



Barriers to Healthcare Access for Myanmar Migrants in Thailand and Japan during COVID-19

Lalita Kaewwilai¹, Ei Thinzar Khin², Su Myat Han³, Nana Moriguchie⁴, Napaswan Namboonsri⁵, Niaya Harper Igarashi^{6,7}, Joji Sugawara⁶, Kwanjai Amnatsatsue¹, Orawan Kaewboonchoo¹

¹Department of Public Health Nursing, Faculty of Public Health, Mahidol University, Thailand

²Department of Medical Education, Juntendo University, Tokyo, Japan

³School of Tropical Medicine and Global Health, Nagasaki University, Nagasaki, Japan

Faculty of Epidemiology and Population Health London School of Hygiene and Tropical Medicine

⁴Faculty of International Liberal Arts, Juntendo University, Tokyo, Japan

⁵Department of Public Health Nursing, Faculty of Nursing, Mahidol University, Thailand

⁶Health and Global Policy Institute (HGPI), Japan

⁷Department of Community and Global Health, Graduate School of Medicine, the University of Tokyo, Japan

Correspondence: Lalita Kaewwilai, Department of Public Health Nursing, Faculty of Public Health, Mahidol University, Thailand, E-mail: lalita.kae@mahidol.ac.th

Received: July 5 2025; Revised: October 21 2025; Accepted: November 12 2025

Abstract

The COVID-19 pandemic has profoundly impacted global health systems, affecting migrants who face multiple barriers to healthcare access. This study explores and compares the healthcare access experiences of Myanmar migrants in Thailand and Japan during the COVID-19 pandemic. A qualitative study was conducted with semi-structured interviews with 20 Myanmar migrants (10 each in Thailand and Japan) and focus group discussions with healthcare professionals in both countries. Data was analyzed thematically using the Health Care Access Barriers (HCAB) model to identify financial, structural, and cognitive barriers. The study revealed multifaceted barriers across financial, structural, cognitive, and cultural dimensions. Financial barriers were particularly pronounced, with migrants in Thailand experiencing significant income loss when seeking medical care. Structural challenges included limited-service accessibility, complicated administrative processes, and geographical constraints. Cognitive barriers manifested through language difficulties, limited health literacy, and fear of discrimination. In Thailand, while the government provided free COVID-19 services to all migrants, challenges

persisted in communication and service delivery. Japan presented similar complexities, with migrants facing additional difficulties in system navigation and cultural integration.

Enhancing migrant health equity requires systemic interventions that go beyond individual-level health education. Strengthening community outreach, translation services, and migrant-inclusive policies are crucial. Future efforts should foster collaborative partnerships among healthcare facilities, local governments, NGOs, employers, and the Myanmar government or its embassies in Thailand and Japan, ensuring shared responsibility for the health and well-being of migrant populations.

Keywords: Healthcare access, Myanmar migrants, Thailand, Japan, COVID-19

What was Known

- Migrant workers face major barriers in accessing healthcare globally.
- COVID-19 worsened inequalities for migrants in host countries.
- HCAB model identifies financial, structural, and cognitive barriers.

What's New and Next

- Comparative study of Myanmar migrants' health access in Thailand and Japan.
- Flexible insurance and cultural training foster inclusive, affordable migrant healthcare.
- Framework advances migrant health policy via cross-sector coordination.

Introduction

The COVID-19 pandemic has been globally recognized as one of major public health threats. It disrupted healthcare systems everywhere and exposed deep inequalities in how different groups can reach medical services¹. Among those most affected were migrant workers, who often live far from home, have insecure jobs, and face language or cultural barriers when seeking care^{1,2}. Many migrants face difficulties in accessing healthcare services due to fear, communication barriers, financial hardship, or cultural differences¹⁻⁷. Although these barriers pre-existed, they were exacerbated during the COVID-19 pandemic^{1,2}, further hindering migrants' ability to obtain necessary care and support^{4, 8-10}.

This study focuses on Myanmar migrants living in Thailand and Japan, two Asian countries that host large numbers of migrants but differ in health systems, economic level, and policy approaches. Comparing these two countries helps explain how the same migrant group experiences different challenges in healthcare access depending on local conditions.

Thailand has been one of the main destinations for Myanmar migrants for decades. Over 2 million Myanmar citizens work there, mostly in construction, seafood, manufacturing, and agriculture^{8,11}. They usually have low education levels and limited Thai-language skills, which makes it difficult for them to communicate with healthcare staff^{4,11}. During the pandemic, many lived in crowded rooms or dormitories where infection spread quickly^{4,8,11}. A well-known example occurred in Samut Sakhon Province, where outbreaks among factory workers led to Thailand's second wave of infections¹². The Thai government responded by organizing mass testing, quarantine zones, and community isolation centers for people with mild symptoms⁶. While large-scale field hospitals were established nationwide to manage moderate cases, which allow hospitals for the treatment of severe cases^{13,14}. All COVID-19 testing, treatment, and vaccination were offered free of charge to everyone, including undocumented migrants⁶. These policies showed Thailand's attempt to include migrants in public health measures. However, many Myanmar migrants still found it hard to reach services. They often lacked identity documents, had trouble understanding Thai instructions, or feared of harassment by enforcement agencies^{8,15}. Economic problems also made things worse. Many migrants lost their jobs or had their wages cut. Even those who were insured under Thailand's Migrant Health Insurance Scheme sometimes avoided hospitals because they did not have time off work⁸. Therefore, for migrants in Thailand, barriers to healthcare were a mix of financial, structural, and cognitive problems.

Myanmar migrants in Japan represented a significant and rapidly growing population, especially among technical interns, care-workers, and students¹⁶. In Japan, every legal resident must join public health insurance, which in theory gives access to affordable medical care. Yet in practice, migrants still face several difficulties^{2,9,10}. They struggle to navigate a complex system, gaps in health insurance coverage, and have limited Japanese language ability^{2,10,16}. Such challenges were already present before the pandemic and were further exacerbated by the public health measures implemented to control the spread of COVID-19^{2,16}.

Japan's national strategy for managing COVID-19 emphasized infection control, sustaining the healthcare system, and prioritizing care for severely ill patients¹⁷. While the government provided free COVID-19 vaccinations to all individuals with vaccine vouchers, and the costs for COVID-19 testing and medical care were covered for patients who tested positive, migrants continued to encounter barriers¹⁶. Migrants in Japan also suffered economically during lockdowns. Although the government offered financial support and emergency loans⁹, some migrants could not apply because of limited Japanese skills or difficulties navigating administrative procedures¹⁶. Compared with Thailand, Japan's migrants were more likely to be covered by insurance, but structural and cognitive barriers such as complicated paperwork, cultural differences, and lack of interpreters were still major problems^{9,16}.

The Health Care Access Barriers (HCAB) model developed by Carrillo et al.¹⁸ specifies three types of barriers: financial, structural, and cognitive. Previous studies have used HCAB to frame research across diverse populations including migrant health⁸, which supports its utility and emerging construct validity¹⁸.

1) Financial barriers refer to economic constraints that impede an individual's ability to seek and receive healthcare services, such as problems related to cost, lack of insurance, or unstable income. 2) Structural barriers encompass system-level challenges, such as limited facilities, transportation, or long waiting times. 3) Cognitive barriers are perhaps the most complex and include factors related to knowledge, communication, language proficiency, and health literacy.

These three factors interact and reinforce each other. Together, these barriers delay treatment and reduce the use of preventive services such as screening and vaccination.

However, recent studies show that cultural barriers like mistrust, discrimination, or fear also play a key role^{2,4,8,10}. For migrants, cultural gaps can shape every stage of the healthcare

experience, from deciding to seek care to communicate with providers. Thus, this research extends the HCAB model to include cultural challenges as a fourth, interrelated dimension.

In the context of public health emergencies like the COVID-19 pandemic, the HCAB model offers critical insights into why vulnerable populations, including migrants, experience disproportionate health impacts. Understanding and addressing these multilayered barriers is essential to developing equitable health policies and interventions that can improve access and reduce health disparities across populations. As studies on access to healthcare among Myanmar migrant workers in Thailand and Japan remain limited, this study aims to explore the perspectives of Myanmar migrant workers and health services providers in both Thailand and Japan regarding the qualitative impacts of the COVID-19 pandemic on access to healthcare services. The findings are intended to inform policymakers and relevant stakeholders in developing evidence-based policies to enhance the health and well-being of migrant populations.

Materials and Methods

Study Design

This qualitative descriptive study explored barriers to healthcare access among Myanmar migrants during the COVID-19 pandemic using the HCAB model as the analytical framework. Semi-structured interviews and focus group discussions (FGDs) were used to obtain rich, contextual data from both migrants and healthcare providers. The study was conducted in June – August 2022 in two host countries where participants resided in Thailand and Japan.

Study Setting and Participants

Participants included Myanmar migrants who were living in Thailand or Japan in 2022 and healthcare providers working with this population. A total of 20 Myanmar migrants (10 from each country) were recruited through purposive sampling to capture a range of migration experiences and healthcare access situations. In addition, two focus group discussions (FGDs) were conducted with healthcare professionals to gain system-level perspectives. The Thai FGD comprised of three nurses from a provincial hospital who were directly involved in migrant health services, while the Japanese FGD included seven healthcare providers (five physicians, one nurse, and one medical interpreter) who experienced in caring for Myanmar migrants. The number of participants in both the interviews and FGDs was determined by data saturation.

Recruitment was conducted via migrant organizations, NGOs, and health service centers (e.g., local clinics and community associations) in both countries. Participation was voluntary, with no monetary incentives provided.

Myanmar migrants in Thailand and Japan

Inclusion Criteria

1. Myanmar nationals aged 18 years or older.
2. Lived in Thailand or Japan for at least six months prior to the study.
3. Able to provide verbal informed consent and communicate in Burmese, Thai, or Japanese.

Exclusion Criteria

1. Individuals with severe mental health conditions that impaired communication.
2. Temporary visitors or those not residing in the Thailand or Japan during the study period.

Health professional in Thailand and Japan

Inclusion Criteria

1. Licensed health professionals (e.g., nurses, doctors, or public health officers) currently working in healthcare or community settings.
2. Having at least six months of professional experience providing health services to migrant or multicultural populations in Thailand or Japan
3. Able to participate in an online discussion with informed consent.

Exclusion Criteria

1. Not currently engaged in health service roles or unable to participate online.

Data Collection

Interview guides were developed based on the Health Care Access Barriers (HCAB) model to explore barriers to healthcare utilization among Myanmar migrants. Key topics included COVID-19 vaccination and treatment, access to health information, and experiences seeking care during the pandemic. The guides were initially written in English and underwent a translation and validation process to ensure accuracy and cultural relevance. The guides were pilot-tested and refined before data collection.

Semi-structured interviews were conducted individually, either online or face-to-face, depending on local COVID-19 restrictions. Trained bilingual researchers conducted interviews in Burmese, Thai, or Japanese with interpretation support as needed. Each interview lasted approximately 45–60 minutes. Online FGDs were conducted in Thai and Japanese to capture health professionals' perspectives on healthcare accessibility for migrants.

All interviews and FGDs were digitally recorded, transcribed verbatim, and translated into English. The first and second authors cross-checked and verified all transcripts to ensure translation accuracy and consistency across languages and contexts.

Data analysis

The data were analyzed using both theory-guided content analysis and inductive thematic analysis. The HCAB model¹⁷ served as the primary framework for organizing themes deductively, while also allowing new ideas to emerge beyond the model's categories. All interviews and FGDs were transcribed, anonymized, and stored in secure, password protected digital folders. The transcripts were managed and analyzed using NVivo 12 software (QSR International), which helped organize codes. Three researchers (L.K., E.T.K., and N.N.) independently coded the transcripts using the HCAB model as a starting point and then added new codes that emerged during analysis. Afterward, they discussed and merged their codes to reach agreement. This process helped ensure accuracy and consistency in coding. To increase the credibility of the findings, the team applied triangulation at several levels. Methodological triangulation was achieved by integrating both individual interviews and focus group discussions. Investigator triangulation involved three independent coders who analyzed the data separately before comparing and reconciling their interpretations, which helped minimize personal bias. Data source triangulation was implemented by comparing findings from the two country contexts to identify both shared and context-specific patterns. These steps allowed the team to cross-check and validate findings from different viewpoints. Peer debriefing sessions and member checks with bilingual researchers were also conducted to confirm interpretations and translation accuracy.

Finally, the themes were refined through multiple reviews of the raw data. The findings were then linked to existing research and theoretical frameworks to develop a clear, comparative narrative between the two countries.

Ethical Considerations

This study received ethical approval from the Institutional Review Board of the Faculty of Public Health, Mahidol University, Thailand (COA No. MUPH-2022-074). The research was conducted in collaboration with the Health and Global Policy Institute (HGPI), Japan, which provided local coordination and oversight for data collection. All participants were informed about the study objectives, data confidentiality, and voluntary nature of participation. Consent was recorded prior to each interview and FGD and witnessed by a member of the research team. Participation was entirely voluntary, and individuals could withdraw from the study at any point without consequence.

Result

1. Socio-demographic characteristics of participants

A total of 20 Myanmar migrants (10 in Thailand and 10 in Japan) participated in the study. Participants in Thailand were primarily non-skilled workers—including factory laborers, street vendors, housemaids, and construction workers residing in Samut Prakan Province. In contrast, participants in Japan were employed in skilled or semi-skilled workers across diverse service and industrial sectors, such as company staff, sushi production, convenience store work, and car maintenance services. They were residing in various prefectures, including Nagasaki, Tokyo, Osaka, Hyogo, Shimane and Gunma, reflecting a mix of urban and regional contexts. These employment patterns highlight the differing economic and occupational profiles of Myanmar migrants in the two host countries. All participants in Thailand had a primary school level education, while those in Japan had higher education. Table 1 summarizes participants' sociodemographic characteristics.

Table 1 Sociodemographic data of the study participants (N=20)

Sociodemographic data	Participants in Thailand (n=10) n (%)	Participants in Japan (n=10) n(%)
Age		
20-30 years old	2 (20)	4 (40)
31-40 years old	4 (40)	6 (60)
41-50 years old	4 (40)	0 (0)
Gender		
Male	5 (50)	3 (30)
Female	5 (50)	7 (70)
Educational level		
Primary School	10 (100)	0 (0)
Junior High School	0 (0)	0 (0)
High School	0 (0)	0 (0)
Higher Education	0 (0)	10 (100)
Health insurance type		
Social security scheme	2 (20)	
Health insurance card scheme (HICS)	8 (80)	
Employer-Based Health Insurance		5 (50)
Residence-Based National Health Insurance		5 (50)
Occupation		
Non-skilled workers	10 (100)	0 (0)
Semi-skilled/ Skilled workers	0 (0)	10 (100)
COVID-19 infection history		
Infected	5 (50)	5 (50)
Never infected	5 (50)	5 (50)

Table 1 Sociodemographic data of the study participants (N=20) (Cont.)

Sociodemographic data	Participants in Thailand (n=10) n (%)	Participants in Japan (n=10) n(%)
Vaccination status		
Never received	1 (10)	1 (10)
Received 1 dose	0 (0)	0 (0)
Received 2 doses	7 (70)	0 (0)
Received 3 doses	2 (20)	9 (90)

2. Thematic Findings Based on the HCAB Framework

Guided by the Health Care Access Barriers (HCAB) model, four themes were derived, including financial, structural, and cognitive barriers, as well as an additional theme of cultural challenges

2.1 Financial barriers

Financial barriers significantly impact migrants' access to healthcare, particularly during the COVID-19 pandemic. Many migrants, especially those in informal jobs, face the challenge of losing work opportunities and income when they seek medical care.

In Thailand, the migrant participants often lose their daily wages if they stop working due to illness, and they receive no financial support from their employers. One participant expressed, "If I go to the hospital, I have to leave my work and lose my income. When I infected COVID-19, I had to borrow money from my friends." This situation creates a cycle of financial strain, as they must cover medical costs out-of-pocket without any employment protection.

In contrast, the migrant participants in Japan benefited from government support during the pandemic, receiving financial assistance that alleviated some of the economic burdens associated with healthcare access. Participants noted that the Japanese government distributed cash and essential supplies, which helped mitigate the financial impact of lost income during lockdowns. For example, one migrant stated, "I received the COVID-19 fund supported by the government."

2.2 Structural barriers

Migrants in both Thailand and Japan encountered multiple structural barriers in accessing healthcare during the COVID-19 pandemic.

In Thailand, participants described difficulties balancing work obligations with healthcare visits, often resulting in income loss. Although some received free COVID-19 testing or quarantine services, others faced costs or limited-service availability, especially on weekends or in distant healthcare facilities.

In Japan, participants also struggled with restricted clinic hours and long travel distances, which conflicted with work schedules. For some, limited health knowledge delayed diagnosis and appropriate care, with language and navigation barriers further complicating access.

Despite free or accessible services in both contexts, participants highlighted that navigating these systems remained challenging due to scheduling, transportation, and information gaps. The lack of dedicated clinics for migrants further constrained equitable access.

During vaccination campaigns, Thailand's inclusive policy enabled undocumented migrants to receive vaccines without fear of punishment or arrest. One migrant shared, "I didn't feel that I get vaccine delay than Thai," while another observed, "I saw illegal migrants, they could get vaccine without arrest." However, some participants described pressure from employers to comply with vaccination requirements. As one interviewee explained, "My employer let me get vaccine. If I didn't get vaccines, I was not allowed to work." This indicates that while access to vaccines was available, the choice to vaccinate was often not truly voluntary, reflecting a form of discrimination against this vulnerable population.

In contrast, Japan's organized approach, especially through universities, facilitated vaccination appointments for skilled migrants. One participant noted, "The university organized for me to get the vaccine in the most convenient way." Several migrants felt they were treated equally to residents, reporting, "No difference with Japanese." Yet, some perceived implicit bias in provider behavior; one participant described feeling alienated when healthcare workers wore extensive personal protective equipment (PPE), illustrating how infection-control practices could unintentionally convey social distance and reinforce feelings of exclusion.

Overall, while Thailand demonstrated inclusive outreach and Japan maintained strong organizational efficiency, both systems revealed persistent operational and cultural barriers that constrained migrants' equitable use of healthcare services.

2.3 Cognitive barriers

Migrant workers in both Thailand and Japan faced significant cognitive barriers related to language, information access, and health literacy. Many migrants reported not knowing what health services were available or how to access them. They often relied on friends, coworkers, or employers rather than official health sources. Limited literacy and digital access further restricted their ability to obtain accurate information.

In Thailand, even though hospitals sometimes offered interpretation in Burmese (the Myanmar language), communication challenges persisted, especially during hospital admissions for COVID-19. Government information, including vaccination updates, was mainly provided in Thai, leaving many migrants dependent on informal or unreliable sources. As one participant said, "I have the Mor Prom application, but I can't access it." (The Mor Prom application is an official Thai government platform and LINE account developed by the Ministry of Public Health to provide verified COVID-19 information, vaccination registration, and health assistance to the public during the pandemic.) Others mentioned receiving health updates from their factories or supervisors.

In Japan, similar issues emerged, as most health information was only in Japanese. Migrants frequently needed help filling out forms or understanding hospital instructions. One participant shared, "We had to fill in the Japanese form. The staff there supported with the procedure, so it was not that difficult." Another added, "We had to fill in the form which was written in Japanese. But the staff there helped us out." Support from volunteers and universities also played a key role during vaccination campaigns: "I got COVID-19 vaccination information from university. My friend did the registration for me. During the vaccination, there were volunteers' staff for translation, guiding the entire procedure until the end."

Fear of infection and widespread misinformation also shaped migrants' health behaviors. Some avoided hospitals due to fear of contracting COVID-19. Others were hesitant about vaccination, citing rumors of death or paralysis. One participant explained, "I was afraid to get vaccination, fear to get paralysis." Despite these fears, several migrants overcame doubts after consulting trusted doctors, realizing that vaccination was safer than remaining unprotected.

2.4 Cultural challenges

Healthcare systems in Thailand and Japan reveal complex cultural barriers that fundamentally challenge migrant workers' experiences. These challenges manifest through deeply embedded perceptions that transform healthcare from a universal human right to a conditional privilege, where cultural differences become obstacles to equitable treatment.

In Thailand, cultural differences between healthcare providers and migrant communities presented subtle yet persistent challenges in promoting health protective behaviors. Healthcare staff reported difficulty addressing long standing habits among Myanmar workers such as spitting in public which conflicted with infection control measures during the COVID-19 pandemic. These behaviors were not acts of resistance but reflections of cultural norms and differing understandings of hygiene. Health professionals emphasized that effective communication and culturally appropriate education were crucial for changing such practices. Additionally, differences in language, trust, and health beliefs sometimes limited participation in preventive activities, underscoring the importance of mutual understanding rather than one-way instruction.

In Japan, cultural barriers were more institutional than behavioral. Healthcare professionals described that existing systems and social norms were primarily structured for Japanese citizens, leaving little flexibility for migrant inclusion. As one FGD participant noted, "Japan is not yet used to accommodating migrants; our system was originally made for Japanese people." They also pointed out difficulties arising from paperwork heavy procedures, Japanese-only health forms, and limited multilingual support. Although most providers expressed willingness to help, these system-based barriers led to unintentional exclusion. Migrants often depended on friends or community volunteers to navigate vaccination and hospital processes, revealing the absence of a sustainable communication framework.

These findings highlight gaps in cultural adaptation and institutional preparedness. Both Thailand and Japan demonstrate how culturally rooted behaviors and system design can influence healthcare access. Building inclusive, intercultural healthcare systems through language support, culturally sensitive education, and collaboration with embassies and community organizations can bridge these divides and foster trust between migrants and healthcare providers.

Discussion

This study revealed that Myanmar migrants in both Thailand and Japan faced multifaceted barriers to healthcare access across financial, structural, cognitive, and cultural dimensions, underscoring systemic inequities in migrant health. Using the HCAB framework, these barriers were shown to overlap and reinforce each other, with cultural barriers emerging as a distinct fourth domain requiring explicit recognition.

Financial barriers remained the most immediate obstacle. In Thailand, daily wage migrants frequently lost income when taking sick leave or attending medical appointments, leaving them vulnerable to income insecurity and delayed care⁸. In Japan, complex insurance procedures and limited awareness among migrants contributed to care discontinuity and inconsistent service use¹⁹.

Structural barriers included administrative and logistical constraints such as restricted service hours, lack of multi-lingual documents or the complexity of the document requirements, and long travel distances to hospitals. These barriers forced migrants to choose between income and healthcare^{9,22}. In Japan, rigid paperwork procedures such as the use of Japanese-only vaccination coupons and health forms added obstacles⁸. In Thailand, limited weekend Outpatient Departments (OPD) services and concerns about quarantine costs further reduced healthcare access^{20,22}. The fundamental human rights dimension emerges as a critical concern, with some healthcare systems rendering undocumented or non-resident migrants invisible within medical infrastructures, potentially creating life-threatening scenarios for vulnerable populations^{8,23}.

Cognitive barriers stemmed from limited language proficiency, health literacy, and reliance on informal information sources^{2,8,11}. Language and communication barriers were found to be particularly significant barriers in studies focusing on migrant populations^{8,9}. Migrants in both countries often depended on friends or employers rather than official channels for COVID-19 information^{9,22}. Low literacy and limited technology access further constrained understanding of health messages, contributing to misinformation and fear^{6,24}. Despite multilingual initiatives such as Japan's Ministry of Health, Labor and Welfare (MHLW) website, communication gaps persisted due to limited reach and technical difficulty⁸.

Cultural barriers further shaped perceptions and behaviors. Healthcare providers may view cultural issues and communication broadly as significant barriers. Balancing public health requirements with cultural respect can be challenging, particularly when addressing specific

cultural practices that might increase health risks. Migrants themselves may experience feeling different or excluded within the healthcare system. Migrants' sense of being "different" or "outsiders" was sometimes reinforced by strict protocols, such as the extensive use of PPE, which, though medically necessary, was perceived as symbolic distancing¹⁹.

Despite these obstacles, facilitators such as bilingual health workers, community volunteers, and embassy collaboration improved access. In Thailand, migrant health workers and volunteers played crucial roles in bridging language and cultural divides^{3,24}, while in Japan, support from universities and local organizations helped mitigate communication and system barriers^{2,9}.

Policy recommendations

Ensuring equitable healthcare access for Myanmar migrants in Thailand and Japan requires multisectoral collaboration. Findings from this study indicate that the modified HCAB model, which adds cultural barriers to financial, structural, and cognitive factors, better reflects migrants' lived experiences.

1. Migrant-Inclusive Communication Systems

Health communication policies should prioritize multilingual access and cultural adaptation. Developing multilingual health information platforms, interpreter services, and culturally tailored outreach programs can enhance understanding and trust among migrants. Myanmar embassies, in partnership with local governments, NGOs, and healthcare facilities, should actively bridge language and administrative gaps.

2. Health System Optimization

Healthcare systems must extend operating hours, simplify administrative procedures, and implement digital documentation systems to improve service accessibility. Vaccination and health services should be available even to unregistered migrants. Establishing crisis information hubs and deploying trained health workers and volunteers can strengthen emergency response capacity.

3. Financial Accessibility

Inclusive health insurance schemes, flexible payment options, and emergency healthcare funds are essential to ensure service access regardless of legal or insurance status. Thailand's policy of universal COVID-19 coverage for all residents provides a strong model for equitable healthcare financing.

4. Cultural Competency and Health Literacy

Healthcare providers should receive mandatory cultural sensitivity and anti-discrimination/bias training to foster inclusive care environments. Investment in migrant focused health literacy initiatives, community health worker networks, and bilateral health agreements can strengthen resilience and empower migrant communities.

5. Strategic Partnerships and Coordination

Collaborative partnerships among healthcare facilities, local authorities, NGOs, employers, and Myanmar embassies should be strengthened. Standardized regional healthcare guidelines and integration of COVID-19 response models into public health and mental health frameworks can promote sustainable health equity. Embedding these strategies into pandemic preparedness and primary care systems will protect the right to health for all populations.

Limitations and Future research

This study has several limitations. Participants in Thailand were mainly low-skilled workers, while those in Japan were skilled or semi-skilled workers, which may have influenced their perceptions of healthcare access. The relatively small sample size and limited sociodemographic detail constrain the generalizability of the findings. Future research with larger and more diverse participant groups is recommended to provide a more comprehensive understanding of migrant healthcare access across different occupational and social contexts. Evaluating the impact of language interpretation technologies and cultural competency training for healthcare providers could also strengthen migrant-inclusive health systems. Longitudinal research exploring the long-term effects of limited healthcare access during the pandemic on migrants' health behaviors and well-being is warranted.

Conclusion

This study explored barriers to healthcare access faced by Myanmar migrants in Thailand and Japan during the COVID-19 pandemic, using the HCAB framework. Four interrelated dimensions (financial, structural, cognitive, and cultural) were identified as key determinants of healthcare access. Financial barriers and policy-related gaps were most pronounced among low-skilled migrants in Thailand, where out-of-pocket costs and income loss during illness constrained care seeking. Structural barriers, such as limited clinic hours and administrative rigidity, were reported in both countries but more evident in Japan, where complex procedures and documentation requirements complicated access. Cognitive barriers, including limited health literacy and language difficulties, hindered migrants' ability to navigate health systems

effectively. Finally, cultural barriers, shaped by differing health beliefs and limited cross-cultural adaptation within institutions, further influenced trust and care experiences.

This study extends the original HCAB model by identifying cultural barriers as a distinct and cross-cutting domain influencing healthcare utilization. This refinement highlights how cultural norms, communication gaps, and perceived discrimination shape trust and decision making within health systems. To address these inequities, stronger collaboration is needed among healthcare providers, local authorities, NGOs, and Myanmar embassies to improve language support, culturally sensitive care, and administrative accessibility. Such partnerships are crucial for building inclusive, migrant responsive health systems. Future research should validate this modified HCAB model with larger, more diverse samples and include socioeconomic indicators to advance regional health equity and cross-border policy development.

Ethical Approval Statement

This study was approved by the Ethical Committee of the Faculty of Public Health, Mahidol university, Thailand (MUPH 2022-074). All participants were informed that their data would be kept confidential, and they agreed to the audio recording of their responses.

Author Contributions

LK, ETK, SMH, and NM conceptualized the study design and developed research methodology. In Thailand, interviews and focus groups were facilitated by LK, NN, and KA, while in Japan they were facilitated by ETK, SMH, and NM. Qualitative data analysis was performed by LK and ETK. The manuscript was initially drafted by LK, ETK, SMH, and NM. LK provided critical revision, with all authors reviewing and approving the final manuscript. Overall project supervision was managed by JS, NHI, KA, and OK.

Acknowledgements

The authors wish to express their sincere appreciation to all Myanmar migrant participants and health-care professionals in Thailand and Japan who generously shared their experiences during the COVID-19 pandemic. We thank the Faculty of Public Health, Mahidol University, Thailand and Health and Global Policy Institute (HGPI), Japan, through collaborative field coordination and knowledge exchange activities. Special gratitude is extended to the non-governmental organizations and local migrant associations that facilitated community engagement.

Source of Funding

This research was supported by the Toyota Foundation: Global Health Education Program (G-HEP) 2021-2022.

Conflicts of Interest

All authors declare that they have no conflicts of interest.

References

1. Núñez A, Sreeganga SD, Ramaprasad A. Access to Healthcare during COVID-19. *Int J Environ Res Public Health.* 2021; 18(6). DOI: 10.3390/ijerph18062980
2. Paudel S, K C Bhandari A, Gilmour S, Lee HJ, Kanbara S. Barriers and facilitating factors to healthcare accessibility among Nepalese migrants during COVID-19 crisis in Japan: an exploratory sequential mixed methods study. *BMC Public Health.* 2023; 23(1): 1226. DOI:10.1186/s12889-023-16107-7
3. Kosiyaporn H, Julchoo S, Phaiyaram M, Sinam P, Kunpeuk W, Pudpong N, et al. Strengthening the migrant-friendliness of Thai health services through interpretation and cultural mediation: a system analysis. *Glob Health Res Policy.* 2020; 5(1): 53. DOI: 10.1186/s41256-020-00181-0
4. Htet H, Chuaychai A, Sottiyotin T, Htet KKK, Sriplung H, Wichaidit W, et al. Association between Thai language proficiency and adherence to COVID-19 protective behaviors (CPB) among Myanmar migrant workers in Southern Thailand. *PLoS One.* 2024; 19(10): e0312571. DOI: 10.1371/journal.pone.0312571
5. Khin YP, Owusu FM, Nawa N, Surkan PJ, Fujiwara T. Barriers and facilitators for healthcare access among immigrants in Japan: a mixed methods systematic review and meta-synthesis. *Lancet Reg Health West Pac.* 2025 Jan 10; 54: 101276. DOI: 10.1016/j.lanwpc.2024.101276
6. Tangcharoensathien V, Sachdev S, Viriyathorn S, Sriprasert K, Kongkam L, Srichomphu K, et al. Universal access to comprehensive COVID-19 services for everyone in Thailand. *BMJ Glob Health.* 2022; 7(6). DOI: 10.1136/bmjgh-2022-009281
7. Pocock NS, Chan Z, Loganathan T, Suphanchaimat R, Kosiyaporn H, Allotey P, et al. Moving towards culturally competent health systems for migrants? Applying systems thinking in a qualitative study in Malaysia and Thailand. *PLoS One.* 2020; 15(4): e0231154. DOI: 10.1371/journal.pone.0231154

8. Uansri S, Kunpeuk W, Julchoo S, Sinam P, Phaiyaram M, Suphanchaimat R. Perceived Barriers of Accessing Healthcare among Migrant Workers in Thailand during the Coronavirus Disease 2019 (COVID-19) Pandemic: A Qualitative Study. *Int. J. Environ. Res. Public Health.* 2023; 20(10): 5781. DOI: 10.3390/ijerph20105781
9. Matsuoka S, Kharel M, Koto-Shimada K, Hashimoto M, Kiyohara H, Iwamoto A, et al. Access to Health-Related Information, Health Services, and Welfare Services among South and Southeast Asian Immigrants in Japan: A Qualitative Study. *Int J Environ Res Public Health.* 2022;19(19). DOI: 10.3390/ijerph191912234
10. Yamashita T, Quy PN, Nogami E, Yamada C, Kato K. Difficulties Faced by Vietnamese Migrants in Japan in Accessing Healthcare During the COVID-19 Pandemic and Their Self-Reported Health Perceptions. *Cureus.* 2024; 16(11): e74058. DOI: 10.7759/cureus.74058
11. Langkulsen U, Mareke P, Lambomnung A. Migrants and Healthcare during COVID-19, the Case of Kanchanaburi Province in Thailand. *Healthcare (Basel).* 2023; 11(20). DOI: 10.3390/healthcare11202724
12. Rajatanavin N, Tuangratananon T, Suphanchaimat R, Tangcharoensathien V. Responding to the COVID-19 second wave in Thailand by diversifying and adapting lessons from the first wave. *BMJ Glob Health.* 2021; 6(7). DOI: 10.1136/bmjgh-2021-006178
13. Phattharapornjaroen P, Carlström E, Sivarak O, Tansuwannarat P, Chalermadamrichai P, Sittichanbuncha Y, et al. Community-based response to the COVID-19 pandemic: case study of a home isolation centre using flexible surge capacity. *Public Health.* 2022; 211: 29-36. DOI: 10.1016/j.puhe.2022.06.025
14. Tuangratananon T, Rajatanavin N, Khuntha S, Rittimanomai S, Asgari-Jirhandeh N, Tangcharoensathien V. Governance, policy, and health systems responses to the COVID-19 pandemic in Thailand: a qualitative study. *Front Public Health.* 2024; 12: 1250192. DOI: 10.3389/fpubh.2024.1250192
15. Kyaw PP, Geater AF. Healthcare seeking preferences of Myanmar migrant seafarers in the deep south of Thailand. *Int Marit Health.* 2021; 72(1): 1-9. DOI: 10.5603/IMH.2021.0001
16. Thandar MM, Iwamoto A, Hoshino HA, Sudo K, Fujii M, Kanda M, et al. Factors associated with the uptake of COVID-19 vaccination, testing and medical care among Myanmar migrants in Japan: a cross-sectional study. *Tropical Medicine and Health.* 2024; 52(1): 53. DOI: 10.1186/s41182-024-00621-4

17. Song P, Mitsuya H, Kokudo N. COVID-19 in Japan: An update on national policy, research, clinical practice, and vaccination campaign. *Glob Health Med.* 2022; 4(2): 64-6. DOI: 10.35772/ghm.2022.01036
18. Carrillo JE, Carrillo VA, Perez HR, Salas-Lopez D, Natale-Pereira A, Byron AT. Defining and targeting health care access barriers. *J Health Care Poor Underserved.* 2011; 22(2): 562-75. DOI: 10.1353/hpu.2011.0037
19. Liu A, Yazdani Y, Elias M, Patel K, Budzi D, Saad A, et al. Transition in care interventions for Refugee, Immigrant and other Migrant (RIM) populations: a health equity-oriented scoping review. *Globalization and Health.* 2025; 21(1): 25. DOI: 10.1186/s12992-025-01114-7
20. Stevenson M, Guillén JR, Bevilacqua KG, Arciniegas S, Ortíz J, López JJ, et al. Qualitative assessment of the impacts of the COVID-19 pandemic on migration, access to healthcare, and social wellbeing among Venezuelan migrants and refugees in Colombia. *J. Migr. Health.* 2023; 7: 100187. DOI: 10.1016/j.jmh.2023.100187
21. Kunpeuk W, Julchoo S, Phaiyaram M, Sinam P, Pudpong N, Loganathan T, et al. Access to Healthcare and Social Protection among Migrant Workers in Thailand before and during COVID-19 Era: A Qualitative Study. *Int J Environ Res Public Health.* 2022; 19(5). DOI: 10.3390/ijerph19053083
22. Santalahti M, Sumit K, Perkiö M. Barriers to accessing health care services: a qualitative study of migrant construction workers in a southwestern Indian city. *BMC Health Serv Res.* 2020; 20(1): 619. DOI: 10.1186/s12913-020-05482-1
23. Istiko SN, Durham J, Elliott L. (Not That) Essential: A Scoping Review of Migrant Workers' Access to Health Services and Social Protection during the COVID-19 Pandemic in Australia, Canada, and New Zealand. *Int. J. Environ. Res. Public Health.* 2022; 19(5): 2981. DOI: 10.3390/ijerph19052981
24. Kosiyaporn H, Julchoo S, Sinam P, Phaiyaram M, Kunpeuk W, Pudpong N, et al. Health Literacy and Its Related Determinants in Migrant Health Workers and Migrant Health Volunteers: A Case Study of Thailand, 2019. *Int. J. Environ. Res. Public Health.* 2020; 17:2105. DOI: 10.3390/ijerph17062105