individual). Within Indonesia, 93 foreign health professionals were employed in managerial roles, while 7 were engaged in the education and training sectors. The increasing influx of foreign medical personnel into Indonesia is expected to both exacerbate the existing shortage of physicians and dentists and facilitate opportunities for technological advancements in the health sector.<sup>10</sup> To address these challenges, the Indonesian government has implemented regulations to manage the entry of foreign workers, particularly in healthcare. These regulations are specified in Law Number 17 of 2023 on Health and Regulation of the Minister of Health of the Republic of Indonesia Number 6 of 2023 concerning the Utilization of Foreign Health Workers in Indonesia. Despite these measures, there is a risk to public safety if foreign medical personnel lack the necessary competence in their respective fields.11 Consequently, it is crucial for the government to adopt effective strategies, regulations, policies, and oversight to ensure that foreign health workers provide safe and qualified services to the public.

The data suggests that the government's efforts to transform health human resources and the influx of foreign medical personnel have not significantly improved the quality of health services in Indonesia. The persistent shortage of medical

<sup>&</sup>lt;sup>7</sup> Tara Tancred and others, 'How Can Intersectoral Collaboration and Action Help Improve the Education, Recruitment, and Retention of the Health and Care Workforce? A Scoping Review', *The International Journal of Health Planning and Management*, 39.3 (2024), 757–80 https://doi.org/10.1002/hpm.3773

<sup>&</sup>lt;sup>8</sup> Saurabh Saluja and others, 'The Impact of Physician Migration on Mortality in Low and Middle-Income Countries: An Economic Modelling Study', *BMJ Global Health*, 5.1 (2020), e001535 https://doi.org/10.1136/bmjgh-2019-001535

<sup>&</sup>lt;sup>9</sup> Asianto Nugroho and others, 'Implementation of Worker Rights Protection for Government Employees with Employment Agreements', 2021 https://doi.org/10.2991/assehr.k.211014.023

<sup>&</sup>lt;sup>10</sup> J. Eaton and others, 'The Negative Impact of Global Health Worker Migration, and How It Can Be Addressed', *Public Health*, 225 (2023), 254–57 https://doi.org/10.1016/j.puhe.2023.09.014

<sup>&</sup>lt;sup>11</sup> Pardeep Kumar and others, 'Workplace Violence and Bullying Faced by Health Care Personnel at the Emergency Department of a Tertiary Care Hospital of Karachi, Pakistan: A Cross-Sectional Study', *Journal of Emergency Nursing*, 49.5 (2023), 785–95 https://doi.org/10.1016/j.jen.2023.02.005



professionals in many Indonesian health centers highlights this issue. While health resources are crucial for enhancing service effectiveness, Singapore stands out by ensuring both high quality and adequate quantity in its healthcare services. This comparative advantage explains why some individuals, including Indonesians, prefer to seek medical treatment in Singapore. <sup>12</sup> Additionally, the evaluation takes into account the presence of advanced and modern hospital facilities and technologies, the ability to deliver high-quality patient care, the availability of comprehensive service packages for greater convenience, and the effectiveness of patient management systems.

Implementing a package system can significantly expedite cost reduction. In Singapore, foreign physicians are allowed entry only after verification by Singaporean medical institutions. To ensure high standards of qualifications, foreign physicians initially must work in a public hospital. After six months, they undergo an evaluation by a supervisor, and with successful evaluations, they may eventually be permitted to work in private hospitals. Successful international examples illustrate that foreign expertise in healthcare reform can offer valuable insights into enhancing medical services, ensuring equitable access, and improving primary health care. Effective management and well-designed policies play a crucial role in professional development and competence, impacting both personnel satisfaction and the overall quality of medical services. This, in turn, influences the quality of healthcare services provided. The provided of the services is a significantly expedition of the services are allowed entry only after verification of the services are allowed entry only after verification of the services are allowed entry only after verification of the services are allowed entry only after verification of the services are allowed entry only after verification of the services are allowed entry only after verification of the services of the se

Indonesia's health services continue to lag behind public and governmental expectations due to insufficient health funding compared to other nations. Despite various policies and initiatives aimed at addressing this issue, such as providing health insurance to marginalized individuals, challenges remain. The shortage of healthcare professionals and inadequate health facilities are significant factors contributing to the substandard quality of health services in the country. Furthermore, the high costs associated with delivering healthcare in Indonesia complicate access to quality services. <sup>15</sup> The quality of medical personnel, insufficient health infrastructure, and reliance on imported drugs and raw materials contribute to the overall low quality of healthcare in Indonesia. Compounding these issues is the illegal practice of foreign medical personnel, despite the enforcement of Law Number 36 of 2009 concerning Health, and the more recent Law Number 17 of 2023. The persistent violations and misconduct by foreign medical personnel highlight the inadequacies in Indonesia's regulatory framework. Although Law Number 17 of 2023 and Regulation of the Minister of Health Number 6 of 2023 set out rules for foreign medical personnel,

<sup>&</sup>lt;sup>12</sup> Hans Kluge and others, 'Strengthening Global Health Security by Embedding the International Health Regulations Requirements into National Health Systems', *BMJ Global Health*, 3.Suppl 1 (2018), e000656 https://doi.org/10.1136/bmjgh-2017-000656

<sup>&</sup>lt;sup>13</sup> Annisa Purwatiningsih, Asih Widi Lestari, and Lisa Dhuhaniyati, 'Implications Of Healthcare System In Singapore And Malaysia As Interesting Lessons Towards Primary Service Innovation For Indonesia', *ASKETIK*, 6.1 (2022), 16–28 https://doi.org/10.30762/asketik.v6i1.185

<sup>&</sup>lt;sup>14</sup> Evgeniy V. Kirichenko, Elman Said-Mokhmadovich Akhyadov, and Oksana Sertakova, 'The Impact of Health Care Reforms on Improving the Quality of Medical Services: International Experience', *Revista Gestão Inovação e Tecnologias*, 11.4 (2021), 2915–25 https://doi.org/10.47059/revistageintec.v11i4.2328

<sup>&</sup>lt;sup>15</sup> E. J. Mills and others, 'The Financial Cost of Doctors Emigrating from Sub-Saharan Africa: Human Capital Analysis', *BMJ*, 343.nov23 3 (2011), d7031–d7031 https://doi.org/10.1136/bmj.d7031



these regulations currently lack provisions for criminal or civil penalties for violations or malpractice that result in patient harm.

Previous research by Perdana highlights that leveraging foreign medical personnel to enhance healthcare services necessitates careful evaluation of multiple factors. The study emphasizes the importance of overcoming cultural barriers in the workplace, a consideration that is crucial for the effective integration of foreign medical personnel.<sup>16</sup> In contrast, research by Sani suggests that the Job Creation Law, which facilitates the employment of foreign workers, may negatively impact Indonesian health professionals. This legislation could marginalize local health workers, including medical personnel, clinical psychologists, nurses, midwives, pharmaceutical staff, public health professionals, environmental health workers, nutritionists, physical therapists, biomedical engineers, traditional health practitioners, and other health professionals, leading to increased unemployment among them. 17 Additionally, Jingwei and Tang's investigation reveals that healthcare integration is still developing in both research and practice. Their findings illustrate that integration must occur not only horizontally but also vertically, spanning across public and private sectors. Although most integration models emphasize the crucial role of primary health care, they often fall short in terms of effectiveness, operational mechanisms, and public perception, indicating a need for further scientific and policy research.<sup>18</sup> Furthermore, research by Than Sein suggests that improving public health requires substantial investment in developing an efficient and effective health system. Such development cannot be achieved in isolation; it requires well-defined policies and strategies, supported by effective governance, to strengthen health systems across various regions.19

Foreign medical personnel is required to address this nation's challenges, including a shortage of medical personnel. However, the current issue lies in the ineffectiveness of the regulations governing foreign medical personnel in Indonesia, which has significantly hindered their ability to improve health services. For various reasons, foreign medical personnel in Indonesia have yet to enhance health services significantly. Initially, the recently enacted Health Law stipulates that foreign medical personnel can only practice in Indonesia if they possess a specific specialty and have completed a competency evaluation. Secondly, Indonesia needs a more precise and detailed evaluation system to assess the quality of foreign physicians' practice. This could compromise the integrity of health services. Third, professional organizations, including the Indonesian Physicians Association (IDI), continue to play a significant role in overseeing the quality of physicians' practices, including foreign doctors, and ensuring they adhere to the necessary quality standards. Fourth, some may view the

<sup>&</sup>lt;sup>16</sup> Dyas Bintang Perdana and S. Sultoni, 'Budaya Terlambat Guru Dan Tenaga Kependidikan Sebagai Faktor Penghambat Pemberian Kompensasi Jabatan Di Sekolah', *Jurnal Administrasi Pendidikan*, 18.1 (2021), 11–16 <a href="https://doi.org/10.17509/jap.v28i1.31937">https://doi.org/10.17509/jap.v28i1.31937</a>

<sup>&</sup>lt;sup>17</sup> Wildan Sani, 'The Utilization of Foreign Workers in Hospital in Terms of Law Number 11 Of 2020 Concerning Job Creation Law (Omnibus Law)', in *Proceedings of the 1st International Conference on Law, Social Science, Economics, and Education, ICLSSEE 2021, March 6th 2021, Jakarta, Indonesia* (EAI, 2021) https://doi.org/10.4108/eai.6-3-2021.2306850

<sup>&</sup>lt;sup>18</sup> Alex Jingwei He and Vivien F.Y. Tang, 'Integration of Health Services for the Elderly in Asia: A Scoping Review of Hong Kong, Singapore, Malaysia, Indonesia', *Health Policy*, 125.3 (2021), 351–62 https://doi.org/10.1016/j.healthpol.2020.12.020

<sup>&</sup>lt;sup>19</sup> Than Sein, 'Health Systems of East Asia and Pacific States', in *Reference Module in Biomedical Sciences* (Elsevier, 2023) https://doi.org/10.1016/B978-0-323-99967-0.00044-2



implemented licensing system as less stringent, implying that it does not provide foreign physicians practicing in Indonesia with qualities that align with Indonesian health standards.

Finally, the inadequacy of detailed evaluation systems and limited involvement of health sector professionals in the legislative development process may undermine the quality of health services in Indonesia. The global shortage of healthcare personnel is exacerbated by factors such as increasing demand in affluent countries, insufficient local training programs, and challenges in retaining healthcare workers. Consequently, recruiting foreign medical personnel becomes essential. This study will therefore concentrate on how foreign medical personnel can enhance the quality of health services in Indonesia. Additionally, the movement of healthcare workers across borders impacts the professional structure, demographic profile, and geographic distribution of personnel, affecting the overall effectiveness of the global healthcare system. Thus, a comparative analysis with Singapore—known for its superior health services—will be conducted to explore how the integration of foreign medical personnel might improve the quality of healthcare services in Indonesia.

#### **METHOD**

This research used normative juridical legal research. Research is conducted by examining library materials or secondary data consisting of primary legal materials, secondary legal materials, and tertiary legal materials.<sup>20</sup> This research analyzes and examines legislation on health and the utilization of foreign medical personnel in Indonesia and Singapore. The approaches used are statutory and conceptual. The legislative approach is carried out by reviewing related laws and regulations. At the same time, a conceptual approach is utilized in legal research that offers an analytical perspective for resolving research problems by examining the values enshrined in enacting a regulation about the utilized concept.<sup>21</sup>

#### **RESULT AND DISCUSSION**

The Challenges of Health Frontiers for Improving the Health Services Quality in Indonesia

The Ministry of Health has outlined six principles of health transformation to be integrated into the health bill, which forms part of Law Number 17 of 2023 concerning Health. First, there is potential for significantly improved access to high-quality health services in Indonesia. Second, the complexities of healthcare service costs must be addressed. Third, there is a need to balance the ratio of health workers. Fourth, the quality of medical personnel must be enhanced. Fifth, the insufficiency of health facilities remains a critical issue. Finally, the reliance on imported medicinal raw materials poses an ongoing challenge.

According to data from the World Bank, Indonesia has one of the lowest numbers of doctors globally, with only 0.4 doctors per 1,000 people, equating to approximately four doctors for every 10,000 individuals. This ratio is notably lower

<sup>&</sup>lt;sup>20</sup> Abdul Kadir Jaelani, Reza Octavia Kusumaningtyas, and Asron Orsantinutsakul, 'The Model of Mining Environment Restoration Regulation Based on Sustainable Development Goals', *Legality: Jurnal Ilmiah Hukum*, 30.1 (2022), 131–46 https://doi.org/10.22219/ljih.v30i1.20764

<sup>&</sup>lt;sup>21</sup> Abdul Kadir Jaelani and others, 'Indonesia Carbon Tax Policy: A Key Role in Sustainable Development Goals', 2024, p. 020040 https://doi.org/10.1063/5.0202042



compared to Singapore, which has two doctors per 1,000 people. Singapore is recognized for its exceptional healthcare services, boasting a score of 86.89 out of 100 on the global health services scale. Despite an increase to 176,110 doctors in Indonesia by 2022—a 3% rise from 2021—the ratio remains at approximately 0.63 doctors per 1,000 people. This figure is still below the World Health Organization's ideal standard of one doctor per 1,000 population.<sup>22</sup>

According to the Indonesian Health Profile 2021, there are approximately 10,292 community health centers in the country, with 4,201 offering inpatient care and 6,091 providing non-inpatient care. However, only about 48.9% of these centers meet the requisite standards for health workers or medical personnel. This indicates that the distribution of medical personnel remains insufficient for delivering optimal health services. Each year, Indonesia loses approximately 170 trillion rupiah in foreign exchange due to nearly 2 million Indonesians traveling abroad for healthcare services, including trips to Singapore, Malaysia, Japan, the United States, and other countries. This phenomenon is driven by the prevailing perception that healthcare services in these countries are superior to those available in Indonesia. Despite this perception, the healthcare facilities and medical personnel in Indonesia are comparable to those in these other nations. In response, the Indonesian government is actively working to enhance the standard of domestic health services by attracting foreign doctors to the country.<sup>23</sup>

Foreign workers in Indonesia who remain in the country for more than 183 days within a 12-month period are subject to domestic taxation. These workers must obtain a Taxpayer Identification Number (NPWP) to comply with domestic tax obligations. Conversely, if a foreign worker's stay in Indonesia does not exceed 183 days within the same timeframe, their income is subject to withholding tax under Article 21 or Article 26 of Law Number 26 of 2008, which imposes a 20% tax on the gross amount paid by the party responsible for the payment. Indonesia boasts a substantial workforce, representing 68.63% or approximately 143.72 million individuals. Many Indonesian workers are employed across ASEAN member countries, including Malaysia, Singapore, Brunei Darussalam, and Thailand. In the first half of 2023, data from the Ministry of Manpower (Kemnaker) indicated that there were 73,011 foreign workers (TKA) in Indonesia. Of these, 37.6 thousand were employed in the service sector, 33.4 thousand in the manufacturing sector, and 1.9 thousand in agriculture and maritime industries. Regarding the countries of origin, China had the largest representation, with 33,000 foreign workers in Indonesia from January to June 2023. This was followed by Japan with 7,700 workers, South Korea with 7,500 workers, India with 3,700 workers, and Malaysia with 2,600 workers.<sup>24</sup>

Under Article 43, paragraphs (1) and (2), employers must obtain approval for employing foreign workers through a Plan for the Use of Foreign Workers (RPTKA),

\_\_\_

<sup>&</sup>lt;sup>22</sup> Ferry Efendi, Gading Ekapuja Aurizki, and others, 'The Paradox of Surplus and Shortage: A Policy Analysis of Nursing Labor Markets in Indonesia', *Journal of Multidisciplinary Healthcare*, Volume 15 (2022), 627–39 https://doi.org/10.2147/JMDH.S354400

<sup>&</sup>lt;sup>23</sup> Robert Marten, Johanna Hanefeld, and Richard D. Smith, 'How States Engage in and Exercise Power in Global Health: Indonesian and Japanese Engagement in the Conceptualization of Sustainable Development Goal 3', *Social Science & Medicine*, 321 (2023), 115455 https://doi.org/10.1016/j.socscimed.2022.115455

<sup>&</sup>lt;sup>24</sup> Endeh Suhartini and others, 'Indonesian Migrant Workers After Job Creation Law: A Challenging Problem for Protection Welfare', *BESTUUR*, 11.2 (2023), 271 https://doi.org/10.20961/bestuur.v11i2.78442

JSDRI 2117

which must be authorized by the relevant minister or an appointed official. Additionally, Article 248 of Law Number 17 of 2023 concerning Health stipulates that foreign medical personnel and health workers who have graduated from overseas and are permitted to practice in Indonesia are eligible only for specialist and subspecialist roles, as well as health workers with specific levels of competency, subject to an evaluation. This evaluation includes assessments of practical skills and administrative completeness to ensure competency standardization and testing. 25 Furthermore, Article 249 requires that foreign nationals who have graduated from international institutions and wish to practice in Indonesia, including those in specialist and subspecialist roles or those with particular competencies, must possess both a registration letter (STR) and a practice permit (SIP). The STR and SIP are valid for two years, with the possibility of a two-year extension. These credentials apply to specialist and subspecialist medical personnel, health professionals with specific competencies, and foreign graduates. Exceptions are made for foreign specialists and subspecialists who provide education and training or engage in other activities that do not require an STR for a designated period. Evidence indicates that the migration of health personnel can lead to a decline in the quality of health services in low- and middle-income countries and has significant economic repercussions for countries that have invested in training their healthcare workforce.<sup>26</sup>

Law Number 36 of 2009 concerning Health lacks comprehensive provisions for the regulation of foreign medical personnel in Indonesia, in contrast to the more detailed stipulations found in Law Number 17 of 2023 concerning Health. Specifically, Law Number 36 of 2009 does not include articles addressing this issue. Additionally, Law Number 29 of 2004 concerning Medical Practices no longer applies to foreign medical personnel working in Indonesia. To address the utilization of foreign medical personnel, the government has enacted regulations such as Minister of Health Regulation Number 6 of 2023. This regulation outlines the conditions and requirements for foreign national health personnel entering Indonesia. However, it does not specify sanctions for violations or malpractice by foreign medical personnel. If foreign medical workers breach administrative rules, they may face administrative penalties. These penalties include written warnings, recommendations for the revocation of their temporary STR or SIP, suspension of their approval to work, or recommendations for action by immigration authorities. It is also required that personnel conduct government affairs in accordance with human rights and legal standards.27

Law Number 17 of 2023 concerning Health does not establish criminal provisions for foreign medical personnel who practice without a registration certificate or practice permit from the Indonesian government. The regulation fails to specify criminal or civil penalties for foreign medical personnel involved in malpractice that results in patient harm. Typically, criminal provisions for medical malpractice are

<sup>&</sup>lt;sup>25</sup> Eka Rismawati, Abdul Kadir Jaelani, and Karakitapoglu Aygün, 'The Regulation of Foreign Workers as Technology and Knowledge Transfer', *Journal of Sustainable Development and Regulatory Issues (JSDERI)*, 1.2 (2023), 64–74 https://doi.org/10.53955/jsderi.v1i2.8

<sup>&</sup>lt;sup>26</sup> Eaton and others.

<sup>&</sup>lt;sup>27</sup> Sidik Budiono and John Tampil Purba, 'Factors of Foreign Direct Investment Flows to Indonesia in the Era of COVID-19 Pandemic', *Heliyon*, 9.4 (2023), e15429 https://doi.org/10.1016/j.heliyon.2023.e15429



addressed separately.<sup>28</sup> Furthermore, the regional autonomy system permits foreign health or medical personnel to enter Indonesia with approval from local regional governments. This system provides multiple entry points for foreign medical personnel, allowing them to undertake various activities based on their visa status. However, this broad access increases the risk of potential violations or malpractice by foreign medical personnel.<sup>29</sup>

The variety of accreditation pathways for foreign medical personnel has led to inadequate supervision of their entry into Indonesia. The Ministry of Health's lack of clear and comprehensive data regarding the number, types, qualifications, and competencies of foreign medical personnel further highlights this issue. As a result, effective oversight and guidance for foreign health or medical personnel remain unattainable. To better understand and manage the costs and benefits associated with dynamic national and international health labor markets, it is crucial to enhance data availability on health worker migration, including their potential return and reintegration into their home countries' health systems. The findings indicate that the advantages of migration do not arise automatically but require supportive policies and programs at the home country level.<sup>30</sup> his includes initiatives focused on engaging the diaspora and implementing favorable reintegration policies to maximize the benefits of migration.<sup>31</sup>

In 2022, the number of doctors in Indonesia reached 176,110, marking an approximate 3% increase from the previous year. This increase results in a ratio of about 0.63 doctors per 1,000 people, still below the World Health Organization's ideal standard of one doctor per 1,000 people. Concerning health facilities, only approximately 48.9% of community health centers in Indonesia meet the necessary criteria for health workers or medical personnel, indicating a need for improved distribution to ensure optimal health service delivery. In 2023, health expenditure in urban areas is significantly higher, averaging IDR 31,445,000, compared to IDR 20,792,000 in rural areas. Additionally, data from the National Socioeconomic Survey reveal that over half of the Indonesian population's health expenditures are paid out of pocket, a trend that has continued to rise over the past three years. In 2023, approximately 61.80% of health expenses are borne by individuals themselves, a substantial amount that exceeds the World Health Organization's recommended maximum of 20%.<sup>32</sup>

<sup>&</sup>lt;sup>28</sup> Lego Karjoko and others, 'The Urgency of Restorative Justice on Medical Dispute Resolution in Indonesia', *AL-IHKAM: Jurnal Hukum & Pranata Sosial*, 16.2 (2021), 362–92 https://doi.org/10.19105/al-lhkam.v16i2.5314

<sup>&</sup>lt;sup>29</sup> Corinne Packer, Vivien Runnels, and Ronald Labonté, 'Does the Migration of Health Workers Bring Benefits to the Countries They Leave Behind?', in *The International Migration of Health Workers* (London: Palgrave Macmillan UK, 2010), pp. 44–61 https://doi.org/10.1057/9780230307292 4

<sup>&</sup>lt;sup>30</sup> Elfrida Ratnawati and others, 'The Cabotage Principle on Law Enforcement for Licensing Ship Operations in Indonesian Waters', *Journal of Human Rights, Culture and Legal System*, 3.3 (2023), 678–705 https://doi.org/10.53955/jhcls.v3i3.182

<sup>&</sup>lt;sup>31</sup> Lila Sax dos Santos Gomes and others, 'The Impact of International Health Worker Migration and Recruitment on Health Systems in Source Countries: Stakeholder Perspectives from Colombia, Indonesia, and Jordan', *The International Journal of Health Planning and Management*, 39.3 (2024), 653–70 https://doi.org/10.1002/hpm.3776

<sup>&</sup>lt;sup>32</sup> Ferry Efendi, Lisa McKenna, and others, 'Experiences of Healthcare Worker Returnees in Their Home Countries: A Scoping Review', *Journal of Multidisciplinary Healthcare*, Volume 14 (2021), 2217–27 https://doi.org/10.2147/JMDH.S321963



Based on health expenditure data for the Indonesian population, foreign medical personnel are likely to be most effective in urban or upper-middle-class communities. This is due to the advanced technological infrastructure and the high level of expertise that foreign medical personnel bring, which typically results in higher treatment or consultation fees. As of March 2023, Indonesia's population includes 25.90 million individuals living in poverty. The middle class comprises approximately 114.7 million people, representing about half of the population. The upper class includes around 53.6 million individuals, while the most affluent segment consists of only 3.1 million people.<sup>33</sup>

Minister of Health Regulation Number 6 of 2023 stipulates that foreign medical personnel may be employed in various domains, including health services, education within the health sector, training for disaster emergency response, research and development in health science and technology, and other related health sector activities (Article 7). However, Article 46 of Law Number 13 of 2003 prohibits foreign workers from occupying positions that involve specific roles regulated by ministerial decree. According to Article 14 of Minister of Health Regulation Number 6 of 2023, and relevant provisions for Companion Personnel, the deployment of foreign medical personnel requires the appointment of Indonesian health workers as companions. These Indonesian companions must have qualifications comparable to those of the foreign medical personnel. Despite these regulations, the health sector faces significant challenges in effectively collaborating with other sectors to influence public policy and establish the necessary social, economic, environmental, and cultural conditions for equitable health outcomes.<sup>34</sup>

One of the key objectives of Law Number 17 of 2023 is to streamline the licensing process for foreign medical personnel seeking to work in Indonesia. This aims to increase the number and distribution of health workers in the country, enhance the quality of health services, and reduce the costs incurred by Indonesian citizens who seek medical treatment abroad.<sup>35</sup> To ensure that Indonesian citizens receive adequate legal protection when employing foreign medical personnel, the law must provide a comprehensive outline of the sanctions for non-compliance. Law Number 17 of 2023 should adhere to the eight principles of legal morality, emphasizing the need for regulations to be relevant and applicable to daily practice. To improve the quality and innovation of public services across government agencies, health regulations must be updated periodically in accordance with community needs and expectations.<sup>36</sup>

Second, health regulations must address the distribution of foreign medical personnel to 3T (underdeveloped, frontier, and outermost) areas. Law Number 17 of 2023 should include provisions that facilitate health system transformation by ensuring an equitable distribution of health service facilities, health workers, and

<sup>&</sup>lt;sup>33</sup> Franklin A. Shaffer and others, 'International Nurse Recruitment Beyond the COVID-19 Pandemic', *Nurse Leader*, 20.2 (2022), 161–67 https://doi.org/10.1016/j.mnl.2021.12.001

<sup>&</sup>lt;sup>34</sup> Marilyn Wise and others, 'The Role of Health Impact Assessment in Promoting Population Health and Health Equity', *Health Promotion Journal of Australia*, 20.3 (2009), 172–79 https://doi.org/10.1071/HE09172

<sup>&</sup>lt;sup>35</sup> Suparto Suparto and others, 'Administrative Discretion in Indonesia & Netherland Administrative Court: Authorities and Regulations', *Journal of Human Rights, Culture and Legal System*, 4.1 (2024), 75–100 https://doi.org/10.53955/jhcls.v4i1.189

<sup>&</sup>lt;sup>36</sup> H.-C. Stoeklé, J.-F. Deleuze, and G. Vogt, 'Society, Law, Morality and Bioethics: A Systemic Point of View', *Ethics, Medicine and Public Health*, 10 (2019), 22–26 https://doi.org/10.1016/j.jemep.2019.06.005



medical personnel. This involves developing service facilities to enhance community access and ensuring alignment with other relevant laws. The government, along with the community, must provide both first-level and advanced health service facilities. Additionally, policies need to be established to manage the distribution of foreign medical personnel to prevent their concentration solely in major cities. Third, the regulations must specify sanctions for foreign medical personnel who practice illegally or commit malpractice. Law Number 17 of 2023 and its accompanying regulations currently lack detailed provisions on this matter.<sup>37</sup> Fourth, health regulations should include protections for health and medical personnel, particularly for foreign practitioners. Employment agreements or contracts are crucial for safeguarding the rights of these individuals. Bilateral agreements, typically involving multiple ministries such as Trade or Employment, Foreign Affairs, Finance, and Health, outline the recruitment and employment conditions for foreign workers.<sup>38</sup> This demonstrates that the utilization of foreign medical personnel has yet to enhance the quality of health services in Indonesia. This is due to the legal structure's weaknesses, specifically the license and supervision process for foreign medical personnel entering and working in Indonesia, which must involve multiple channels and legal substances. In this instance, Law Number 17 of 2023 still needs to provide sufficient legal protection and supervision to regulate the utilization of foreign medical personnel who wish to practice in Indonesia and the condition of the Indonesian people who cannot afford to employ foreign medical personnel.

## The Challenges of Health Frontier for Improving the Health Services Quality in Singapore

The WHO has acknowledged Singapore as one of the ASEAN countries with the most exceptional health service system. In practice, Singapore's health system is structured. The government and the private sector both regulate it. The Monetary Authority of Singapore (MAS), Central Provident Fund (CFP), and Ministry of Health (MOH) are the government entities involved. The majority of the health system in Singapore is regulated by the MOH, which is responsible for the following: the allocation of human resources and health infrastructure, the promotion of health education, the monitoring of the quality and accessibility of health services, the prevention and control of disease.<sup>39</sup> In the interim, the MAS and the CFP regulate Singapore's social security costs. In stark contrast, health services in Indonesia still structurally overlap due to the involvement of numerous health organizations and the ongoing lack of optimal parameters in the Indonesian service system.<sup>40</sup>

In 2021, the number of registered medical practitioners in Singapore increased to 16,044 from 15,430 in 2020. There were 776 new registered medical practitioners, 456 of whom were local graduates from our three medical schools. A total of 373

<sup>&</sup>lt;sup>37</sup> Bambang Ali Kusumo and others, 'COVID-19 Vaccination Service: Legal Issues and Health Workers Protection in Indonesia', *International Journal of Health Sciences*, 6.1 (2022), 50–60 https://doi.org/10.53730/ijhs.v6n1.2954

<sup>&</sup>lt;sup>38</sup> Joshua Munywoki and others, 'Tracking Health Sector Priority Setting Processes and Outcomes for Human Resources for Health, Five-Years after Political Devolution: A County-Level Case Study in Kenya', *International Journal for Equity in Health*, 19.1 (2020), 165 https://doi.org/10.1186/s12939-020-01284-3

<sup>&</sup>lt;sup>39</sup> Mary Joy Garcia-Dia, 'The Ethical Recruitment of Internationally Educated Nurses', *Nurse Leader*, 20.1 (2022), 43–47 https://doi.org/10.1016/j.mnl.2021.10.002

<sup>&</sup>lt;sup>40</sup> Hanzhang Zhan and others, 'Towards a Sustainable Built Environment Industry in Singapore: Drivers, Barriers, and Strategies in the Adoption of Smart Facilities Management', *Journal of Cleaner Production*, 425 (2023), 138726 https://doi.org/10.1016/j.jclepro.2023.138726



new specialists were added to the specialist list. At the end of 2021, there were 6,431 registered specialist doctors, which exceeded 40% of the total number of doctors in Singapore for the first time. The number of foreign-trained Singapore Citizens and Permanent Residents who returned to Singapore and registered with the SMC was 217 people in 2021. This number increased slightly from the 209 people who returned in 2020. In 2021, 156 overseas-trained medical practitioners were awarded registration conditional 143 were non-specialists (92%), and 13 were specialists (8%). Of the 156 medical practitioners, 42 are Singaporean citizens (27%) and 11 are permanent residents (7%) and 70 new overseas-trained medical practitioners registered in the provisional registration. They are accepted for postgraduate training/research in Singapore, consisting of 65 Clinical Fellows, 2 Clinical Observers and 3 Clinical Research Fellows.

To meet the needs of health services in Singapore, it is assisted by professional medical personnel and driven by the high quality of expertise of its medical personnel. However, it is still necessary to consider the possibility that Singapore still needs professional medical personnel from other countries. In this case, Singapore has regulations regarding using foreign medical personnel in Singapore. Singapore has a ratio of doctors per 1,000 people, reaching 1.9 doctors or 190:100,000. Singapore is a country that does not have rural areas, so all doctors work in the urban sector. The division of existing doctors is also independent of urban or rural, but the division is based on the public and private sectors. The country's small geography also means that the distribution of doctors in Singapore is relatively good. Meanwhile, in Indonesia, according to the Indonesian Medical Council (KKI), as of December 6, 2022, Indonesia only has 54.1 thousand domestic specialist doctors with an Indonesian population of 270 million people.<sup>41</sup>

Singaporean citizens and foreign medical personnel from other countries primarily make up the health profession in Singapore. Foreign national health professionals are an essential component of Singapore's healthcare system. Over the past five years, Singapore has granted permanent resident status to approximately 1,200 foreign health workers, who have entered and worked there annually on average. This figure includes over six out of ten nurses, with the remaining individuals being physicians, related specialists, and other health workers. To become a doctor in Singapore, one must meet the following criteria have a medical degree from a university or medical school recognized by the Singapore Medical Council, a postgraduate qualification recognized by the Singapore Medical Council, have been selected to work in a Singapore Medical Council-approved healthcare institution, possess an experience certificate or equivalent as proof of satisfactory completion of a horsemanship, PGY1, or apprenticeship year, be currently in active clinical practice, have passed the national licensing examination as required in the state where the primary medical degree was awarded, have been certified as being in good standing by a foreign

<sup>&</sup>lt;sup>41</sup> Wee Tong Ng, 'COVID-19: Protection of Workers at the Workplace in Singapore', Safety and Health at Work, 12.1 (2021), 133–35 https://doi.org/10.1016/j.shaw.2020.09.013

<sup>&</sup>lt;sup>42</sup> A.P. Bochkovskyi and N.Yu. Sapozhnikova, 'Development of System of Automated Protection of Employees from COVID-19 and Other Infections at the Enterprise', *Journal of Achievements in Materials and Manufacturing Engineering*, 112.2 (2022), 70–85 https://doi.org/10.5604/01.3001.0016.0705

<u>JSDRI</u>

regulatory body or equivalent medical board, and meet the English language requirements. They will go to a training and a residency program.<sup>43</sup>

One of the conditions that must be satisfied to become a foreign worker in Singapore is the possession of a work permit, as outlined in the Singapore Foreign Worker Law (Chapter 91A). The necessary criteria for obtaining a work permit include applying for one to the employer or on behalf of an authorized employer in a format determined by the superior. The information, statements, and personal documents in this job application letter substantiate the supervisor's requirements. Subsequently, the supervisor may grant the foreign worker a training work permit. At any moment, the supervisor may request the revocation and cancellation of the work permit that has been issued.

Several rights are granted to every foreign worker who works in Singapore, including a fixed salary and monthly allowances that do not include variable allowances, overtime payments, bonuses, commissions, additional annual wages, fees from sitting on the Board, stock options, or dividends, payments in the form of inkind, all forms of cost reimbursement, including costs incurred by an employee during their work, productivity incentive payments, contributions paid by the employer to a pension fund or savings fund, including contributions made on behalf of the employee, and gratuities paid to foreign workers upon dismissal, reduction, or retirement. In addition, foreign laborers in Singapore are entitled to health insurance, monthly levies, and security guarantees. <sup>44</sup> Singapore, in contrast, does not deduct income tax from earned salaries. People regard the Singapore government's system for employing foreign medical personnel as straightforward and efficient. Furthermore, the Singapore government does not discriminate against non-Singapore citizens during the process. <sup>45</sup>

Singapore is a developed nation that attracts international talent due to its exceptional benefits. Medical expenses in Singapore have steadily increased over the years. As stipulated by the Ministry of Manpower (MOM), employers are accountable for procuring health insurance for each foreign laborer they employ.<sup>46</sup> Specific requirements dictate the type of insurance required and the coverage it provides. While most employers offer health insurance for their foreign employees, all foreign workers must comprehend the operation of the health insurance system. Employers must obtain and maintain health insurance coverage for work permit holders that is at least \$\$15,000 annually. Nevertheless, employers are not required to purchase insurance for dependents if their health insurance plans meet the minimum coverage requirement of \$\$15,000 per year. Furthermore, the health insurance bundle must encompass the entire work permit's validity duration. The plan should

<sup>&</sup>lt;sup>43</sup> William Burdick and Ibadat Dhillon, 'Ensuring Quality of Health Workforce Education and Practice: Strengthening Roles of Accreditation and Regulatory Systems', *Human Resources for Health*, 18.1 (2020), 71 https://doi.org/10.1186/s12960-020-00517-4

<sup>&</sup>lt;sup>44</sup> Foster Mensah Kofi Agbornu, Isaac Mensah Boafo, and Adelaide Maria Ansah Ofei, 'Effects of Workplace Violence on the Quality of Care by Nurses: A Study of the Volta Region of Ghana', *International Journal of Africa Nursing Sciences*, 16 (2022), 100421 https://doi.org/10.1016/j.ijans.2022.100421

<sup>&</sup>lt;sup>45</sup> Sheila Kusuma Wardani Amnesti and others, 'Higher Education with Disabilities Policy: Ensuring Equality Inclusive Education in Indonesia, Singapore and United States', *Journal of Human Rights, Culture and Legal System*, 3.3 (2023), 412–40 https://doi.org/10.53955/jhcls.v3i3.135

<sup>&</sup>lt;sup>46</sup> Helena Legido-Quigley and others, 'Are High-Performing Health Systems Resilient against the COVID-19 Epidemic?', *The Lancet*, 395.10227 (2020), 848–50 https://doi.org/10.1016/S0140-6736(20)30551-1



cover medical expenses related to inpatient care, daily operations, and treatment for non-work-related conditions. Suppose each sub-limit is equivalent to the minimum claimable amount of \$15,000 per year. In that case, health insurance plans with sub-limits on aspects such as daily surgery, inpatient care, or per disability may still satisfy MOM requirements. Furthermore, to fulfill the MOM requirements, a minimum total coverage of \$\$15,000 for both categories collectively is necessary in the absence of sub-limits for daily surgery and inpatient care. This implies that foreign laborers can claim up to \$15,000 for inpatient treatment, provided they do not incur daily operating expenses during the policy year.<sup>47</sup>

There are three primary categories of institutions in Singapore's healthcare system. Firstly, acute hospitals were specialized institutions (excluding psychiatric hospitals) that offered acute with inpatient facilities. Secondly, a mental hospital is a facility that is dedicated to the diagnosis and treatment of mental conditions and disorders. Lastly, community hospitals offer medical services to individuals who require follow-up care for a brief period, typically after discharge from an acute hospital. Advanced technological advancements have also been implemented in Singapore's health services. The Electronic Registration Certificate (e-RC) and Electronic Practice Certificate (e-PC), collectively referred to as e-Cert, were introduced by the Secretariat of the Health Professions Board (SPB) in partnership with the Ministry of Health in the Professional Registration System (PRS) for 11 Professional Councils and Healthcare Accreditation Councils in Singapore.<sup>48</sup>

The party also partners with the Ministry of Health and GovTech to introduce a digital Practice Certificate (digital PC) on the Singpass telephone application. The two digital initiatives offer healthcare professionals, and consumers registered in a secure electronic network system increased convenience and access. All registered healthcare personnel with a valid PC can now access and view their PC digitally on the Singpass app in the "My Cards" section, in addition to their digital NRIC and digital Driving License, shortly after the launch of e-Certs. Greater convenience is provided to over 75,000 registered health professionals with valid PCs through collaboration with the Ministry of Health and GovTech. The Singpass application on their smartphone allows them to access their PC information directly. However, the Singpass app will not display the digital PCs of healthcare professionals who are suspended, unregistered, or have a PC whose validity period has expired.<sup>49</sup>

The government encourages Singaporean and non-Singaporean enterprises to establish private hospitals within the country in the context of health service providers. Foreign ownership and hospital management are not subject to any constraints in the private healthcare sector. In other words, the city-state does not prohibit or impose maximal limits on the amount of bets that non-Singaporeans may hold in private healthcare facilities. The MOH is responsible for making licensing decisions, and the Regulations on Private Hospitals and Medical Clinics (last amended in 2002)

<sup>&</sup>lt;sup>47</sup> Shaffer and others.

<sup>&</sup>lt;sup>48</sup> Sallie Yea, 'The Art of Not Being Caught: Temporal Strategies for Disciplining Unfree Labour in Singapore's Contract Migration', *Geoforum*, 78 (2017), 179–88 https://doi.org/10.1016/j.geoforum.2016.05.003

<sup>&</sup>lt;sup>49</sup> Arthur Sakamoto and Anita Koo, 'American versus East Asian Norms and Labor Market Institutions Affecting Socioeconomic Inequality', *Research in Social Stratification and Mobility*, 90 (2024), 100914 https://doi.org/10.1016/j.rssm.2024.100914



delineate the licensing procedures. The Licensing, Inspection & Audit Branch of the Ministry of Health must receive an application with the necessary license fee two months before the facility's commencement of operations. Institutions with multiple branches are required to submit distinct applications for individual licenses. It is essential to mention that these private facilities are not permitted to incorporate the terms "Singapore" or "National" into their names unless they "fulfill or intend to fulfill a national or equivalent role." Permit extensions are permissible; however, they must be executed two months before the permit's expiration date. Failure to comply with this requirement will result in a penalty for late renewal. Late fees may be assessed at 20% of the license renewal fee or \$\$100, whichever is greater. The authorities did not mandate that these entities obtain insurance coverage for their liabilities to expedite the establishment of private health institutions.

Foreign dentists are permitted to operate in Singapore provided that they satisfy the following criteria: (1) possess a primary degree from a university listed in the Second Schedule of the Medical Registration Act or an equivalent degree (subject to approval by the Singapore Dental Council (SDC)); (2) have been selected to work in a dental facility approved by the SDC; (3) pass the national licensing examination at the institution where the degree was earned; and (4) pass a qualifying examination administered by the SDC for individuals with an alternative degree. Because of this licensing policy, the number of health professionals in the city-state has increased. For instance 2017, 1,583 (or 17.11 percent) of 9,521 medical practitioners were non-Singaporeans employed in the public healthcare sector. The Ministry of Health has increased the enrollment of Singaporean medical students and provided professional licenses to foreign health workers. The ministry has provided subsidies for the final three years of medical school to encourage Singaporean medical students who have completed their studies abroad to return and serve in the country.<sup>50</sup>

In January 2018, the Ministry of Health proposed replacing the current Private Hospitals and Medical Clinics Act (PHMCA) with the Health Services Act (HCSA) to ensure effective rules and regulations govern the country's healthcare system. Established in 1980 and last amended in 1999, the PHMCA aims to "ensure the regulation, licensing, and inspection of private hospitals, medical clinics, clinical laboratories, and health care institutions." According to the HCSA, the MOH must oversee "the licensing and quality of hospital services and other medical institutions." In 2018, the Ministry of Health revealed that the government aimed to "improve the governance of healthcare providers, strengthen regulatory clarity, ensure continuity of service and accountability, and better regulate health services" by "safeguarding patient safety and welfare." The private medical practice operates in a constantly changing environment. The following schedule shows that the hope is to pass this policy in three stages in December 2019. It is classified under this law. All PHMCA-licensed hospitals and nursing homes will be subject to the HCSA during Phase II,

<sup>&</sup>lt;sup>50</sup> Susann Schäfer and Sebastian Henn, 'Recruiting and Integrating International High-Skilled Migrants – Towards a Typology of Firms in Rural Regions in Germany', *Journal of Rural Studies*, 103 (2023), 103094 https://doi.org/10.1016/j.jrurstud.2023.103094

<sup>&</sup>lt;sup>51</sup> I Gede Adhi Mulyawarman, Putu Gede Arya Sumerta Yasa, and Lamberton Cait, 'Blocking Dangerous Content in Electronic Communications Networks: Evidence from Netherlands, United States and Singapore', *Journal of Human Rights, Culture and Legal System*, 4.1 (2024), 237–62 https://doi.org/10.53955/jhcls.v4i1.216

JSDRI ...

which will commence in June 2020. This new law will apply to new services, including telemedicine, during Phase III, which will begin in December 2020.

Following a comprehensive examination of the health service system and the provisions for the utilization of foreign medical personnel in Indonesia and Singapore, as previously described, the influx of senior researchers and migrants from a variety of countries serves as evidence that Singapore has strategically recruited foreign medical personnel to meet its healthcare requirements and improve its biomedical research capabilities. The country's initiatives are consistent with the World Health Organization's Global Code of Practice on International Recruitment of Health Workers, which underscores the significance of training and retaining local health workers to mitigate international migration pressures. The recruitment of foreign medical professionals not only strengthens Singapore's health workforce but also facilitates the advancement of biomedical research by attracting renowned scientists and establishing research institutes. This strategic procurement approach enables Singapore to expand its workforce using foreign human resources, thereby mitigating the effects of low total fertility rates on economic growth. 53

Indonesia should consider adopting Singapore's legislative practices, particularly those related to the employment of foreign medical personnel. Singapore's approach is marked by bureaucratic simplification, in contrast to Indonesia's complex system of administration and authority, which complicates the enforcement and oversight of laws. In Indonesia, the distribution of authority across various levels (internal hospital, regional, and central) and the presence of multiple derivative regulations can lead to inconsistent interpretations and legal uncertainty. The complexity in Indonesian law arises from overlapping structures and varying authorities at different administrative levels. 54 This fragmentation often results in misinterpretations and ambiguity, undermining the rule of law. In contrast, Singapore's system ensures clarity and efficiency, providing foreign medical personnel with a comprehensive package of benefits, including a basic salary, monthly allowances, health insurance, and tax advantages. To improve the legislative framework in Indonesia, it is crucial to simplify both the drafting and application of derivative regulations. This approach will ensure that Indonesian laws are not only general in nature but also serve as clear, actionable guidelines. By minimizing the scope for misinterpretation and reducing bureaucratic overlap, Indonesia can achieve greater legal certainty and effective enforcement in the employment of foreign medical personnel.

#### CONCLUSION

First, the integration of foreign medical personnel has not yet significantly improved the quality of health services in Indonesia. The current legal framework, including Law Number 17 of 2023, requires further refinement in its structure, substance, and legal culture. Specifically, the law lacks comprehensive provisions detailing the sanctions applicable to foreign medical personnel. Without these, the

<sup>&</sup>lt;sup>52</sup> Joanna SE Chan and others, 'Health-Seeking Behaviour of Foreign Workers in Singapore: Insights from Emergency Department Visits', *Annals of the Academy of Medicine, Singapore*, 50.4 (2021), 315–24 https://doi.org/10.47102/annals-acadmedsg.2020484

<sup>&</sup>lt;sup>53</sup> Vanessa W Lim and others, 'Cross-Sectional Study of Prevalence and Risk Factors, and a Cost-Effectiveness Evaluation of Screening and Preventive Treatment Strategies for Latent Tuberculosis among Migrants in Singapore', *BMJ Open*, 11.7 (2021), e050629 https://doi.org/10.1136/bmjopen-2021-050629

<sup>&</sup>lt;sup>54</sup> Ratnawati and others.



Indonesian populace may not receive adequate legal protection when utilizing foreign medical services. To address this, Law Number 17 of 2023 must align with the eight principles outlined in The Morality of Law, ensuring that regulations are effectively implemented in practice. Health regulations should not only address the distribution of foreign medical personnel in 3T areas (underdeveloped, frontier, and outermost) but also include clear sanctions for illegal practices and malpractice. Additionally, the regulations must contain provisions for the protection of all health workers, especially foreign medical personnel. Second, the approach taken by Singapore, where social security costs are managed by the Monetary Authority of Singapore (MAS) and the Central Provident Fund (CPF), contrasts sharply with the structural complexities and inefficiencies observed in Indonesia's health service system. Singapore's streamlined and non-discriminatory system for employing foreign medical personnel has been effective in advancing its biomedical research capabilities and meeting healthcare demands. This approach aligns with the World Health Organization's Global Code of Practice on International Recruitment of Health Workers, which emphasizes the importance of training and retaining local health workers to reduce the pressures of international migration. Therefore, Indonesia should consider adopting Singapore's strategies in legislative formulation and regulatory practices, particularly regarding the employment of foreign medical personnel. Establishing specific regulations and enhancing legal protections could potentially improve the quality of health services in Indonesia.

#### REFERENCES

Agbornu, Foster Mensah Kofi, Isaac Mensah Boafo, and Adelaide Maria Ansah Ofei, 'Effects of Workplace Violence on the Quality of Care by Nurses: A Study of the Volta Region of Ghana', *International Journal of Africa Nursing Sciences*, 16 (2022), 100421 https://doi.org/10.1016/j.ijans.2022.100421

Annisa Purwatiningsih, Asih Widi Lestari, and Lisa Dhuhaniyati, 'Implications Of Healthcare System In Singapore And Malaysia As Interesting Lessons Towards Primary Service Innovation For Indonesia', *ASKETIK*, 6.1 (2022), 16–28 https://doi.org/10.30762/asketik.v6i1.185

Artamonova, G. V., A. N. Popsuiko, Yu. V. Danilchenko, and E. A. Batsina, 'The Personnel Policy in Health Care Institutions in the Light of Tasks of Provision of Medical Care Quality and Medical Activity Safety', *Problems of Social Hygiene Public Health and History of Medicine*, 31.2 (2023) https://doi.org/10.32687/0869-866X-2023-31-2-270-277

Bochkovskyi, A.P., and N.Yu. Sapozhnikova, 'Development of System of Automated Protection of Employees from COVID-19 and Other Infections at the Enterprise', *Journal of Achievements in Materials and Manufacturing Engineering*, 112.2 (2022), 70–85 https://doi.org/10.5604/01.3001.0016.0705

Budiono, Sidik, and John Tampil Purba, 'Factors of Foreign Direct Investment Flows to Indonesia in the Era of COVID-19 Pandemic', *Heliyon*, 9.4 (2023), e15429 https://doi.org/10.1016/j.heliyon.2023.e15429



- Burdick, William, and Ibadat Dhillon, 'Ensuring Quality of Health Workforce Education and Practice: Strengthening Roles of Accreditation and Regulatory Systems', *Human Resources for Health*, 18.1 (2020), 71 https://doi.org/10.1186/s12960-020-00517-4
- Chan, Joanna SE, Dennis WJ Chia, Ying Hao, Sherman WQ Lian, Mui Teng Chua, and Marcus EH Ong, 'Health-Seeking Behaviour of Foreign Workers in Singapore: Insights from Emergency Department Visits', *Annals of the Academy of Medicine, Singapore*, 50.4 (2021), 315–24 https://doi.org/10.47102/annals-acadmedsg.2020484
- Eaton, J., F. Baingana, M. Abdulaziz, T. Obindo, D. Skuse, and R. Jenkins, 'The Negative Impact of Global Health Worker Migration, and How It Can Be Addressed', *Public Health*, 225 (2023), 254–57 https://doi.org/10.1016/j.puhe.2023.09.014
- Efendi, Ferry, Gading Ekapuja Aurizki, Ilmiawan Auwalin, Anna Kurniati, Lita Dwi Astari, las Tarina Puspitasari, and others, 'The Paradox of Surplus and Shortage: A Policy Analysis of Nursing Labor Markets in Indonesia', *Journal of Multidisciplinary Healthcare*, Volume 15 (2022), 627–39 https://doi.org/10.2147/JMDH.S354400
- Efendi, Ferry, Lisa McKenna, Sonia Reisenhofer, Anna Kurniati, and Eka Mishbhahatul Marah Has, 'Experiences of Healthcare Worker Returnees in Their Home Countries: A Scoping Review', *Journal of Multidisciplinary Healthcare*, Volume 14 (2021), 2217–27 https://doi.org/10.2147/JMDH.S321963
- Garcia-Dia, Mary Joy, 'The Ethical Recruitment of Internationally Educated Nurses', *Nurse Leader*, 20.1 (2022), 43–47 https://doi.org/10.1016/j.mnl.2021.10.002
- Gulden, Christian, Philipp Macho, Ines Reinecke, Cosima Strantz, Hans-Ulrich Prokosch, and Romina Blasini, 'RecrulT: A Cloud-Native Clinical Trial Recruitment Support System Based on Health Level 7 Fast Healthcare Interoperability Resources (HL7 FHIR) and the Observational Medical Outcomes Partnership Common Data Model (OMOP CDM)', Computers in Biology and Medicine, 174 (2024), 108411 https://doi.org/10.1016/j.compbiomed.2024.108411
- He, Alex Jingwei, and Vivien F.Y. Tang, 'Integration of Health Services for the Elderly in Asia: A Scoping Review of Hong Kong, Singapore, Malaysia, Indonesia', *Health Policy*, 125.3 (2021), 351–62 https://doi.org/10.1016/j.healthpol.2020.12.020
- Jaelani, Abdul Kadir, Resti Dian Luthviati, Muhammad Jihadul Hayat, Reza Octavia Kusumaningtyas, and Fitri Nur Aini, 'Indonesia Carbon Tax Policy: A Key Role in Sustainable Development Goals', 2024, p. 020040 https://doi.org/10.1063/5.0202042
- Kadir Jaelani, Abdul, Reza Octavia Kusumaningtyas, and Asron Orsantinutsakul, 'The Model of Mining Environment Restoration Regulation Based on Sustainable Development Goals', *Legality: Jurnal Ilmiah Hukum*, 30.1 (2022), 131–46 https://doi.org/10.22219/ljih.v30i1.20764
- Kirichenko, Evgeniy V., Elman Said-Mokhmadovich Akhyadov, and Oksana Sertakova,



- 'The Impact of Health Care Reforms on Improving the Quality of Medical Services: International Experience', *Revista Gestão Inovação e Tecnologias*, 11.4 (2021), 2915–25 https://doi.org/10.47059/revistageintec.v11i4.2328
- Kluge, Hans, Jose Maria Martín-Moreno, Nedret Emiroglu, Guenael Rodier, Edward Kelley, Melitta Vujnovic, and others, 'Strengthening Global Health Security by Embedding the International Health Regulations Requirements into National Health Systems', *BMJ Global Health*, 3.Suppl 1 (2018), e000656 https://doi.org/10.1136/bmjgh-2017-000656
- Kumar, Pardeep, Uzma Rahim Khan, Salman Muhammad Soomar, Zohra Jetha, and Tazeen Saeed Ali, 'Workplace Violence and Bullying Faced by Health Care Personnel at the Emergency Department of a Tertiary Care Hospital of Karachi, Pakistan: A Cross-Sectional Study', *Journal of Emergency Nursing*, 49.5 (2023), 785–95 https://doi.org/10.1016/j.jen.2023.02.005
- Kusumo, Bambang Ali, Muhamad Mahrus Setia Wijaksana, Fatma Ulfatun Najicha, Ariesty Fujiastuti, and Abdul Kadir Jaelani, 'COVID-19 Vaccination Service: Legal Issues and Health Workers Protection in Indonesia', *International Journal of Health Sciences*, 6.1 (2022), 50–60 https://doi.org/10.53730/ijhs.v6n1.2954
- Lal, Arush, Ngozi A Erondu, David L Heymann, Githinji Gitahi, and Robert Yates, 'Fragmented Health Systems in COVID-19: Rectifying the Misalignment between Global Health Security and Universal Health Coverage', *The Lancet*, 397.10268 (2021), 61–67 https://doi.org/10.1016/S0140-6736(20)32228-5
- Legido-Quigley, Helena, Nima Asgari, Yik Ying Teo, Gabriel M Leung, Hitoshi Oshitani, Keiji Fukuda, and others, 'Are High-Performing Health Systems Resilient against the COVID-19 Epidemic?', *The Lancet*, 395.10227 (2020), 848–50 https://doi.org/10.1016/S0140-6736(20)30551-1
- Lego Karjoko, I Gusti Ayu Ketut Rachmi Handayani, Abdul Kadir Jaelani, Jaco Barkhuizen, and Muhammad Jihadul Hayat, 'The Urgency of Restorative Justice on Medical Dispute Resolution in Indonesia', *AL-IHKAM: Jurnal Hukum & Pranata Sosial*, 16.2 (2021), 362–92 https://doi.org/10.19105/al-lhkam.v16i2.5314
- Lim, Vanessa W, Hwee Lin Wee, Phoebe Lee, Yijun Lin, Yi Roe Tan, Mei Xuan Tan, and others, 'Cross-Sectional Study of Prevalence and Risk Factors, and a Cost-Effectiveness Evaluation of Screening and Preventive Treatment Strategies for Latent Tuberculosis among Migrants in Singapore', *BMJ Open*, 11.7 (2021), e050629 https://doi.org/10.1136/bmjopen-2021-050629
- Marten, Robert, Johanna Hanefeld, and Richard D. Smith, 'How States Engage in and Exercise Power in Global Health: Indonesian and Japanese Engagement in the Conceptualization of Sustainable Development Goal 3', Social Science & Medicine, 321 (2023), 115455 https://doi.org/10.1016/j.socscimed.2022.115455
- McBride, Bronwyn, Sarah Hawkes, and Kent Buse, 'Soft Power and Global Health: The Sustainable Development Goals (SDGs) Era Health Agendas of the G7, G20 and BRICS', *BMC Public Health*, 19.1 (2019), 815 https://doi.org/10.1186/s12889-019-7114-5



- Mills, E. J., S. Kanters, A. Hagopian, N. Bansback, J. Nachega, M. Alberton, and others, 'The Financial Cost of Doctors Emigrating from Sub-Saharan Africa: Human Capital Analysis', *BMJ*, 343.nov23 3 (2011), d7031–d7031 https://doi.org/10.1136/bmj.d7031
- Mulyawarman, I Gede Adhi, Putu Gede Arya Sumerta Yasa, and Lamberton Cait, 'Blocking Dangerous Content in Electronic Communications Networks: Evidence from Netherlands, United States and Singapore', *Journal of Human Rights, Culture and Legal System*, 4.1 (2024), 237–62 https://doi.org/10.53955/jhcls.v4i1.216
- Munywoki, Joshua, Nancy Kagwanja, Jane Chuma, Jacinta Nzinga, Edwine Barasa, and Benjamin Tsofa, 'Tracking Health Sector Priority Setting Processes and Outcomes for Human Resources for Health, Five-Years after Political Devolution: A County-Level Case Study in Kenya', *International Journal for Equity in Health*, 19.1 (2020), 165 https://doi.org/10.1186/s12939-020-01284-3
- Ng, Wee Tong, 'COVID-19: Protection of Workers at the Workplace in Singapore', Safety and Health at Work, 12.1 (2021), 133–35 https://doi.org/10.1016/j.shaw.2020.09.013
- Nugroho, Asianto, Reza Octavia Kusumaningtyas, Ravi Danendra, Gusti Faza Aliya, and Fatma Ulfatun Najicha, 'Implementation of Worker Rights Protection for Government Employees with Employment Agreements', 2021 <a href="https://doi.org/10.2991/assehr.k.211014.023">https://doi.org/10.2991/assehr.k.211014.023</a>
- Packer, Corinne, Vivien Runnels, and Ronald Labonté, 'Does the Migration of Health Workers Bring Benefits to the Countries They Leave Behind?', in *The International Migration of Health Workers* (London: Palgrave Macmillan UK, 2010), pp. 44–61 https://doi.org/10.1057/9780230307292\_4
- Perdana, Dyas Bintang, and S. Sultoni, 'Budaya Terlambat Guru Dan Tenaga Kependidikan Sebagai Faktor Penghambat Pemberian Kompensasi Jabatan Di Sekolah', *Jurnal Administrasi Pendidikan*, 18.1 (2021), 11–16 https://doi.org/10.17509/jap.v28i1.31937
- Ratnawati, Elfrida, Laurensius Arliman S, Meta Indah Budhianti, Vience Ratna Multi Wijaya, and Aida Abdul Razak, 'The Cabotage Principle on Law Enforcement for Licensing Ship Operations in Indonesian Waters', *Journal of Human Rights, Culture and Legal System*, 3.3 (2023), 678–705 https://doi.org/10.53955/jhcls.v3i3.182
- Rismawati, Eka, Abdul Kadir Jaelani, and Karakitapoglu Aygün, 'The Regulation of Foreign Workers as Technology and Knowledge Transfer', *Journal of Sustainable Development and Regulatory Issues (JSDERI)*, 1.2 (2023), 64–74 https://doi.org/10.53955/jsderi.v1i2.8
- Sakamoto, Arthur, and Anita Koo, 'American versus East Asian Norms and Labor Market Institutions Affecting Socioeconomic Inequality', *Research in Social Stratification and Mobility*, 90 (2024), 100914 https://doi.org/10.1016/j.rssm.2024.100914
- Saluja, Saurabh, Niclas Rudolfson, Benjamin Ballard Massenburg, John G Meara, and



- Mark G Shrime, 'The Impact of Physician Migration on Mortality in Low and Middle-Income Countries: An Economic Modelling Study', *BMJ Global Health*, 5.1 (2020), e001535 https://doi.org/10.1136/bmjgh-2019-001535
- Sani, Wildan, 'The Utilization of Foreign Workers in Hospital in Terms of Law Number 11 Of 2020 Concerning Job Creation Law (Omnibus Law)', in *Proceedings of the 1st International Conference on Law, Social Science, Economics, and Education, ICLSSEE 2021, March 6th 2021, Jakarta, Indonesia* (EAI, 2021) https://doi.org/10.4108/eai.6-3-2021.2306850
- Sax dos Santos Gomes, Lila, Ferry Efendi, Nuzulul Kusuma Putri, Mery Bolivar-Vargas, Rami Saadeh, Pedro A. Villarreal, and others, 'The Impact of International Health Worker Migration and Recruitment on Health Systems in Source Countries: Stakeholder Perspectives from Colombia, Indonesia, and Jordan', *The International Journal of Health Planning and Management*, 39.3 (2024), 653–70 https://doi.org/10.1002/hpm.3776
- Schäfer, Susann, and Sebastian Henn, 'Recruiting and Integrating International High-Skilled Migrants Towards a Typology of Firms in Rural Regions in Germany', Journal of Rural Studies, 103 (2023), 103094 https://doi.org/10.1016/j.jrurstud.2023.103094
- Sein, Than, 'Health Systems of East Asia and Pacific States', in *Reference Module in Biomedical Sciences* (Elsevier, 2023) https://doi.org/10.1016/B978-0-323-99967-0.00044-2
- Shaffer, Franklin A., Mukul Bakhshi, Kaley Cook, and Thomas D. Álvarez, 'International Nurse Recruitment Beyond the COVID-19 Pandemic', *Nurse Leader*, 20.2 (2022), 161–67 https://doi.org/10.1016/j.mnl.2021.12.001
- Stoeklé, H.-C., J.-F. Deleuze, and G. Vogt, 'Society, Law, Morality and Bioethics: A Systemic Point of View', *Ethics, Medicine and Public Health*, 10 (2019), 22–26 https://doi.org/10.1016/j.jemep.2019.06.005
- Suhartini, Endeh, Mimi Fitriana Zaini, Bambang Widjojanto, and Ani Yumarni, 'Indonesian Migrant Workers After Job Creation Law: A Challenging Problem for Protection Welfare', *BESTUUR*, 11.2 (2023), 271 https://doi.org/10.20961/bestuur.v11i2.78442
- Suparto, Suparto, Fadhel Arjuna Adinda, Azamat Esirgapovich Esanov, and Zamira Esanova Normurotovna, 'Administrative Discretion in Indonesia & Netherland Administrative Court: Authorities and Regulations', *Journal of Human Rights, Culture and Legal System*, 4.1 (2024), 75–100 https://doi.org/10.53955/jhcls.v4i1.189
- Tancred, Tara, Michelle Falkenbach, Joanna Raven, and Margaret Caffrey, 'How Can Intersectoral Collaboration and Action Help Improve the Education, Recruitment, and Retention of the Health and Care Workforce? A Scoping Review', *The International Journal of Health Planning and Management*, 39.3 (2024), 757–80 https://doi.org/10.1002/hpm.3773



- The Lancet, 'Health as a Foundation for Society', *The Lancet*, 397.10268 (2021), 1 https://doi.org/10.1016/S0140-6736(20)32751-3
- Thompson, Maddy, and Margaret Walton-Roberts, 'International Nurse Migration from India and the Philippines: The Challenge of Meeting the Sustainable Development Goals in Training, Orderly Migration and Healthcare Worker Retention', *Journal of Ethnic and Migration Studies*, 45.14 (2019), 2583–99 https://doi.org/10.1080/1369183X.2018.1456748
- Wardani Amnesti, Sheila Kusuma, Jundiani Jundiani, Siti Zulaichah, Mohd Shahid Mohd Noh, and Lailatul Fitriyah, 'Higher Education with Disabilities Policy: Ensuring Equality Inclusive Education in Indonesia, Singapore and United States', *Journal of Human Rights, Culture and Legal System*, 3.3 (2023), 412–40 https://doi.org/10.53955/jhcls.v3i3.135
- Wise, Marilyn, Patrick Harris, Ben Harris-Roxas, and Elizabeth Harris, 'The Role of Health Impact Assessment in Promoting Population Health and Health Equity', Health Promotion Journal of Australia, 20.3 (2009), 172–79 https://doi.org/10.1071/HE09172
- Yea, Sallie, 'The Art of Not Being Caught: Temporal Strategies for Disciplining Unfree Labour in Singapore's Contract Migration', *Geoforum*, 78 (2017), 179–88 https://doi.org/10.1016/j.geoforum.2016.05.003
- Zhan, Hanzhang, Bon-Gang Hwang, Hanjing Zhu, and Si Hui Pearlyn Ang, 'Towards a Sustainable Built Environment Industry in Singapore: Drivers, Barriers, and Strategies in the Adoption of Smart Facilities Management', *Journal of Cleaner Production*, 425 (2023), 138726 https://doi.org/10.1016/j.jclepro.2023.138726