Antenatal care access for migrant women in Thailand: insights from Myanmar workers in Khon Kaen

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Abstract

Migrant populations face numerous challenges in accessing healthcare, particularly maternal health services, which are essential for positive maternal and neonatal outcomes. In Thailand, Myanmar migrant women experience multiple social, financial, and systemic barriers that hinder their access to Antenatal Care (ANC). This qualitative study explored these barriers in Muang district, Khon Kaen province, in northeastern Thailand, with a large population of Myanmar migrant workers employed primarily in labor-intensive industries. Data were collected through semi-structured interviews with ten purposively selected documented women migrant workers from Myanmar. Thematic analysis was used to identify key barriers and facilitators of ANC access. The findings revealed that although public transportation was available, long travel and wait times limited ANC accessibility. Public hospitals demonstrated strong service, offering comprehensive ANC services. However, the lack of formal health education left many women unprepared to navigate the healthcare systems. Workplace flexibility, including unpaid leave, enabled women to access ANC services despite income concerns. Financial barriers were mitigated by social insurance schemes, such as the Social Security Scheme and Migrant Health Insurance Scheme, which significantly reduced out-of-pocket expenses. Nonetheless, language barriers and prolonged wait times negatively affected patient experiences. These findings highlight the need for targeted interventions, such as improved health education, language support, and migrant-friendly policies, to address systemic barriers and advance equitable maternal and neonatal health outcomes for migrant populations.

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Introduction

Migration is a global demographic phenomenon affecting over a billion people, or approximately one in eight individuals worldwide.[1] Migration presents both opportunities and challenges that are often driven by poverty, insecurity, limited access to essential resources, conflict, environmental degradation, and natural disasters. Although migration may offer improved economic prospects, it exposes migrants to health risks. Barriers such as language differences, cultural unfamiliarity, discrimination, and restricted service availability often hinder migrants' access to healthcare in both transit and destination countries.[1] Healthcare policies for migrants are complex and influenced by factors including national security laws and economic considerations.[2] Moreover, limited awareness of available healthcare options among migrant workers further constrains their access to necessary services.[3]

Due to its economic opportunities, Thailand has become a significant destination for migrant workers from neighboring countries, particularly Myanmar, Cambodia, and Laos.[2] Migration in the ASEAN region intensified following the 2015 economic integration led by the ASEAN Community.[4] Migrants, particularly those in labor-intensive sectors, significantly contribute to the Thai economy, enhancing workforce availability and national

GDP.[5,6] In 2018, Thailand hosted 4.9 million migrant individuals, with 80% being Myanmar nationals.[7] However, only 49 percent of these migrants had access to health insurance, underscoring a critical gap in healthcare accessibility.[8] This lack of healthcare access is particularly concerning for Myanmar migrant women in northeastern Thailand, where healthcare access rates are notably low.[9]

Migration from Myanmar to Thailand has long been influenced by a combination of economic, social, and political factors. Cross-border movement increased notably following the political changes in Myanmar in early 2021. In the years since, evolving conditions—including economic challenges and localized instability—have contributed to continued migration flows, particularly from areas such as Kayin, Shan, and Mon states. Thailand, with its geographic proximity and established migrant networks, has remained a common destination. While earlier migration was often driven by limited livelihood opportunities and long-standing regional disparities, more recent trends reflect a complex mix of structural factors. Migrants arriving in Thailand may encounter various challenges, including informal employment, low wages, indebtedness, and limited access to social protection.[8]

Myanmar migrant workers in Thailand are concentrated in agriculture, hospitality, seafood processing, construction, and manufacturing. Many are employed in informal or seasonal roles, especially undocumented workers, with women particularly overrepresented in precarious jobs like seafood processing and agriculture. While reforms in the fishing industry have reduced exploitation, challenges persist. Undocumented and contract workers often face low wages, job insecurity, limited legal protections, and exclusion from social benefits like healthcare. These vulnerabilities are more pronounced in border provinces, where temporary employment and lack of full-time contracts are common.[6]

The third goal of the United Nations' Sustainable Development Goals emphasizes promoting good health and well-being for individuals of all ages.[10] A key target, established jointly by the World Health Organization (WHO) and the United Nations, is reducing the global maternal mortality rate to less than 70 per 100,000 live births by 2030. Maternal mortality is disproportionately high among women in rural and impoverished areas, primarily due to pregnancy-related complications and limited access to maternal health services, such as Antenatal Care (ANC) and delivery services. According to the WHO, inadequate care before, during, and after delivery is a leading cause of pregnancy complications and maternal deaths.[11] Research by the International Organization for Migration found that migrant mothers in Thailand experience a maternal mortality rate of 289 per 100,000 live births, which significantly exceeds the national average of 37.7 per 100,000 live births.

Additionally, only 25.41% of pregnant migrant workers in Thailand accessed ANC services in 2017.[12] ANC is a critical component of reproductive healthcare that contributes to healthy pregnancies and safe deliveries. The WHO emphasizes that ANC directly reduces maternal mortality and morbidity by enabling early detection and treatment of pregnancy-related conditions. Furthermore, ANC indirectly contributes to safer deliveries by identifying women at higher risk for complications and ensuring they receive appropriate care.[13]

A significant proportion of migrant women are in their reproductive years and face considerable challenges regarding reproductive health, family planning, pregnancy, and childbirth.[14] Healthcare accessibility for Myanmar migrant women is influenced by healthcare policies, service availability and accessibility, financial resources, type of work, social support, language, and communication barriers.[14] These women encounter multiple obstacles in accessing healthcare, including their inability to afford health insurance, concerns over wage deductions, unfamiliarity with healthcare facilities, transportation costs, and instances of denied access.[14] Therefore, investigating antenatal healthcare access for migrant women in Khon Kaen, Thailand, is vital for addressing the significant barriers they face and informing interventions that could enhance their healthcare outcomes and overall well-being. To the best of our knowledge, no previous studies have investigated antenatal healthcare access of Myanmar migrant women in Khon Kaen. Exploring these antenatal healthcare access challenges is crucial. This study aims to explore the barriers to and facilitators of antenatal healthcare service access among Myanmar migrant women workers in the Muang district of Khon Kaen province, Thailand, and propose recommendations for improving the accessibility of these services.

Materials and Methods

Study area

This study was conducted in Khon Kaen province, located in northeastern Thailand. The province was chosen due to its substantial economic migration from Myanmar and its sizable population of Myanmar migrant workers, most of whom are employed in labor-intensive sectors. As of March 2024, data from the Khon Kaen Provincial Labour Office reports that 6,100 Myanmar migrant workers are employed in the province. Additionally, no prior studies have focused explicitly on vulnerable groups in Khon Kaen, such as migrant women from Myanmar, and their access to ANC services. Thus, Khon Kaen is an ideal location to explore the challenges migrant workers face in accessing healthcare, specifically ANC services.

Study design

A qualitative case study approach was adopted to explore the experiences of Myanmar migrant women in accessing antenatal healthcare services in Khon Kaen. The case study design allowed for an in-depth investigation of personal and contextual factors influencing healthcare access among this population. This approach is well-suited for capturing complex sociocultural phenomena and understanding the nuanced experiences of a specific group within their real-life context.

Participants

This study focused on documented migrant women employed in formal sectors due to their eligibility for social insurance schemes and structured employment settings. Undocumented workers were excluded because of logistical and ethical challenges in recruitment and the distinct healthcare barriers they face, which warrant separate investigations. The study used purposive sampling to select participants, focusing on documented Myanmar migrant women who accessed ANC services in Khon Kaen within the past two years (in 2022–2024). The community leaders were engaged to select the participants. Participants were purposefully sampled to include variation in age, parity (first-time *vs*. experienced mothers), ethnicity, and education level. This approach aimed to capture a range of experiences. Participants included women aged 23–37 years, currently residing in Khon Kaen and having sought ANC at least once in the area. Ten participants were interviewed (Table 1), with sample size determined based on data saturation, ensuring that no new information emerged from additional interviews.

Data collection

Data were collected through in-depth, semi-structured interviews conducted in the Myanmar language to encourage open communication and ensure participant comfort. Before the interviews, all participants received an Information and Consent Letter written in Myanmar. In the letter, we explained the research objectives and emphasized that participation was voluntary. A guide for the semi-structured interviews was created and covered key topics such as geographic accessibility, availability, financial accessibility, and acceptability based on the framework of Peters *et al.*[15] for accessing health services. Interviews were recorded with participants' consent and later transcribed for analysis.

Data analysis

Thematic analysis was used to identify and analyze patterns within the data. Following the seven stages of Braun and Clarke, the analysis included transcription, data familiarization, initial coding, theme generation, theme review, theme definition, and final write-up.[16] This approach allowed for the systematic identification of recurring themes and insights, which provided a deeper understanding of the barriers to and facilitators of healthcare access, as experienced by Myanmar migrant women in Khon Kaen.

Ethical considerations

The Khon Kaen University Ethics Committee for Human Research Ethics approved this study (reference number HE673404). We ensured that all participants were volunteers. Informed written consent was obtained from all participants, who were assured confidentiality and anonymity in reporting results. Participants were informed of their right to withdraw from the study at any stage without any consequences. The study adhered to ethical guidelines for research involving human subjects, ensuring respect and protection for all participants.

Results

This study highlights the experiences of Myanmar migrant women employed in Khon Kaen province as they accessed antenatal healthcare services at Khon Kaen Public Hospital. Participants generally reported positive experiences accessing ANC, which were facilitated by their documented status and coverage under social security or migrant health insurance.

Five primary themes emerged from the interviews (Table 2). First, participants widely reported ease of physical access to healthcare services, indicating that the hospital's location and available transportation options made visits manageable. Second, participants generally perceived the healthcare facilities as adequately equipped to meet their needs, citing essential resources and staff availability. Third, workplace flexibility played a significant role, as supportive employers made it easier for participants to attend antenatal appointments without risking job security. Fourth, the financial feasibility of accessing care, supported by the Social

Table 1. Demographic characteristics of research participants.

No.	ID	Age	Parity	Ethnicity	Years in Thailand	Participant's education	Husband's education	Monthly Household Income (THB)
1	P01	23	P1	Burmese	2	High School	Middle School	23,000
2	P02	30	P1	Burmese	7	Primary School	Middle School	10,000
3	P03	36	P2	Burmese	8	Middle School	Primary School	22,000
4	P04	28	P2	Burmese	9	Primary School	Undergraduate	15,000
5	P05	31	P1	Burmese	10	Middle School	Middle School	18,000
6	P06	37	P2	Burmese	10	Primary School	Middle School	16,000
7	P07	28	P1	Mon	10	High School	High School	15,000
8	P08	28	P1	Burmese	11	Middle School	Middle School	15,000
9	P09	33	P3	Kayin	14	Middle School	Unknown	20,000
10	P10	25	P2	Burmese	15	Primary School	Primary School	20,000

Table 2. Barriers to and facilitators of access to antenatal care services in Khon Kaen, Thailand.

Key themes	Sub-themes	Description
Physical Accessibility	Transportation options Distance	City buses were cheap but required transfers, taking 30-60 min to the hospital. Private taxis covered the 15.5 km trip in 30 min.
Healthcare Services Readiness	Comprehensive care Health Information gaps Limited health education	ANC services included ultrasounds, tests, vaccines, medication, and health education. Migrants relied on friends and translators to seek health care; formal resources were limited. Workplace and early pregnancy education were lacking.
Workplace Flexibility	Employer flexibility Administrative barriers	Lighter duties and unpaid ANC leave were offered. Medical leave requests were discouraged by extensive paperwork requirements.
Financial Feasibility	Insurance coverage Transport cost	Social Security or Migrant Health Insurance reduced costs. Travel expenses were affordable due to the availability of city buses.
Acceptability	Positive experiences Language challenges	Migrants reported respectful, high-quality care from healthcare staff. Formal workers benefited from translators provided by employers; informal workers faced barriers due to the lack of translators at the hospital.

Security Scheme (SSS) or Migrant Health Insurance Scheme (MHIS), allowed participants to receive necessary services despite limited family incomes. Finally, participants valued the acceptability and patient-centeredness of the care, which helped foster a sense of trust and comfort in the healthcare environment. Collectively, these themes indicate that documented Myanmar migrant workers in Khon Kaen face fewer barriers to ANC than we expected. However, language and cultural factors still impact their overall experience.

Physical accessibility of health care services

Migrant women predominantly relied on public transportation, specifically city buses, for ANC visits. However, they faced challenges related to travel time and waiting periods. Many women had to transfer between buses because there were no direct routes from their residences to the Public Social Security Hospital. P01 shared,

"I took the city bus but had to transfer between two buses, as there was no direct route to the hospital. Usually, it was manageable, but sometimes I had long waits, making the trip take 30 minutes to an hour."

This highlights the inconvenience of navigating the public transport system for healthcare access. Although most participants used public buses for ANC follow-ups, P09 noted,

"Most of the migrant women used public buses most of the time for ANC follow-up, but occasionally, in case of rain or emergencies, we used private taxis, which are expensive."

Despite these challenges, all the women remained committed to attending their scheduled ANC visits, reflecting their determination to access necessary healthcare services.

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Service readiness in healthcare

Findings reveal that Khon Kaen Public Hospital largely met the ANC needs of Myanmar migrant women, providing comprehensive services and quality care. These women primarily went to the designated Social Security Hospital. They often relied on informal sources for initial information about ANC services, such as experienced mothers, friends, and Myanmar translators employed at their factories. P10 noted, "I learned where to seek antenatal care from senior mothers who had already given birth when I became pregnant." Women often did not receive formal health information from their healthcare providers or employers, leading to self-directed decisions about when to start ANC. P04 shared, "When I was pregnant, I contacted the translator for information about antenatal care services. I received no formal information about healthcare services from healthcare providers." This reliance on informal networks and translators highlights the absence of structured reproductive health education and culturally appropriate communication, which could delay ANC initiation. Indeed, many women began ANC in the second trimester, believing their good health or past pregnancy experience justified postponement. Language barriers and the lack of written information in Burmese further limited their understanding, making the role of translators essential in facilitating communication and navigation of the health system.

The hospital was well-equipped regarding service availability, offering a full range of ANC services, including ultrasounds, blood tests, urine tests, vaccinations, nutritional counseling, and necessary medications for pregnancy-related complications. P08 remarked,

"I received a full package of ANC examinations, such as ultrasound, blood test, and urine test, during my first visit, and necessary tests during subsequent follow-up appointments. According to the doctor's appointment times, I went to the hospital at least eight times."

Despite the availability of services, long wait times often lasting 30 minutes to an hour were a common challenge, particularly uncomfortable during late-stage pregnancy. P01 recalled feeling dizzy while waiting. Still, none of the women missed appointments, indicating a strong commitment to receiving professional healthcare. Those with complications, like hypertension and diabetes, received appropriate care, as P09 shared, "I got the necessary medication for my pregnancy-related complications." Overall, Khon Kaen Public Hospital effectively met the ANC needs of Myanmar migrant women through comprehensive services and consistent care. However, formal health education and communication gaps often delay ANC initiation, with most women relying on peers or translators for information. Language barriers limited understanding of medical advice, making Myanmar-speaking translators essential for bridging communication gaps. Despite challenges like long wait times, the women remained committed to attending appointments. Improving culturally and linguistically appropriate health communication and early education could enhance timely and equitable ANC access for migrant populations.

Workplace flexibility and support for antenatal care access

Workplace flexibility was essential for Myanmar migrant women in Khon Kaen to access ANC. Many women relied on employer-approved leave, often using their six annual leave days for appointments. Supervisors generally supported their needs by allowing time off and assigning lighter duties. However, many women required additional leave, resulting in unpaid time off; nevertheless, they remained committed to seeking care.

Participant P04 noted, "I could take leave on the days I needed to go to the hospital for ANC. I just had to inform my supervisor in advance." However, P03 shared,

"I used my annual leave for ANC visits, but I had to go to the hospital around 10 times, so I needed additional leave. My supervisor approved the extra days off, but I wasn't paid for them."

Although some women could avoid wage deductions by providing medical documentation, the administrative burden of this process discouraged its use, as P10 explained:

"I didn't want to go through the extra steps of getting those documents… Having paid leave for antenatal care visits, separate from annual leave, would make it easier for me to attend appointments without worrying about the daily wages."

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In addition to flexible leave, some employers made physical work accommodations for pregnant workers, such as assigning less physically demanding tasks during pregnancy. While employers generally granted leave upon request, few took proactive steps to promote or facilitate ANC visits. This left the responsibility of arranging care entirely on the women, who often balanced work duties with health needs under the pressure of potential income loss. Though formal processes existed for securing paid leave using medical documentation, the complexity discouraged many from taking advantage of them. These challenges highlight the need for more supportive workplace policies, including dedicated paid maternal health leave and simplified administrative procedures, to improve timely and stress-free ANC access for migrant women.

Financial feasibility of antenatal care access

Financial affordability is a critical factor in accessing healthcare for pregnant migrant women. All documented women in this study participated in either the SSS or the MHIS. Those in the formal sector contributed 5% of their income to the SSS, whereas others purchased the MHIS. Both schemes provided significant financial benefits during pregnancy and childbirth. SSS members were eligible for maternity benefits, including reimbursements, lump sum cash benefits, and child allowances.

In contrast, MHIS members could access affordable ANC and delivery services through a one-year package costing 2,700 THB. One participant, P03, reported, "I spent around 1,400 THB for my first antenatal visit... When I delivered my baby normally at the hospital, the medical bill was around 3,000 THB."

Women covered by the SSS received reimbursements for out-of-pocket expenses within a month of childbirth. P07 explained, "I saved money in advance... I received reimbursement from the Social Security Scheme within one month after I gave birth." She also clarified that initial payments were necessary only for some visits and were eventually refunded. Not all visits incurred costs; P01 noted, "I didn't need to pay for some visits if the doctor found my baby was in good condition." In cases of complications, however, concerns about costs arose. P01 recounted,

"When I found out there was a cyst in my baby's head, I worried about my baby's condition and the test costs. Despite my worries, I could afford the costs and received 25,300 THB from the social security fund after giving birth."

Emergency deliveries had higher costs, as P06 stated, "I paid around 13,000 THB for the hospitalization... but the social security fund covered the cost." Even for cesarean section deliveries, the coverage under SSS helped offset expenses. For those not in the SSS, the MHIS offered an affordable option. P02 shared, "I paid only 30 THB for each antenatal visit... The insurance cost 2,700 THB for a one-year package, which I could afford." She added that although MHIS did not offer cash maternity benefits like SSS, it still covered all medical costs during pregnancy and delivery.

Transportation to the hospital was also manageable, with public buses costing approximately 22 THB per trip. P05 commented, "Transportation costs were never a concern... It's cheap and affordable." In rare cases when public buses were missed or during poor weather, some women used taxis, which cost around 200 THB, but this was not common. Overall, social insurance coverage, low-cost health services, and accessible public transport made antenatal and delivery care financially feasible for the participants. Women expressed confidence in their ability to afford ANC and delivery costs.

Acceptability and patient-centered experience

The perception of healthcare quality significantly influences service utilization, often more than cost or availability. In this study, all migrant women reported positive experiences with the quality of care provided by healthcare staff. P07 stated, "The health staff, including doctors and nurses, were very kind, and they provided equal treatment to us, just as they did for Thai nationals." P08 added, "The nurses took excellent care of me… I felt comfortable and grateful." Similarly, P10 noted, "I felt that the doctors and nurses were kind; they listened carefully to my complaints and treated me respectfully." These statements reflect that healthcare workers treated migrant women with dignity and respect.

Despite these positive interactions, language barriers remained a significant challenge for many migrant women who could not speak Thai. Some could manage the challenge, as P02 shared, "Although I couldn't speak Thai, I didn't have to worry during my antenatal care visits because we had a translator… It was very convenient." However, P09 identified limitations: "When I was hospitalized for delivery… the translator was not available 24 hours a day." Additionally, some healthcare providers used technological solutions; P07 noted,

"Doctors and nurses sometimes used Google audio translation… While it was not fully accurate, I could grasp the overall meaning. But they requested that I call the translator for important matters. I have not encountered any incorrect medical services because my employer provides access to a translator."

Despite these efforts, P05 emphasized the disadvantages faced by women employed in the informal sector, stating, "I knew other migrant women who did not work in the formal sector and hesitated to go to the hospital because of the language barrier." This highlights the barriers migrant women face to accessing ANC outside formal employment in Khon Kaen.

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Discussion

Summary of the main findings

This study identified five key themes affecting the access of Myanmar migrant women to ANC in Khon Kaen province. First, physical access to healthcare services was generally manageable due to available public transportation, despite indirect routes and multiple transfers. Women predominantly relied on affordable buses, though they faced long waits and travel times, sometimes extending up to an hour. These findings align with previous research, underscoring the importance of geographic accessibility in healthcare utilization.[15] Specifically, distance and transportation difficulties can lead to delays in ANC initiation, missed follow-up appointments, and reduced health care utilization.[17,18] In this context, the combination of manageable distances and low-cost transport enables women to prioritize ANC despite some logistical barriers.

Second, Khon Kaen Public Hospital demonstrated strong service readiness in healthcare by providing essential screenings, vaccinations, and health education. Timely and adequate ANC is critical for detecting and managing pregnancy-related risks, including gestational diabetes, preeclampsia, and anemia.[12] However, challenges remained: long wait times, insufficient early health education, and language barriers presented significant challenges. Notably, many women delayed ANC initiation until the second trimester. Early initiation of ANC is crucial for reducing maternal mortality rates.[19] Moreover, many participants relied on informal sources, such as friends and senior mothers, for information about ANC, underscoring the absence of structured health education from formal providers. Several studies identified the importance of social networks, such as friendship and kinship networks, in accessing health information, especially among migrants facing language and cultural barriers in healthcare communication.[20] Similarly, Badge *et al.* reported delayed ANC registrations among migrant women, often due to limited reproductive health knowledge.[21] In addition, research suggests that inadequate health information limits access to healthcare services for migrant workers.[22] Therefore, targeted health education and awareness campaigns could improve timely ANC access.[23] Another identified barrier to ANC access was the absence of health information in the Myanmar language. Translators employed by formal sector jobs played a critical role in overcoming these language barriers, emphasizing the value of culturally competent translation services in ANC. Similar findings from Thailand and other countries demonstrate that long wait times and language issues can hinder healthcare access for migrant women. [24]

Third, workplace flexibility was essential for supporting ANC access. Many employers allowed migrant women to take time off for ANC visits and adjusted work tasks during pregnancy, enhancing their ability to seek healthcare. Although migrant women expressed concerns about losing daily wages due to unpaid leave, they prioritized attending ANC follow-up appointments, recognizing their importance. Moreover, they expressed satisfaction with the flexibility to take leave whenever needed. Research shows that despite formal policies, employer-related barriers, including unpaid sick leave, are common obstacles to migrant workers' access to healthcare.[25,26] Additionally, some employers discourage workers from taking time off for healthcare, further complicating access to essential services.[27]

Fourth, financial feasibility was a decisive factor in ANC access. All participants in this study were enrolled in the SSS or the MHIS, which significantly reduced the financial burden associated with ANC services and deliveries. These insurance schemes enabled participants to access essential ANC services affordably, which was also reported by Suphanchaimat *et al.*[28] Conversely, research has shown that uninsured migrants face substantial healthcare costs.[25,29,30] Although public transportation was generally affordable, private taxis, which were costly, were used only during emergencies, further adding to migrants' financial burden.

Finally, acceptability and patient-centered experiences strongly influenced ANC utilization. All participants reported positive experiences with healthcare providers, citing respectful and equal treatment. This contrasts with studies suggesting that discrimination and fear of racism can deter healthcare use among migrants.[24,28,29,31] However, language barriers remained significant, particularly for women employed in the informal sector without access to translators. To overcome these barriers, some healthcare providers used technological solutions, such as Google Translate; although helpful in some cases, such technology is insufficient for critical healthcare discussions. Research confirms that language barriers and limited translator availability are persistent challenges for healthcare access among migrants.[25,29,30] By contrast, migrant women employed in the formal sector benefited from having a culturally competent translator provided by their employer for health-related matters. This support was crucial in overcoming significant language barriers and ensuring they could effectively access healthcare services. The presence of a trained translator significantly facilitated communication and contributed to the women's positive experiences with ANC services.

Policy implications

A multifaceted approach is needed to improve ANC access for Myanmar migrant women. First, raising awareness about early pregnancy care is essential. This can be achieved through workplace-based health education programs, implemented in collaboration with local health authorities and community organizations. Employers play a crucial role in delivering these programs, helping bridge information gaps and encouraging timely ANC use.

Second, scaling up migrant-friendly initiatives, such as the Migrant Health Worker and Migrant Health Volunteer programs, is vital. These initiatives have proven effective in addressing lan-

guage barriers and cultural differences, both critical for improving healthcare access.[32] Migrant health workers serve as interpreters in public healthcare facilities. In contrast, health volunteers act as cultural mediators, fostering engagement within migrant communities and promoting awareness of available services (*e.g.*, health issues, healthcare system).[32] Expanding these programs should include providing culturally appropriate health materials and emphasizing reproductive health education, particularly targeting young migrant women.

Third, supportive workplace policies, such as providing paid leave for ANC visits and simplifying medical leave procedures, are indispensable to alleviating financial and logistical challenges. Promoting health in the workplace not only benefits migrants but also improves business productivity and reduces operational costs, making it a mutually advantageous investment.[10]

Conclusions

Myanmar migrant women in Khon Kaen, Thailand, face a mix of facilitating and hindering factors in accessing ANC services. While public transportation enables physical access despite indirect routes and long wait times, healthcare readiness at Khon Kaen Public Hospital meets their needs through comprehensive services. Nonetheless, gaps in health education and language support challenge the quality and timeliness of care. Workplace flexibility, including unpaid leave, is pivotal in enabling ANC use, and social insurance schemes, such as the SSS and the MHIS, alleviate financial barriers.

More importantly, women largely reported positive interactions with healthcare staff, reflecting a high level of service acceptability. However, language barriers remain, particularly for women without access to translators, emphasizing the need for expanded linguistic and cultural support.

While this study focused on low-skilled, documented Myanmar migrant women within a formal employment setting, its findings may not fully capture the experiences of undocumented workers or those in informal sectors, who likely face additional barriers. Moreover, excluding healthcare providers, policymakers, and civil society perspectives limits the ability to assess systemic factors. Future research should adopt a mixed-methods design, include larger and more diverse samples across multiple regions, and incorporate the perspectives of additional stakeholders. This broader approach would offer a more comprehensive understanding of healthcare challenges and inform more effective interventions for migrant workers in Thailand.

References

1. World Health Organization. World report on the health of refugees and migrants. Geneva: World Health Organization; 2022. Available from: https://www.who.int/publications/i/item/9789240054462
2. Suphanchaimat R, Putthasri W, Prakongsai P, Tangcharoensathien V. Evolution and complexity of government policies to protect the health of undocumented/illegal migrants in Thailand: The unsolved challenges. Risk Manag Healthc Policy 2017;10:49-62.
3. Low WY, Tong WT, Binns C. Migrant workers in Asia Pacific and their rights to health. Asia Pac J Public Health 2015;27:584-7.
4. ASEAN. ASEAN economic community blueprint. Jakarta: ASEAN Secretariat; 2008. Available from: https://www.asean.org/wp-content/uploads/images/archive/5187-10.pdf
5. International Organization for Migration. Thailand social protection diagnostic review: social protection for migrant workers and their families in Thailand. Bangkok: IOM Thailand; 2021. Available from: https://publications.iom.int/system/files/pdf/Social-Protection-for-Migrant-Workers-in-Thailand.pdf
6. United Nations Development Programme. Seeking opportunities elsewhere: exploring the lives and challenges of Myanmar migrant workers in Thailand. 2023 [cited 2023 Mar 20]. Available from: https://myanmar.un.org/sites/default/files/2023-12/undpseeking_opportunities_elsewhere_final.pdf.
7. Aung TNN, Shirayama Y, Moolphate S, et al. Prevalence and risk factors for hypertension among Myanmar migrant workers in Thailand. Int J Environ Res Public Health 2022;19:063511.
8. United Nations Network on Migration in Thailand. Thailand migration report 2024. Bangkok: United Nations Network on Migration in Thailand; 2024. Available from: https://www.ilo.org/sites/default/files/2024-12/thailand-migration-report-2024.pdf
9. Laohasiriwong W, Khongthanachayopit S. Accessibility to health services among migrant workers in the Northeast of Thailand. F1000Res 2017;6:11651.1
10. Ratanachina J, Sithisarankul P. Workplace health promotion management of noncommunicable disease prevention and implementation among organizational leaders and human resource executives in Thailand: a qualitative study. J Public Health Dev 2024;22:170-83.
11. Ketut Swarjana I, Chansatitporn N, Suwannapong N, et al. Disparities in utilization of maternal health services in the rural areas of Indonesia: an analysis among provinces with low, middle, and high poverty rates. J Public Health Dev 2020;18:49-6.
12. Wungrath J. Antenatal care services for migrant workers in northern Thailand: challenges, initiatives, and recommendations for improvement. J Child Sci 2023;13:E118-26.
13. Myo LZ, Tiraphat S, Hongkrailert N. Factors affecting the utilization of quality antenatal care services among Myanmar migrants in Thai health care facilities: Tak and Samut Sakhon Province. J Public Health Dev 2016;14:45-57.
14. Sitkulanan P, Chaisitsanguan K, Winaiprasert P, Wong-Arsa W. Problems of Myanmar women of reproductive age in accessing health services as migrant workers in Thailand: a qualitative study. Nurse Media J Nurs 2024;14:53-64.
15. Peters DH, Garg A, Bloom G, et al. Poverty and access to health care in developing countries. Ann N Y Acad Sci 2008;1136:161-71.
16. Braun V, Clarke V. Successful qualitative research: a practical guide for beginners. Thousand Oaks, CA: SAGE Publications; 2013.
17. Purohit N. Utilization of antenatal care services in a remote, tribal and hilly district of Himachal Pradesh: challenges to access. J Family Med Prim Care 2021;10:3374-80.
18. Steinbrook E, Min MC, Kajeechiwa L, et al. Distance matters: barriers to antenatal care and safe childbirth in a migrant population on the Thailand-Myanmar border from 2007 to 2015: a pregnancy cohort study. BMC Pregnancy Childbirth 2021;21:1-11.
19. Soontornprakasit P, Mongkolchati A, Chompikul J. Factors associated with time to start antenatal care within 12 weeks gestational age among mothers in Mahasarakham province,

Thailand. J Public Health Dev 2016;14:21-36.
20. Ohn NST, Worland S. Information behaviour and factors influencing family planning knowledge of Myanmar ethnic migrants: a qualitative study. J Public Health Dev 2024;22:22-37.
21. Badge V, Pandey M, Solanki M, Shinde R. A cross-sectional study of migrant women with reference to their antenatal care services utilization and delivery practices in an urban slum of Mumbai. J Family Med Prim Care 2016;5:759-64.
22. Cho HJ, Kang K, Park KY. Health and medical experience of migrant workers: qualitative meta-synthesis. Arch Public Health 2024;82:1-12.
23. Rasheed P, Al-Sowielem LS. Health education needs for pregnancy: a study among women attending primary health centers. J Fam Community Med 2003;10:31-8.
24. König A, Nabieva J, Manssouri A, et al. A systematic scoping review on migrant health coverage in Thailand. Trop Med Infect Dis 2022;7:166.
25. Ang JW, Chia C, Koh CJ, et al. Healthcare-seeking behaviour, barriers and mental health of non-domestic migrant workers in Singapore. BMJ Glob Health 2017;2:e000213.
26. Loganathan T, Rui D, Ng CW, Pocock NS. Breaking down the barriers: understanding migrant workers' access to healthcare in Malaysia. PLoS One 2019;14:e0218669.
27. Webber G, Spitzer D, Somrongthong R, et al. Facilitators and barriers to accessing reproductive health care for migrant beer promoters in Cambodia, Laos, Thailand and Vietnam: a mixed methods study. Glob Health 2012;8:21.
28. Suphanchaimat R, Kunpeuk W, Phaiyarom M, Nipaporn S. The effects of the health insurance card scheme on out-of-pocket expenditure among migrants in Ranong province, Thailand. Risk Manag Healthc Policy 2019;12:317-30.
29. Loganathan T, Rui D, Pocock NS. Healthcare for migrant workers in destination countries: a comparative qualitative study of China and Malaysia. BMJ Open 2020;10:e039800.
30. Phaiyarom M, Kosiyaporn H, Pudpong N, et al. Access to non-communicable disease services among urban refugees and asylum seekers, relative to the Thai population, 2019: a case study in Bangkok, Thailand. Risk Manag Healthc Policy 2021;14:3423-33.
31. Czapka EA, Sagbakken M. Where to find those doctors? A qualitative study on barriers and facilitators in access to and utilization of health care services by Polish migrants in Norway. BMC Health Serv Res 2016;16:460.
32. Kosiyaporn H, Julchoo S, Phaiyarom M, et al. Strengthening the migrant-friendliness of Thai health services through interpretation and cultural mediation: a system analysis. Glob Health Res Policy 2020;5:53.