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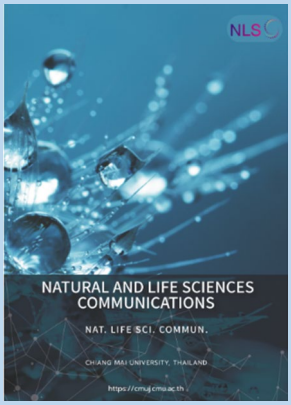

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Exploring Reasons and Perspectives Behind Decisions to Forego Hospital Births Among Remote Rural Populations in Bokeo Province, Lao PDR

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ABSTRACT

Maternal mortality remains high among marginalized rural populations in Laos. Remote mountain villages in Bokeo Province typify persistent health access divides facing minor subgroups amidst infrastructure gaps and scattered habitation. This study explores complex drivers behind shunning hospital births using focused rural ethnography. Between October and November 2023, this qualitative study interviewed 40 participants including pregnant women, postpartum women, and their relatives across 5 villages in Bokeo Province regarding barriers to hospital births. Open-ended discussions aimed to elucidate motivations and barriers embedded in their decision to avoid formal delivery care, despite mortality awareness. Transcriptions from Lao were translated to Thai, maintaining cultural nuances. Thematic analysis identified patterns in women's attitudes and barriers to hospital childbirth. A collaborative coding process revealed constraints on access, affordability, and autonomy, explaining why vulnerable groups often forego hospital births despite risks. The result founded that prohibitive transportation deficiencies including impassable roads, exorbitant driver fees and unreliable conveyance options were primary obstacles. Prohibitive direct and indirect costs compounded struggles for impoverished families. Restrictive traditions persisted among certain ethnicities. Discrimination fears and hospital foreignness also provoked wariness among a minority. Multidimensional geographical, financial and sociocultural barriers intersect to obstruct rural groups from accessible emergency obstetric care in Laos. Infrastructural strengthening, financial protection and public education can relieve these pronounced constraints denying the marginalized realization of maternal health rights.

Keywords: Hospital births, Home birth, Remote rural area, Maternal and child, Maternal mortality

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INTRODUCTION

Southeast Asian landlocked nation known as the Lao People's Democratic Republic (Lao PDR) is distinguished by its varied ethnic groupings and predominately rural populace. The nation's economy has grown significantly in recent years, moving it from a low-income to a lower-middle-income status (Nonaka et al., 2022). Despite these advancements, the Lao PDR's infrastructure and healthcare system development have had difficulty keeping up with the demands of the populace, especially those living in rural and isolated locations. Disparities in the availability and caliber of healthcare services between urban and rural areas characterize the overall health situation in the Lao PDR (Takura and Miura, 2022; World Bank, 2020b).

Between 1993 and 2019, the poverty rate decreased by more than half, from 46% to 18%. (World Bank, 2020a). Of the 6.1 million people, about 66.8% reside in rural areas, many of which are hard to get to because of the steep terrain. With 49 recognized ethnic groups, the nation is ethnically diverse. (Nonaka et al., 2022). Hospitals and health clinics in the public sector are the main providers of healthcare services. In 2020, Laos's average maternal mortality ratio (MMR) was 126 deaths for every 100,000 live births. (World Bank, 2020a, 2020b). However, by 2030, the MMR is expected to drop to fewer than 70 maternal deaths per 100,000 live births, according to the Sustainable Development Goals (SDG) 3.1 objective. It's clear that Laos needs to close a big gap before attempting to accomplish this challenging objective (United Nations, 2023; World Bank, 2020a).

The percentage of women giving birth in hospitals is lower nationally than in metropolitan areas, according to statistics. Hospital births in rural Lao PDR was significantly hampered by elements like cultural beliefs, financial hurdles, and distance to health facilities (Turkmani et al., 2023). The health of mothers and children may suffer from a number of factors if there are fewer hospital births. Preterm birth, low birth weight, maternal morbidity, and death are among the difficulties that might arise from giving birth at home without professional assistance (Mohseni et al., 2023; Wungrath, 2023). Furthermore, hospital births give medical professionals a crucial platform to handle possible health problems for the mother and child, as well as to provide treatment and guidance for a safe delivery. Therefore, skipping hospital deliveries may result in worse health consequences for the mother and the infant (Mohseni et al., 2023; Turkmani et al., 2023).

Despite Laos meeting several developmental milestones, maternal mortality ratios in remote rural areas remain high, lagging national and global commitments. Qualitative evidence reveals distance, unaffordability and cultural considerations collectively deterring vulnerable women from accessing hospital births - instead dangerously relying on traditional attendants in unfamiliar home environments devoid of emergency care (Altaweli, 2023; Docilait, 2023). Analysis intends to unravel the multifaceted obstacles embedded in ethnic minority women’s narratives to inform context-specific solutions (Houghton et al., 2023). Creating an equitable landscape facilitating the rural poor to safely access childbirth facilities is imperative to uphold reproductive justice and prevent avoidable loss of disadvantaged life, uplifting Laos’ maternal health outcomes (Docilait, 2023).

This study aims to explore the reasons and perspectives behind decisions to forego hospital births among remote rural populations in Bokeo Province, Lao PDR, by employing qualitative research methods to uncover the complex interplay of factors embedded within individuals' experiences to the greatest extent possible.

METHODS

Study Design

This qualitative study conducted in-depth interviews with 12 pregnant women, 17 postpartum women, and 11 relatives of pregnant and postpartum women across 5 villages in 5 districts of Bokeo Province between October and November 2023. A phenomenological approach was used to uncover the actual reasons lying in their minds and to elucidate the complex beliefs and motivations driving rural women to avoid formal healthcare for childbirth.

Setting

In Lao PDR, the healthcare system faces challenges due to its diverse population and difficult terrain. The country has been working on improving its health information system to enhance mortality statistics reporting (Nonaka et al., 2022). To address maternal health, the Free Maternal Health Service policy was adopted in 2012, aiming to reduce inequalities in access to services (Ahissou et al., 2023). The primary health care approach is emphasized to enhance rural health, focusing on elements like health education, maternal and child health care, and disease prevention (Liverani et al., 2024). Nationwide, the promotion of skilled birth attendants is a key strategy, requiring the proper functioning of district hospitals and health posts to ensure access to essential maternal health services (Ahissou et al., 2023).

Bokeo Province, located in Laos approximately 500 kilometers away from Vientiane Capital, faces significant environmental and socio-economic challenges. The province, with a population of around 150,000, experiences high levels of poverty and has a diverse ethnic composition, which contributes to developmental and health-related issues. The main industry, tourism, focuses on promoting eco-tourism and cultural experiences. In one of its villages, improper household waste management leads to environmental degradation, impacting health and polluting local water bodies. Another concern is the low visitation rate of children under five to healthcare centers, which is influenced by factors such as limited maternal knowledge and infrequent routine visits. These complex factors highlight the need for integrated approaches to tackle both health and economic challenges in the region (Kapheak et al., 2024a).

This study was conducted in five purposefully selected villages representing all five districts of Bokeo Province, namely: Huayxainoi village (Houayxay district), Srimungkhun village (Tonpheung district), Namyu village (Meuang district), Phouviengchai village (Pha-oudom district) and Hadsa village (Paktha district). The selection criteria prioritized the most geographically isolated and marginalized village with the greatest healthcare access challenges from each district to illuminate pronounced barriers. All five chosen villages were remotely located far from their respective district centers. The diversity of settings experiencing poverty, remoteness, cultural hurdles, and infrastructure limitations enabled investigating the multidimensional drivers embedded across vulnerable subgroups when opting for precarious unattended home births despite comprehension of attendant risks. The thick descriptions aimed to explain the complex interplay of factors intertwined with ethnicity, gender, poverty and marginalization that shape healthcare navigation for rural populations devoid of decent options.

Participants

A purposive sampling technique was employed to recruit 40 participants across 5 villages in 5 districts of Bokeo Province, who had given birth within the past 3 years. Eligible participants included 12 pregnant women, either

primi-gravida or multi-gravida, 17 postpartum women with varying parity, and 11 relatives such as husbands, parents, parents-in-law, or family members responsible for the care of pregnant women. They were identified through local health volunteers to capture a diversity of perspectives. The participants encompassed women from a range of ethnic backgrounds, age groups, parity levels, and socioeconomic statuses, thus maximizing representation within this marginalized region regarding decisions on foregoing formal maternity care.

Table 1. Participants' sociodemographic information.

Characteristics	Number of Participant (%)
Total Number of participants	40
Average age (years)	
pregnant women	27.6
postpartum women	31.4
relatives	36.2
Education level	
Primary school	21(52.5%)
Secondary school	6(15.0%)
No education	13(32.5%)
Average household income per month (Kip)	300,000 (Approximately 14.5 USD)
Occupation	
Housewife	13(32.5%)
Farmer	27(67.5%)
Number of children	
1	18(45.0%)
2	14(35.0%)
3	6(15.0%)
>3	2(5.0%)
Residential address	
Haad Sa village	7(17.5%)
Mai Pattana village	6(15.0%)
Ban Pung village	7(17.5%)
Pon Thong village	7(17.5%)
Hua Namtha village	7(17.5%)
Nam Yu village	6(15.0%)

Data Collection

Qualitative data was gathered through one-on-one in-depth interviews. Guided by existing literature and specialists, the conversations were semi-structured with open-ended questions that probed the personal thought processes and obstacles that dissuaded rural mothers from hospital deliveries. These sessions were conducted privately in homes by trained bilingual interviewers, granting around 60 to 90 minutes for each woman to voice her narrative with assurance of confidentiality. This cultivated an atmosphere of trust for marginalized participants to unpack sensitive issues around finances, culture or infrastructure driving their healthcare avoidance beyond superficial responses. Audio recordings were supplemented by interviewer notes capturing body language and reactions. The linguistic and cultural fluency of the researchers in the Lao-Isan context strengthened rapport with ethnic minorities to uncover multidimensional rationale underlying precarious decisions to spurn biomedical facilities for traditional birth attendants despite risk awareness. The interviews continued until data saturation was reached, participants begin to repeat the same themes or information, and no new data seems to emerge in subsequent data collection, it's a sign that saturation may have been reached (Boddy, 2016; Hennink and Kaiser, 2022).

Data Analysis

Verbatim interview transcriptions were translated from Lao dialects into standard Thai by bilingual staff, retaining cultural nuances. Employing a collaborative thematic analysis method, an inductive coding approach helped identify emergent patterns in the raw data. Initial interpretive codes extracted by two independent analysts were compared, discussed and consolidated into coherent themes encapsulating women's embedded attitudes and encountered barriers. Iterative dialogue between the coders enhanced legitimacy through resolving analytic differences and confirmation by member checking with participants when needed. The systematic multi-phased strategy produced a rigorous synthesis of textual narratives revealing why vulnerable groups forewent hospitals for childbirth despite awareness of consequent risk. The process underscored women's voices detailing personal constraints around access, affordability and autonomy denying their realization of essential care.

The trustworthiness

Recognizing reflexivity and bias risks inherent during in-depth ethnographic interviewing, several procedures enhanced data rigor. Extensive field preparation standardized techniques aligned with anti-oppressive qualitative paradigms, so interactions foregrounded participants' authentic perspectives. Question phrasing training minimized directionality along with confidentiality assurances mitigating social desirability response distortions. An iterative dialogue around emerging themes enabled researchers to validate interpretive resonance with women's intended meanings rather than superficial impressions. Cross-verification questions also helped confirm consistency in expressed viewpoints over the lengthy sessions. Ultimately the women steered conversations illuminating multifaceted rationale embedded within decision-making on pregnancy care utilization. The insights revealed through collaborative meaning-making opened implications for policy reforms targeting gender-inclusive communication. This approach is essential in terms of avoiding information bias.

Ethical Considerations

Preserving the strictures of ethics, the voluntary nature of participation was reinforced through verbal informed consent preceding semi-structured engagements. Participants received Lao translations of printed introductory sheets detailing confidentiality protections, potential discussion topics on childbirth decisions and the leeway to exit interactions without repercussion. These transparency measures established reciprocal trust allowing self-determined sharing of reasons underlying hospital avoidance. The study received ethical approval from the Research Ethics Committee of the Faculty of Public Health, Chiang Mai University, Thailand, with reference number ET022/2022 on December 29, 2022.

RESULT

Long distances and deteriorating road conditions as barriers to hospital births

The study found that long travel distances and poor road infrastructure in remote rural Bokeo Province posed significant barriers for pregnant women from remote villages seeking to give birth in healthcare facilities. Despite some villages located only 10km from the nearest hospital, women reported journeys taking over 5 hours along uneven dirt roads filled with potholes. The difficult roads increased risks during transportation and caused distress for women in

labor. Some women recounted previous traumatic experiences being unable to reach the hospital in time. Others deliberately postponed departure until labor was advanced due to the uncertainty of road conditions.

In the wet season especially, roads become muddy and flooded, essentially cutting off access. Family members also faced difficulties arranging any transport due to the unwillingness of drivers to commit to these long and hazardous routes. The challenging geography and infrastructure contributed to unintended home births without skilled attendance.

Ultimately the study revealed that even relatively short distances of 10-50km to hospitals became insurmountable obstacles for vulnerable pregnant women from rural remote areas. Trekking along severely degraded provincial roads exacerbated risks of complications. Thus solutions must address infrastructure improvements alongside increasing proximate birthing options to bridge the access gap.

> *"The road is very bad. My village is only 10 km away but it took 5-6 hours last time I went to deliver my baby. We were worried the whole way about accidents or going into labor on the road."* (27-year-old pregnant women)

> *"I wanted to deliver at the hospital but could not handle the long and uncomfortable ride there. The road is not paved, and it damages the car. My cousin had to give birth in the car halfway."* (27-year-old pregnant women)

> *"It is too far and difficult for my wife to go to the hospital to give birth. More than 50 km and mountains, unpaved road. Not safe for her and the baby."* (33-years-old pregnant woman's husband)

> *"The hospital told my sister to come, but we couldn't arrange transport. No one wants to drive that far out of town. She gave birth at home with a midwife."* (21-years-old pregnant woman's relative)

Difficulties arranging transport to hospitals and prohibitive transportation costs

The study found that women in remote villages faced considerable difficulties even attempting to arrange transport to distant hospitals for delivery. Private car services expected high payments around $8-10 for these arduous journeys along degraded roads. With the majority of rural residents subsisting on under $2 a day, paying these fares equaling a month's income seemed impossible. Some women resorted to borrowing money or selling livestock and land to raise funds. However, even with payment promised, car owners remained reluctant to commit their vehicles to risky trips far from town that would keep them away from more convenient and profitable work.

The prohibitive transportation costs and unwillingness of drivers left many women effectively stranded, unable to complete their journeys to hospitals.

> *"In the city, if you call ambulance they will come free to take you to hospital. But here, even finding a car willing to drive this far is difficult if you don't pay them a lot."* (26-year-old pregnant women)

With few vehicles in these remote areas, many women had to hire farm trucks and tractors with makeshift coverings, hardly appropriate or safe transport for a woman in active labor. However exorbitant fees were still charged, placing immense financial strain on already impoverished families.

"The village taxi doubled their normal rate because we needed to go so far to the hospital. Very expensive but no choice if you want medical help." (28-year-old pregnant women)

Thus, solutions must not only focus on road infrastructure but also address deeper inequities in the transport system and travel subsidies to increase conveyance options. Rural women require better access to motorized transit both financially and logistically to overcome these geographical barriers to maternal healthcare.

Other expenses related to hospital births

The sample population explained that there were other considerable costs involved with accessing hospital births, beyond just transportation fees. Women and accompanying family members incurred food and lodging expenses, often needing to stay near or within hospital facilities for multiple days during and after delivery. Relatives would also forfeit income and work opportunities while providing this caregiving support.

Moreover, some women discovered that upon reaching the hospital, certain medicines and supplements for optimal postpartum recovery were out of stock or not sufficiently provided. The hospitals instructed the recent mothers to personally purchase these items from pharmacies, amounting to unexpectedly high medical bills. For instance, vitamins for healing and lactation cost significant sums that further compounded the financial burden especially for impoverished rural families.

"My mother came to take care of me and my baby at the hospital for 3 days. That meant she couldn't work and lost money, plus we had to pay for all meals there." (23-year-old pregnant women)

"The morning after the birth, my wife started bleeding more than normal. The hospital had no medicine left for preventing hemorrhage, so I had to run and buy from outside." (36-years-old pregnant woman's husband)

"They told us to buy iron, calcium, and vitamin tablets after discharge but it was unexpectedly expensive. This was very difficult as we'd already spent all our money to get to hospital." (42-years-old pregnant woman's mother)

Cultural beliefs and practices discouraging hospital births

The study found that traditional cultural beliefs and ancestral customs around childbirth persisted in discouraging rural women from pursuing hospital deliveries. Various minority ethnic groups actively restricted any "outsider" assistance during labor and delivery, allowing only women from their own tribe to help in an intimate process. Spiritual worldviews also dominated in certain villages, convinced that supernatural forces and blessings from earlier generations ensured safe home births just as their grandmothers and ancestors before them.

"In our custom, only Hmong women can help for birth. We cannot show our body to outsiders." (20-year-old pregnant women)

Spiritual worldviews also dominated in certain villages, convinced that supernatural forces and blessings from earlier generations ensured safe home births just as their grandmothers and ancestors before them.

> *"The sacred spirits of our grandmothers will make sure we give birth safely at home as they did."* (52-year-old pregnant women's grandmother)

Additionally, practical factors made home birthing supervised by relatives more attractive, avoiding hospital expenses and enabling family to share caregiving while continuing economic activities. These communal perspectives contrasted biomedical norms of medically managed pregnancy.

> *"Having my mother and aunts help me give birth at home makes more sense than going to the hospital. They have guided many babies into this world. The hospital is too expensive and won't let my husband work in the fields. We trust our ancestral ways."* (32-year-old postpartum women)

Additional socio-cultural factors influencing hospital birth decisions

The study revealed some additional sociocultural considerations from a minority of respondents that may further dissuade some rural families in Bokeo Province from pursuing hospital deliveries, supplementing the geographical, financial, and cultural barriers already discussed.

Firstly, language differences posed issues for minority ethnic groups, who felt unable to smoothly communicate medical needs with Lao hospital staff. Their lack of fluency and comprehension could not only cause discomfort when vulnerabilities surfaced during labor, but also doubts regarding quality of care received.

> *"I worried because I don't speak Lao well, the doctors might not understand what I need."* (19-year-old pregnant women)

Secondly, fears of discrimination as "second-class" citizens or rural villagers could also mentally obstruct hospital access. Some women harbored concerns that urban healthcare professionals might look down on their traditional ways, ethnicity, poverty, or rural background - rather than provide equitable care.

> *"Some don't want to go to hospital in town because they think doctors will treat them badly for being uneducated or poor."* (31-year-old pregnant women)

Finally, the unfamiliar hospital environment itself stimulated wariness among villagers accustomed only to small community spaces. The sterile floors, bright lights, machines, and strange smells could overwhelm those used to delivering in dark thatched huts at home. This inhibition to navigate a foreign institutional setting additionally explained some decisions to remain in familiar village surrounds.

> *"I feel scared just going to clinic. The hospital is even bigger with so many strange equipment."* (20-year-old pregnant women)

DISCUSSION

This study seeks to understand the motivations and viewpoints of remote rural communities in Bokeo Province, Lao PDR, who choose not to utilize hospital birthing services, employing qualitative research techniques to thoroughly examine the intricate factors that affect their decisions. It reveals

that geographical, financial, cultural, and social barriers significantly impede access to these services. Poor roads and high transportation costs complicate hospital access, while cultural preferences for home births and fears of discrimination further deter use of hospital facilities. These barriers not only increase the risk of childbirth complications but also highlight the critical need for targeted interventions to improve infrastructure, reduce costs, and adapt healthcare services to the cultural context of these communities.

Transportation barriers

The finding that long travel distances and poor road infrastructure constitute major barriers preventing rural women in Bokeo Province from accessing hospital maternity services aligns with existing literature highlighting transportation and geography as crucial determinants of care utilization. Prior literature affirms physical distance as a unanimous barrier to institutional delivery care-seeking, with qualitative evidence exposing vast disconnects between theoretical catchment and lived access realities for rural groups (Quake et al., 2023). Our finding of remote mountain villages located within mere kilometers of facilities yet requiring endless treacherous journeys mirrors earlier place-based highlighting impassable roads multiplying travel time (Truong et al., 2023). By compelling vulnerable parturient women to endure uncertain passage on non-motorized routes, systemic governance failures to expand basic rural road quality and prehospital conveyance structurally violate healthcare rights and ethics (Iwelunmor et al., 2015; Woodward et al., 2023).Thematic analysis further reveals profound distress among respondents stemming from apprehensions of surviving the risky journey itself to access care at the moment of greatest mortal peril, rather than healthcare assurances (Cox et al., 2023). Through centering such localized voices of marginalized rural women navigating reproductive vulnerabilities, this study reaffirms calls to augment survey-centric scholarship with focused ethnography illuminating context-specific barriers (Cox et al., 2023; Truong et al., 2023). Our finding underscore women's constrained mobility and denial of basic rights amid immense geographical, financial, and temporal challenges to achieving positive, equitable maternal outcomes (Iwelunmor et al., 2015).

Financial barriers

Financial limitations constitute widely documented key obstacles to professional maternity care access in analogous settings (Mastylak et al., 2023). Such accounts illuminate living consequences behind statistics - desperate families assuming debts through livestock sales, representing survivability itself bartered to finance theoretical access (Rebitzer and Rebitzer, 2023). Meanwhile driver reluctance given road hazards and opportunity costs elicits lesser policy discussion, despite stranding laboring women devoid of options when needs are greatest. Financial protection frameworks designed for marginalized pregnant women remain lacking, with current systems essentially structuring inequities through urban centrism (Rahman, 2020). Transport subsidization alongside basic rural birthing infrastructure could relieve the triple-layered burden confronting remote groups in transitional contexts (World Health Organization, 2021). Our analysis privileges ethnographic voices detailing cumulative denied mobility and autonomy. The accounts unveil worsened disenfranchisement from healthcare competing against compounding daily precarity. Resolving these injustices relies on patient-centered solutions securing contextual affordability and availability, not just proximate locations of facilities.

Indirect costs barriers

Our study aligns with prior evidence that indirect expenses beyond transport fees frequently obstruct poor rural women from completing the journey for institutional births (Kurji, 2021). In describing additional costs accrued for food, lodging, lost wages of accompanying family members, and unexpected post-delivery hospital expenses, rural women underscore the web of financial considerations enveloping decisions to seek care (Wan et al., 2016; Wen et al., 2020). While transportation constitutes their foremost cited barrier, indirect economic factors compound to tip women towards unsafe options without skilled attendance (Rajbanshi et al., 2021). We further demonstrate relatives mobilizing inflated out-of-pocket payments in distant hospitals lacking basic postpartum provisions (Akhtar, 2022). This underscores the call for balancing budgets and medical supply chains in areas serving marginalized citizens, upholding equity tenets rather than deepening poverty. Realizing public financing policies eliminating catastrophic fees necessitates urgent priority and implementation support (Mathonnat et al., 2020). Altogether, eliminating the unique financial barriers intersecting childbirth remains imperative yet lacking, with rural women facing fragile existence over basic mobility, dignity and healthcare rights. The solution relies on patient-centered maternal system reforms securing contextual affordability, availability, and appropriateness for transitional regions through strategic budgetary allocations.

Cultural factors barriers

Our finding that certain ethnic groups actively forbid non-tribe members from assisting birth delivery or strongly prefer traditional home settings on a spiritual basis aligns with studies across Southeast Asia documenting the entrenched nature of cultural or religious norms discouraging hospital maternity care (Sihre, 2021).

While affiliation with Buddhism or ancestral worship did associate with home births in Laos (Sychareun et al., 2023), our work enriches explanations by spotlighting beliefs among minority groups. We centralize women's voices conveying conviction that generations of divine blessings ensure safety of village-based customs amid familiar community surrounds (Guignard, 2020). However, countervailing risks of unattended amateur delivery have received inadequate policy spotlight. Our study supports thoughtfully designed public health communication that respects the significance of longstanding traditions among ethnic minorities, while gently bridging information gaps. This aligns with experts advocating gradual transitions rather than forcibly imposing hospital births. Strategically integrating existing community resources like traditional caretakers through capacity building could enable constructive partnerships for skilled birthing assistance when risks arise (Ankersmit, 2020). Beyond spiritual beliefs, preferences to minimize hospital expenses and engage family support structures also emerged. Hence, multidimensional solutions spanning infrastructure upgrades, financial protections, cultural dialogue, staff training and economic empowerment initiatives together can pragmatically overcome barriers (Ankersmit, 2020; Keegan, 2021). Rather than singular interventions, synchronously aligning top-down facilities with bottom-up community preferences through participatory approaches is key for sustainability. These holds promise to uplift equitable access in transitional contexts.

Additional factors barriers:

While a minority perspective from our ethnographic inquiry, the issues of communication barriers, discrimination fears, and hospital environment

discomfort echo important considerations other scholars have surfaced in discussing what deters vulnerable rural groups from maternal health services.

Language barriers between doctors and minority patients can inhibit medical understanding and quality of care (Chauhan et al., 2020). Rural patients also fear disrespect from urban doctors, erecting barriers to care (Hsueh et al., 2021). Consequently, communication gaps deter rural ethnic minority women in low-income countries from accessing vital maternal healthcare. As hospitals use official languages, minority women speaking indigenous dialects feel linguistically overwhelmed, heightening fears of not comprehending procedures, questions, or emergent needs. This drives avoidance of hospitals despite maternal/child health risks (Hsueh et al., 2021). Bridging linguistic divides is essential for accessible healthcare. Hospitals must hire multi-lingual staff, utilize visual aids, provide translation services, and thoughtfully conduct rural outreach. Enhancing communication channels across languages and cultures can encourage vulnerable groups to access live-saving services otherwise avoided due to language barriers. Eliminating these gaps promotes health equity (Diamond et al., 2019; Hsueh et al., 2021).

Fears of discrimination from urban hospital staff also obstruct rural minority women's maternal health service access. Concerns stem from perceived stigmatization for socioeconomic disadvantage, traditional practices, or rurality (Ayhan et al., 2020). Some women worry staff might treat them prejudicially as "second-class," intellectually inferior citizens undeserving equitable care quality. Such perceptions, whether substantiated experiences or symbolic, carry immense psychological deterrence. Literature confirms rural patients' sense "authoritative hierarchies" in hospitals, while discrimination erodes minority groups' medical system engagement (Min, 2019; Hennein et al., 2022). Cultivating positive institutional cultures conveying equal respect and validating patients across backgrounds is thus essential. Beyond passive non-discrimination, proactively building intercultural competencies and signaling welcoming climates can further encourage access and trust (LaPlant et al., 2021; Poirier et al., 2022). Healthcare systems must confront discrimination fears through education, awareness, and genuine patient comfort to ensure equitable maternal health service utilization (Poirier et al., 2022; Kapheak et al., 2024a).

The theme of hospital environments feeling foreign and aligned with unfamiliar medical equipment has been shown to exacerbate rural groups' healthcare access barriers. This reflects rural-urban divides (Sperlich et al., 2017). Though clinical advancements matter, subjective emotional factors shaping access warrant equal attention per person-centered care philosophy. Technocratic upgrades alone insufficiently address apprehensions rooted in cultural, linguistic, sensory disconnects that make hospitals feel alienated (Degrie et al., 2017; Esteves Villanueva et al., 2021). Small accommodations enabling care transparency and cultural competency can mitigate this, creating accessibility and equity. Even if quality protocols exist, rural minority groups may avoid maternal health services if communication barriers or ambient dissonance overwhelm. Ensuring hospitals feel welcoming across community settings, not foreign, is essential for equitable access and outcomes (Hazen, 2017; Esteves Villanueva et al., 2021; Kapheak et al., 2024b).

Strengths and Limitations of the study

This study has several key strengths. Firstly, it centered the authentic voices of affected rural women through in-depth qualitative engagement, gathering firsthand perspectives. Secondly, featuring a diversity of villages and subgroups enabled capturing a wide range of beliefs barriers, experiences, and attitudes. Thirdly, the deployment of sensitive, ethical methods encouraged open sharing of sensitive information and stigmatized perspectives. Finally, the

analysis successfully illuminated the multidimensional drivers embedded within this setting that structure maternal healthcare decision-making and access.

However, this study has some limitations. First, as a highly localized ethnographic study within five remote mountain villages in Bokeo Province, the findings cannot provide definitive nationally generalizable conclusions on barriers to hospital births for the entire country. Second, the qualitative approach relying on translations between minority dialects risks some subtle nuance losses in the captured narratives. Finally, while confidentiality encourages openness, social desirability biases may persist in self-reported data requiring cautious interpretation. There is also the exclusive reliance on health volunteer gatekeepers for sample recruitment that potentially skews participation patterns.

Future policy implications

Several policy and health system interventions emerge as necessary based on the study's findings regarding pronounced barriers that intersect to influence rural maternal healthcare utilization. Firstly, infrastructure and transportation policies must proactively promote improvements in rural road access and connectivity. Secondly, healthcare legislation ought to consider substantive reforms around emergency transport subsidies that specifically enable impoverished and excluded communities to reach lifesaving facilities. Thirdly, network-wide investments should prioritize enhancing the number of skilled staff deployed and upgrading facilities in remote rural areas in ways that align with cultural norms. Finally, local governance mechanisms require strengthening to incentivize the localized recruitment and training of clinicians equipped to serve ethnic minority villages with sensitivity.

CONCLUSION

The qualitative findings conveyed a complex web of compounded limitations around transport inaccessibility across dilapidated roads, prohibitive vehicular fees straining poverty-stricken villages, insensitive hospital environments detached from customs, worsened by absent information pathways - that collectively deter marginalized subgroups from lifesaving skilled birthing facilities. Balancing top-down infrastructure upgrades with localized cultural dialogue and public health communication channels that respect autonomy offers potential to pragmatically shift dire equity gaps undermining maternal health in Laos.

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AUTHOR CONTRIBUTIONS

KK and JW were responsible for conceptualization and methodology. KK, JW, NT, CC, PB, and NP collected data and investigated. CC and PB translated

and edited quotes. JW wrote the original draft. JW and KK critically reviewed the manuscript. This study was supervised by JW. All authors read and approved the final manuscript.

CONFLICT OF INTEREST

The authors declare that they hold no competing interests.

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