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Waiting, Worrying, and Paying: Migrant Healthcare Inequities in Northern Thailand

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Abstract

Background: Migrant workers face a double burden of disease: communicable and non-communicable diseases worldwide. Despite international and national agencies coordinated efforts for equitable health access for migrant workers through various health strategies and labor policies, profound inequalities in health-seeking behavior are observed. The Thai government has adopted a universal health coverage strategy to diminish marginalization and social exclusion for vulnerable groups. Myanmar migrant workers in Northern Thailand encounter complex systemic healthcare disparities occurring from structural factors, including precarious legal status, unstable employer-linked insurance, language barriers, fear of deportation, and discrimination. This study aimed to explore how and why migrant workers are marginalized and excluded from enriched health security.

Methods: A qualitative descriptive study was conducted using in-depth, semi-structured interviews with 10 purposively selected Myanmar migrant workers (insured = 5, uninsured/undocumented = 5) in Chiang Rai Province. Interviews (25–40 minutes) were conducted in the Myanmar language. Detailed contemporaneous notes were translated into English summaries in collaboration with experts and analyzed thematically within the Andersen Healthcare Utilization Model framework for categorizing findings into predisposing and enabling factors. Stringent ethical protocols followed anonymity, confidentiality, and participant safety.

Results: Key barriers included long waiting times at public facilities, insurance discontinuities, fear of legal repercussions among undocumented migrants, language difficulties, workers' mobility, and perceived discrimination, including financial toxicity. Participants often preferred private clinics or self-care due to convenience and accessibility. Health insurance facilitated service use but was frequently unstable due to employer practices and migrant mobility.

Conclusions: Myanmar migrant workers encounter systemic and multifaceted obstacles that limit effective healthcare utilization despite nominal availability. These barriers lead to high out-of-pocket expenditure, even though migrants face social and financial challenges. Policy action is needed to ensure portable and non-discriminatory insurance and service points, interpreter services, and migrant-friendly units within the public health system, guaranteeing equitable access regardless of immigration status.

1. Background

Migration patterns are reshaping societies because of modernization and soaring human capital demands, acting as a powerful social and economic driver shaping societies worldwide. Well-managed migration supports inclusive and sustainable development, as recognized by global frameworks such as the 2030 Agenda for Sustainable Development and the Global Compact for Safe, Orderly, and Regular Migration (1, 2). Myanmar migrant workers are increasingly moving to Thailand, especially to northern provinces like Chiang Rai, due to political instability and economic hardship in Myanmar (3). These migrants form a vulnerable population facing higher risks of occupational injury, infectious diseases, and limited access to healthcare compared to local populations (4, 5)

Guided by the Andersen Healthcare Utilization Model, which conceptualizes health service use as a function of predisposing, enabling, and need factors, we further interpret these enabling factors as structurally distributed resources and constraints. Following Braveman and Gruskin's (2003) definition of health equity as the absence of systematic, remediable differences in health across social groups, we view migrants' legal precarity,

employer-linked insurance, language exclusion, and discrimination not as individual limitations but as structural determinants that generate avoidable and unjust disparities (6). This framing aligns with the World Health Organization's commitment to Universal Health Coverage (UHC) and equal protection under the right to health.

The recent quantitative study among Myanmar migrant workers in Mueang District, Chiang Rai, identified five key factors linked to healthcare utilization: age, assistance in seeking healthcare, monthly expenditure, health insurance coverage, and working hours per day (7). Although these findings specify which factors influence healthcare use, they do not explain why or how these factors affect health-seeking behaviors in real-life situations. Gaining a deeper understanding of migrants' experiences and perceptions is crucial for developing effective, culturally appropriate healthcare policies and interventions, using the Andersen Healthcare Utilization Model.

2. Methods

Study Design

This study explored a qualitative descriptive approach to explore the health-seeking behaviors of Myanmar migrant workers in Chiang Rai Province, Thailand. The investigation focused on Andersen's Healthcare Utilization Model, which structured data collection and interpretation in different themes. This framework includes predisposing, enabling and need factors, pivotal to exploring equity perspectives and power dynamics related to health-seeking behavior in order to stress policy drives on the community level outcomes. This model appears well suited for application in the context of developing countries, as indicated by (8).

Study Setting and Participants

The study was carried out in Mueang District, Chiang Rai Province, which has a high number of Myanmar migrant workers mainly employed in informal and low-wage sectors such as construction, agriculture, and domestic work (7). Participants for the qualitative interviews were purposively selected from among respondents of the preceding quantitative survey (n = 355) (7). This strategy focused on diversity in documentation status, work sector, and language skills, while also acknowledging potential bias toward individuals already engaged with formal systems.

The sample size (n=10) was considered adequate based on the concept of "information power" (9), which suggests that small, targeted samples can provide valid insights when the research aim is narrow, saturation is assessed based on the study's specific focus, participant group, and the interviewer's skill in eliciting culturally sensitive narratives. After the eighth interview, no new codes or themes appeared, and interviews nine and ten confirmed redundancy.

No audio recordings were made due to participants' fear of exposure. Instead, detailed notes were taken during interviews and immediately expanded into full English summaries by experts, a method supported in qualitative research with vulnerable populations where recordings might compromise trust (10, 11).

Participant details are summarized in Table 1, showing diversity in age, gender, work sector, length of stay in Thailand, documentation or insurance status (Social Security Scheme [SSS], Migrant Health Insurance [MHI], or none), typical work hours, and Thai language skills.

A semi-structured interview format was deliberately used to reduce power imbalances and allow participants to share sensitive experiences at their own pace. While most participants had valid documentation, some had uncertain or transitional legal statuses (e.g., temporary work permits or pending renewals), which could lead to fear of disclosure and mistrust of formal systems. This flexible approach was vital for capturing subtle structural, emotional, and logistical barriers to healthcare access.

Inclusion criteria were:

- Myanmar nationality
- Aged 18–60 years
- Documented and undocumented migration status
- Living and working in the Mueang District for at least six months
- Willingness to participate in an in-depth interview.

Exclusion criteria

- Withdrawal from the interview
- Fear of exposure or other risks associated with participation

Table 1: Participants' Characteristics

participant	Age	Gender	Occupation	Tenure in Thailand	Document validity	Migrant Health facility	Language Proficiency
P1	28	F	Shop front seller	>1 year	Valid work permit	MHI	Basic
P2	35	M	Construction	Long-term	Legal	SSS	Intermediate
P3	30	M	Manual Labor	2 years	Employer discontinued SSS	None	Intermediate
P4	22	F	Housemaid	<1 year	Valid work permit	MHI	None/Beginners
P5	26	F	Shop front seller	6 months	No documents	None	Basic
P6	29	M	Construction	1 year	Temporary permit	None	Basic
P7	40	F	Manual Labor	Several years	Undocumented	None	Basic
P8	33	M	Construction	3 years	Valid work permit	SSS	Intermediate
P9	38	F	Shop front seller	>3 years	Valid work permit	SSS	Intermediate
P10	25	M	Construction	<1 year	Applying for insurance	None	Basic

Interpretation

Documentation is classified as:

1. A valid work permit: legal work authorization in the country.
2. Temporary permit: denotes provisional documentation
3. No document or undocumented status refers to the absence of legal status.

Insurance status is categorized as Migrant Health Insurance (MHI), which refers to health coverage specifically for migrants; Social Security Scheme (SSS), the standard government-mandated health insurance; or no insurance, meaning the person does not have any form of health insurance coverage.

Thai language proficiency is classified as basic, intermediate, or no proficiency.

Data Collection

All interviews were conducted in the Myanmar language by the first author, a Myanmar medical doctor and public health researcher fluent in both Myanmar and English. No audio recordings were made due to participants' fear of exposure. Instead, detailed notes were taken during interviews and immediately expanded into full English summaries by a team of expert members, a method supported in qualitative research with

vulnerable populations where recordings might compromise trust (10, 11). Immediately after each interview, the researcher expanded these notes into complete English summaries, cross-checking with any Myanmar phrases to preserve original meaning and ensure accuracy. This approach balanced participant safety with the need for rich, trustworthy data. The back-to-back translation method was used. A supplementary section of original quotes and translations is included. Participants were encouraged to speak about:

- What do they usually do when they feel ill?
- Where do they prefer to go for treatment and why?
- Barriers they face in accessing care (e.g., work, cost, documents)
- Opinions about hospitals, clinics, and traditional care
- Does the legal status or insurance documents affect access to healthcare decisions

Data Analysis

The Andersen Healthcare Utilization framework was applied to facilitate manual thematic analysis. The researchers first conducted open coding and identified emerging themes. The researcher maintained a versioned codebook and analytic memos to ensure an audit trail. Although one researcher primarily coded the data, two co-authors participated in peer debriefing, reviewed codebooks and thematic summaries, and enhanced credibility and confirmability. The team resolved disagreements through discussion until reaching a consensus.

Trustworthiness

Interviews were conducted in each participant's native language by researchers who were specifically matched culturally and linguistically. This intentional, informal conversational style promoted openness and actively reduced power dynamics between interviewer and participant. Interviews were not recorded; instead, detailed and reliable data were preserved through rigorous note-taking during the interviews and immediate write-up afterward. The data reached thematic saturation by the eighth interview, as no new insights emerged. The sample size of 10 participants was enough to reach thematic saturation, since no new themes appeared in the final interview.

Researcher Reflexivity

The interviewer’s shared linguistic and cultural background with participants helped build rapport and reduce interpreter-related power imbalances. To address positionality bias, interviews were conducted in neutral, private locations, and participants were assured that the study team was independent of immigration or labor authorities. Team discussions during analysis explicitly considered how the interviewer’s professional identity might influence interpretation.

Member Checking and Triangulation

Formal member checking was not practical because many participants were highly mobile and some lacked legal documentation, making follow-up potentially risky. To increase trustworthiness, findings were triangulated with quantitative results from the larger cross-sectional survey on variables such as assistance in accessing

healthcare, work hours, health insurance coverage, monthly expenditures, and age, and discussed with community stakeholders familiar with Myanmar migrants in Chiang Rai.

COREQ Reporting

This study adheres to the Consolidated Criteria for Reporting Qualitative Research (COREQ).

Ethical Considerations

The research protocol and study instruments were approved from the Ethics Committee on Human Research at Mae Fah Luang University (EC 24046-18). All participants were provided with written consents. In order to protect confidentiality, the researchers removed all personal identifiers and securely handled handwritten and transcribed data. Participants were informed about their right to participate voluntarily and they could withdraw participation any time without consequences.

Ethical Safeguards for Undocumented Participants

Special care was taken to protect the rights of participants. All interviews were conducted under neutral conditions to minimize the risk and protect confidentiality.

Anonymity and Confidentiality:

The absence of personal details such as names, addresses, or workplaces was secured. Interview notes and summaries were anonymized immediately after collection of information for privacy purposes. Participant IDs were used for coding and reporting to confidentiality.

Safe Interview Locations: Interviews took place in private, neutral settings chosen by participants to ensure comfort and privacy, away from workplaces or areas linked to authorities.

No Audio Recording: In line with participants' concerns about legal exposure, **no audio recordings were made**. Detailed contemporaneous notes were taken instead, capturing key phrases verbatim whenever possible.

Assurance Script: At the beginning of each interview, participants were explicitly informed that the study was conducted independently of any immigration or law enforcement agencies. They were informed through a standardized declaration that their responses would remain strictly confidential and would not be shared with governmental authorities.

3. Results

A total of ten Myanmar migrant workers participated in this study. Participants were purposely selected and represented a variety of backgrounds in age, occupation, and access to healthcare. While some participants were covered by health insurance schemes such as the Social Security Scheme (SSS) or the Migrant Health Insurance (MHI), others had no insurance coverage.

Theme 1: Healthcare Utilization System

The healthcare utilization system in Chiang Rai posed challenges for migrant workers, especially those with insurance. Even with access to public healthcare through the Social Security Scheme (SSS) or migrant health insurance, long wait times, limitations of the schemes, and distant healthcare facilities discouraged service utilization. Public hospitals were seen as inconvenient, particularly for those with busy work schedules who could not afford to take a full day off. These structural and occupational factors contributed to the high out-of-pocket expenses and hindered equitable access to healthcare.

"I have insurance, but I could only use it at a designated hospital, so I don't usually access their service because it is far from my workplace, so when I get sick, I prefer to use private clinic services or a pharmacy."

Participant 1 (Personal Communication, 2024, 10 June)

"I stayed in Chiag Rai for many years and have insurance, but I never had access to the public hospital services because I don't have much time to wait, as I have to spend 5 hours to see a doctor, so that is not possible with my job."

Participant 2 (Personal Communication, 2024, 10 June)

"I have SSS insurance, but I rarely use it because hospital service has long waiting hours, and sometimes it takes the whole day. Since I could not take a day off from my job. Even, I have insurance, I will use private clinic services, even if I need to pay extra, because it is convenient."

Participant 8(Personal Communication, 2024, 16 June)

For an individual who does not have insurance or legal documentation, they viewed public hospitals as a risky place to access services due to fears of questioning or legal issues. So, they prefer to use private healthcare even with a higher cost, which highlights a gap between the availability of healthcare and it actual utilization among illegal immigrant workers.

"I don't have a work permit in Thailand; for this reason, I do not want to go to a public hospital, because I am worried that someone will report me to the authorities, that is why I prefer to go to private clinics, even if it is expensive."

Participant 7(Personal Communication, 2024, 16 June)

Theme 2: Precarity of Health Insurance

Analysis revealed that Health Insurance coverage was an essential tool to push the barrier for inequality in health service utilization. Migrants heavily depended on scheme coverage for healthcare, including the Social Security Scheme (SSS). Often, employers stopped paying fees for continuation of the coverage, which forced the workers to face social exclusion, financial burden, bureaucratic bottleneck, and psychological consequences in various ways. Additionally, frequent job changes are common among migrant workers, contributing to a cycle of lapsed coverage and systematic neglect. A short duration, such as 6 or 12 months of insurance feature, was creating health-seeking challenges for the migrant population. Fixed hospital service and work permit procedure were another bundle of obstacles for marginalized populations to experience health security. Because of these underlying reasons, many workers did not renew their insurance once it expired. This pattern aligns with the

finding that those with insurance coverage were more likely to utilize healthcare services compared to those without insurance.

"As my current place and designated hospital are very far, when I feel sick, I go to a private clinic or pharmacy, depending on my disease, even though I have insurance."

Participant 1 (Personal Communication, 2024, 10 June)

"*I used to have Social Security Scheme insurance, as I previously contributed to the scheme. However, my employer has stopped making contributions, so I no longer have insurance. As a result, I go to a pharmacy or private clinic based on my health needs*."

Participant 3 (Personal Communication, 2024, 12 June)

Migrants who do not have insurance depend on free services. The service offers diagnosis and treatment, and can help to reduce financial burdens. It also emphasized the importance of social networks and community resources in supporting those who lack formal employment or insurance.

"I don't have any work documents or insurance, so the temple where I work has given me permission to stay, since it has a free clinic, so I use their services when I have an illness."

Participant 5(Personal Communication, 2024, 14 June)

Theme 3 Barriers

Communication barriers prevent migrants from accessing healthcare. Language barriers compel migrants to hire interpreters or depend on friends or family for help. However, this dependence adds another layer of difficulty, leading some individuals to avoid care when translation support is unavailable. This issue also affects those with access to assistance services, who often use health services as well.

"I've stayed in Chiang Rai for almost a decade, but I still can't speak Thai. So, I find it hard to communicate, and I need to hire a translator when accessing a private clinic service."

Participant 4 (Personal Communication, 2024, 12 June)

"I have stayed in Chiang for many years, but still, I could not speak Thai well. So, I found it very difficult to communicate with healthcare workers, and sometimes the translators are not available to me. So, sometimes I have to rely on my children or friends to help me with translation. So sometimes I avoid going to the hospital because of the language barrier."

Participant 6 (Personal Communication, 2024, 14 June)

Cultural and social barriers were also prevalent, as one of the participants reported feeling unwelcome in public hospitals due to their migrant status, leading to an emotional constraint on accessing care.

"When I access the public hospital health service, I feel discrimination, even though I have SSS insurance. They treat me differently. So, it makes me feel uncomfortable, so I don't want to go to the public hospital unless it's urgent."

Participant 9 (Personal Communication, 2024, 18 June)

These barriers show that structural conditions, legal status, employer practices, and language exclusion systematically restrict migrants from accessing health services, leading to unequal health outcomes.

Theme 4 Self-Care or Private Healthcare

Participants stated they avoid the public health system and prefer self-care medications and private clinics. Some participants prefer private clinics or pharmacies for minor illnesses because they are easily accessible, fast, and closer than designated hospitals. This aligns with the finding that individuals with higher monthly expenses are more likely to use health care services (7)

"I have a migrant health insurance card, but it can only be used at a designated hospital. Since I live far from that hospital, I prefer going to a private clinic or pharmacy, depending on the severity of my illness."

Participant 1 (Personal Communication, 2024, 10 June)

"Before, I had Social Security. But my employer stopped paying for it, so I do not have insurance now. So, whenever I get sick, I have to go to the pharmacy or a private clinic."

Participant 3 (Personal Communication, 2024, 12 June)

"I just got to Thailand, so I am still signing up for health insurance. Until I get it, I go to pharmacies and private clinics if I have any health problems. I do not really know how the healthcare system works here, and without insurance, I am careful about going to a public hospital."

Participant 10 (Personal Communication, 2024, 18 June)

To ensure depth, insight, and accuracy in qualitative analysis, Andersen's Healthcare Utilization Model was used to organize the narrative within its domains and incorporate emerging themes and subthemes.

Table 2 demonstrates a theme-by-theme alignment to illustrate this structure. Andersen Domain → Theme → Sub-theme → Illustrative Quotes. Each theme is supported by two to three quotes, including participant IDs and details about documentation or insurance status. To highlight variability, counterexamples are given, such as insured participants avoiding public hospitals due to long waits and uninsured participants using free temple clinics. This approach revealed another aspect of participant experience while staying clearly tied to the Andersen model. The structured analysis increases transparency and trust by showing how personal and enabling factors relate to health-seeking behavior for migrant workers in Chiang Rai.

Table 2 demonstrates a theme-by-theme alignment to illustrate this structure.

Enabling Factors	Healthcare Utilization System	Access barriers (distance, wait times)	“I have a migrant health insurance card, but it can only be used at a designated hospital. Since I live far from that hospital, I prefer going to a private clinic or pharmacy, depending on the severity of my illness.” (P1 / Temporary permit, MHI) “I have lived in Chiang Rai for a long time and have legal status with SSS insurance. However, I avoid public hospitals because the waiting time is too long, often around five hours to see a doctor.” (P2 / SSS) Counter-example: “Even though I have SSS insurance, I rarely use public hospitals. They are slow, so I pay for private care instead.” (P8 / SSS)
Enabling Factors	Health Insurance	Coverage gaps	“I used to have Social Security Scheme insurance, but my employer stopped contributing, so I go to pharmacies/private clinics based on my health needs.” (P3 / None) “I have a migrant health insurance card, but it only covers one hospital. I often go elsewhere for convenience.” (P1 / MHI) Counter-example: “I don’t have insurance, but I can access the free temple clinic whenever needed.” (P5 / Undocumented, None)
Predisposing Factors	Barriers	Language constraints	“I have been in Chiang Rai for less than a year, and I don’t speak Thai. It is difficult to communicate, so I hire a translator when visiting a private clinic.” (P4 / MHI) “I rely on friends or my children to translate at hospitals, but sometimes they are not available. Sometimes I avoid going altogether.” (P6 / Temporary permit, None)
Predisposing Factors	Barriers	Social/cultural constraints	“Even though I’ve lived here legally for several years and have SSS insurance, I sometimes feel unwelcome at the public hospital. Some staff treat me differently once they realize I’m a foreigner.” (P9 / SSS)
Need Factors	Self-Care or Private Healthcare	Alternative care strategies	“Until I get insurance, I rely on pharmacies and private clinics for any health issues.” (P10 / Applying for insurance, None) “I go to private clinics for minor illnesses because they are faster and closer than public hospitals.” (P1 / Temporary permit, MHI) “I used to have SSS insurance, but since it ended, I now go to pharmacies or private clinics.” (P3 / None)

4. Discussion

This study navigates the real experiences of the health-seeking behaviors of Myanmar migrant workers in Northern Thailand. The findings reveal that structural health determinants, legal insecurity, employer-linked insurance, language barriers, worker mobility, employers’ intentions, policy binding for designated hospitals, financial hurdles and discriminatory treatment substantially influence access to healthcare. Additionally, the analysis highlights individual barriers that demonstrated system fragility for Universal Health Coverage and the right to health. According to Andersen’s model, predisposing, enabling, and need factors are present; the analysis indicates that enabling factors are socially constructed and influenced by policy, which further reinforces intersectional disadvantages and facilitates a cycle of inequality.

Healthcare Access and Insurance Challenges

In line with previous research, insured migrants face challenges in accessing Thai public health services due to long wait times and limited hours. These barriers mainly affect those with busy work schedules (12, 13). Insurance coverage under the Social Security Scheme (SSS) or Migrant Health Insurance (MHI) is often inconsistent, with many workers experiencing gaps when employers stop contributions or when they change jobs frequently (14). These results support documented issues in maintaining insurance coverage among migrants working in informal sectors (15). The study conducted among Myanmar migrant workers in Ranong province, Thailand, yielded significant findings regarding the influence of health insurance on individual health-seeking behavior (16). Parallel findings were observed in research conducted in China and the United States, indicating that possessing health insurance coverage significantly influences healthcare utilization behavior (17–19).

Legal Status and Fear

The legal status of migrant workers emerges as a pivotal factor influencing health seeking behavior, closely intertwined with the choice of healthcare services (16). Aung et al. (2009) highlighted in their study among migrant workers in Ranong province, Thailand, that individuals feared inquiries about their identification cards or background when seeking healthcare services. Undocumented migrants report fear of legal repercussions when accessing public healthcare, aligning with research in Thailand and other Southeast Asian countries that identify legal status as a key factor in healthcare use (20, 21). This fear drives a preference for private or informal clinics for mild to severe health issues, despite higher costs, highlighting systemic inequalities in access to care.

Language and Cultural Barriers

Most migrant workers encounter language barriers, which significantly impact their ability to seek healthcare. Inadequate language skills hinder effective communication and impede their access to proper healthcare services. Studies on migration health in European countries have highlighted language as a significant factor influencing health-seeking behavior (22). This finding is consistent with research conducted in Thailand, Australia, and various other locations (23, 24).

Language barriers limited migrants' ability to navigate healthcare systems, leading them to rely on translators or social networks, as seen in other migrant groups worldwide (25, 26). causing delayed treatment and poor compliance. Perceived discrimination and unwelcoming attitudes at healthcare facilities further discouraged seeking care, supporting research on stigma and cultural competence in migrant healthcare (12, 27).

Self-Care and Private Providers

Many migrants prefer pharmacies and private clinics for minor illnesses because they are convenient and quick, which aligns with other qualitative studies on migrant health behavior in Thailand and the region (28, 29). This preference is shaped by practical factors such as more accessible, faster, and closer than designated hospitals.

Sample Size

While the sample size restricts formal subgroup analysis, participants' stories highlight intersectional factors like **gender, employment sector, documentation and insurance status, length of residence, and work hours**,

including night shifts or long hours. Future research should investigate how these overlapping social identities exacerbate structural barriers and lead to varying levels of vulnerability among migrants.

Mixed-Methods Integration

To strengthen the connection between the qualitative and quantitative components of this study, a Mixed-Methods Integration approach was employed for explaining the health care landscape. Quantitative survey findings from the larger study (n = 355) identified several predictors of healthcare utilization, including age, work hours (> 8 hours/day), monthly expenditure, insurance status, and presence of assistance (e.g., spouse or friend support).

The qualitative findings provided **context-rich explanations** for these patterns which was demonstrated in Table 3:

- **Assistance**: Participants who reported receiving help from spouses, friends, or colleagues often relied on them for language translation, navigating healthcare facilities, and completing paperwork. These are trusted individuals, who work as a cultural and linguistic broker in utilizing health services. This qualitative insight explains why survey data showed higher utilization among those with assistance.
- **Work hours**: Long working hours (> 8 hours/day) emerged as a barrier in qualitative interviews, with participants describing the high opportunity cost of attending public hospitals due to long waiting times. This complements survey findings showing lower healthcare utilization among participants with extended work schedules.
- **Insurance**: Survey data indicated that insured participants (SSS or MHI) were more likely to access formal healthcare. Qualitative narratives revealed nuances, including gaps in coverage, distance from designated hospitals, and employer discontinuation of contributions, which explain why some insured individuals still sought private clinics. This illuminates' critical fissures in systems such as coverage gaps.
- **Monthly expenditure**: Higher personal expenditure often enabled participants to choose private clinics for convenience, consistent with quantitative associations between expenditure and utilization. This has the notion of purchase power: migrants with greater financial means can bypass the public barriers.
- **Age**: Younger migrants described relying more on peer networks for guidance, while older migrants often leveraged family support, providing qualitative depth to the age-related patterns in survey utilization. This suggests changing the order of social networking and strategy for health seeking patterns.

Table 3
Socioeconomic and Support Factors Influencing Healthcare Utilization Among Migrant Participants

Assistance (spouse/friend)	**↑ likelihood of healthcare use**	**Spouses or friends help with translation and paperwork; facilitate access (P4, P6)**
Work hours (> 8 h/day)	↓ healthcare utilization	Long hours prevent attending public hospitals; participants opt for private clinics or pharmacies (P2, P8)
Insurance (SSS, MHI)	↑ healthcare utilization	Some insured participants still avoid public hospitals due to long waiting times or limited facility coverage (P1, P8)
Monthly expenditure	↑ healthcare utilization	Higher spending allows use of faster, private services (P1, P3)
Age	Variable	Younger migrants rely on peers; older migrants leverage family for healthcare navigation (P6, P9)

Implication for Policy

Policy responses should move beyond expanding nominal coverage and instead dismantle structural barriers:

1. Interpreter services should be implemented in district and provincial hospitals.
2. Portable insurance schemes should be introduced, decoupled from employers, ensuring continuity across jobs and provinces.
3. Public hospitals should establish migrant-friendly service units modeled after existing “one-stop” border health centers.
4. Legal protections must ensure that undocumented migrants can access care without fear of immigration enforcement.

Limitations

The study has several limitations due to the 10 participants, which limits generalizability. However, the purposive strategy and achievement of information power support the transferability of findings to similar contexts. In addition, the absence of audio recordings may have reduced verbatim accuracy; nevertheless, detailed contemporaneous notes, immediate expansion into full summaries, a versioned codebook, and peer debriefing were employed to preserve credibility and confirmability.

Significantly, the mixed-methods analysis mitigates some of these limitations. The quantitative survey (n = 355) provided population-level associations, while the qualitative interviews offered contextual explanations for why and how these factors shaped health-seeking behavior. This integration enhances both the robustness and the policy relevance of the findings. Future studies with larger qualitative samples, audio-recorded data, and longitudinal follow-up could further strengthen insights and support broader applicability.

5. Conclusion

In conclusion, Myanmar migrant workers in Northern Thailand face various healthcare challenges, such as insecure insurance coverage, fear of legal repercussions, long wait times, language barriers, frequent mobility, bureaucratic bottleneck, financial hardship, emotional consequences, and experiences of discrimination. These obstacles often lead migrants to seek care at private clinics, pharmacies, or through self-care, even when formal

health services are accessible. Therefore, it is essential to ensure equitable healthcare access, non-discriminatory insurance policies and revision of predefined service hospitals, interpreter services in public hospitals, culturally sensitive care, and protection for all migrants regardless of their legal status. Addressing these structural inequities is vital for improving migrant health outcomes, advancing universal health coverage, and strengthening public health security in border regions.

Declarations

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Authors' contributions: All authors contributed to study design, data collection, analysis, and manuscript preparation. All authors approved the final manuscript.

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Competing interests: The authors declare no competing interests.

Availability of data and materials: Data supporting the findings are available from the corresponding author upon reasonable request.

Consent for publication: Not applicable or obtained as part of informed consent.

Ethics approval and consent to participate: This study was performed in line with the principles of the Declaration of Helsinki. The study protocol, including all quantitative and qualitative components, was approved by the Mae Fah Luang University Ethics Committee. Reference No: EC 24046-18. Informed consent was obtained from all individual participants included in the study.

Domain / Item	Response (Concise)
Domain 1: Research team & reflexivity	
1. Interviewer/facilitator	Zaw Min (ZM), MBBS, a public health researcher, conducted all interviews.
2–5. Credentials, occupation, gender	ZM: MBBS, male, clinician/researcher. PK (co-author): PhD, male, researcher.
6. Relationship established	No prior relationship; recruited via survey.
7–8. Participant knowledge & characteristics	Participants knew the interviewer as an independent researcher, shared a linguistic/cultural background, and considered reflexivity.
Domain 2: Study design	
9. Methodological orientation	Qualitative descriptive; thematic analysis guided by the Andersen model.
10. Sampling	Purposive from survey (n=355); diversity in legal status, sector, language.
11. Approach	Direct invitation after the survey.
12. Sample size	10 participants (5 insured, 5 uninsured/undocumented).
13. Non-participation	Not reported; saturation reached.
14–15. Setting & presence of others	Private, neutral locations; no non-participants.
16. Sample description	Age 22–40, male/female, work sectors: construction/shop/domestic, insurance: SSS/MHI/none, Thai language: none–intermediate.
17. Interview guide	Semi-structured and unstructured prompts: illness response, care preferences, barriers, and insurance/legal status effects.
18. Repeat interviews	No.
19–20. Recording & field notes	No audio (legal concerns); detailed notes taken and expanded post-interview.
21. Duration	25–40 minutes.
22. Data saturation	Achieved by 8th interview; confirmed by 9–10.
23. Transcript return	Not feasible; peer debriefing used.
Domain 3: Analysis & findings	
24. Number of coders	Primary coder ZM; peer debriefing by PK and PI.
25–26. Coding tree & theme derivation	Codes grouped into categories and synthesized into four major themes: (1) Healthcare utilization, (2) Health insurance, (3) Barriers, (4) Self-care/private healthcare.
27. Software	Manual coding.
28. Participant checking	Not feasible; triangulation with survey & stakeholders.
29. Quotations	Yes, includes participant ID, legal status, and insurance.

30. Consistency	Quotes support identified themes.
31–32. Clarity of major & minor themes	Major: 4 themes; minor: counter-examples included (insured avoiding public hospitals; uninsured using temple clinic).

1	“I have a migrant health insurance card, but it can only be used at a designated hospital. Since I live far from that hospital, I prefer going to a private clinic or pharmacy, depending on the severity of my illness.” (10 June 2024)	“[illegible]”
2	“I have lived in Chiang Rai for a long time and have legal status with Social Security Scheme (SSS) insurance. However, I avoid public hospitals because the waiting time is too long, often around five hours to see a doctor.” (10 June 2024)	“[illegible]”
3	“I used to have Social Security Scheme insurance, as I previously contributed to the scheme. However, my employer has stopped making contributions, so I no longer have insurance. As a result, I go to a pharmacy or private clinic based on my health needs.” (12 June 2024)	“[illegible]”
4	“I have been in Chiang Rai for less than a year, and I don’t speak Thai. It is difficult to communicate, so I hire a translator when visiting a private clinic.” (12 June 2024)	“[illegible]”
5	“I don’t have any work documents. The chief abbot of the temple where I work has given me permission to stay. Since the temple has a free clinic, I don’t need health insurance. I go there whenever I need medical help.” (14 June 2024)	“[illegible]”
6	“I have lived in Chiang Rai for a year, but I don’t speak Thai well. This makes it hard to communicate with hospital staff, and they don’t always have translators available. When I do go to the hospital, I rely on my children or friends who speak Thai to help, but that’s not always possible. Sometimes, I avoid going altogether because of the language problem.” (14 June 2024)	“[illegible]”
7	“I don’t have legal documents for working in Thailand, so I’m afraid to go to public hospitals. Even though I’ve been here for several years, I always worry that someone might ask too many questions or report me to the authorities. As a result, I stick to private clinics where I feel safer, but it’s expensive.” (16 June 2024)	“[illegible]”
8	“I have Social Security Scheme insurance, but I rarely use it. The public hospital in Chiang Rai has long waiting times, and I can spend an entire day just waiting to see a doctor. I work long hours, so I can’t afford to take a day off. Instead, I go to private clinics, even though I have to pay, because they are faster.” (16 June 2024)	“[illegible]”
9	“Even though I’ve lived here legally for several years and have Social Security insurance, I sometimes feel unwelcome at the public hospital. Some staff members treat me differently once they realize I’m a foreigner. It makes me uncomfortable, and I try to avoid going unless it’s an emergency.” (18 June 2024)	“[illegible]”

10	“I just arrived in Thailand, so I am in the process of applying for health insurance. Until I receive it, I rely on pharmacies and private clinics for any health issues. I am unsure about how the healthcare system works here, and without insurance, I feel cautious about going to a public hospital.” (18 June 2024)	“[illegible]/[illegible] [illegible] [illegible] [

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