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NAVIGATING CROSS-BORDER HEALTHCARE POLICIES AT THE SARAWAK–WEST KALIMANTAN BORDER

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ABSTRACT

Introduction: Access to healthcare remains a challenge for the Sarawak–West Kalimantan border communities. The close proximity to neighbouring countries and uneven healthcare infrastructure often lead these communities to seek care across the border. A previous study revealed that nearly 60% to 70 % of Malaysia's incoming patients came from Indonesia. **Aims:** This study aimed to identify and compare the characteristics of Malaysia's and Indonesia's healthcare access policies related to Sarawak–West Kalimantan border communities. **Methods:** This study employed a qualitative phenomenological approach and conducted semi-structured, in-depth interviews with 40 participants, including government officials, community leaders, and residents from 12 locations along the border. Data collection was conducted between October 2023 and May 2024, and the collected data were analysed through inductive thematic analysis. **Results:** Healthcare mobility between Sarawak and West Kalimantan relies on informal community trust over standardized frameworks. Malaysia's institutionalized outreach contrasts with Indonesia's army-assisted delivery and insurance schemes. Divergent border procedures and non-binding bilateral platforms like Sosek Malindo further limit effective cooperation, highlighting a significant lack of harmonized enforcement and policy integration.**Conclusion:** Sustainable cross-border healthcare governance requires formalised bilateral standard operating procedures encompassing emergency mobility, disease surveillance, and referral systems, complemented by active community involvement. Strengthening these mechanisms would transform cross-border healthcare from an informal, ad hoc practice into an institutionalised framework that ensures equitable and continuous care for border communities.

Keywords: Border Community, Cross-Border Healthcare, Healthcare Access, Health Policy, Malaysia–Indonesia Collaboration

INTRODUCTION

Borneo is the third-largest island in the world, covering about 750,000 square kilometres. Three sovereign countries occupy this island: Brunei, Indonesia, and Malaysia (Zhang, 2016). Indonesia and Malaysia share a 2,002–kilometre international land border, stretching from the provinces of West and East Kalimantan in Indonesia and the states of Sarawak and Sabah in Malaysia (Ruhana & Karim, 2024). Several official border checkpoints have been established between Indonesia and Malaysia in Borneo; three of them are located between Sarawak and West Kalimantan (Anuar & Raharjo, 2022).

As for border communities, access to healthcare remains a challenge. Border areas are often considered the country's backyards, typically marginalised and underdeveloped (Alunaza & Sudagung, 2020). There are welfare gaps between Indonesian and Malaysian border regions, which have led to many impoverished families, limited human resources, and minimal socioeconomic infrastructure (Darajati et al., 2023). These conditions prevent border communities from receiving adequate healthcare locally and force them to seek better treatment across the border

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(Ssengooba et al., 2021). Residents of West Kalimantan are known to regularly seek healthcare in Sarawak (Ormond & Sulianti, 2017). A previous study showed that nearly 60% to 70% of Malaysia's incoming patients came from Indonesia (Md Zain et al., 2022).

This study aimed to identify and compare the characteristics of Malaysia's and Indonesia's healthcare access policies related to Sarawak–West Kalimantan border communities. Understanding them is crucial for developing effective and inclusive frameworks that can improve cross-border healthcare access and the well-being of border populations.

METHODS

This study employed a qualitative phenomenological approach to explore about healthcare policies in the Sarawak–West Kalimantan border and how the border communities navigate these policies. Semi-structured, in-depth interviews with 40 participants, including government officials, community leaders, and residents from 12 locations along the border, were conducted. Six locations in Sarawak were selected: Tebedu, Biawak, Lubok Antu, Sapit, Serikin, and Telok Melano. Another six locations were from the opposite side, specifically in West Kalimantan: Entikong, Aruk, Nanga Badau, Gun Tembawang, Jagoi Babang, and Temajuk. These locations were purposively selected based on their geographical connectedness and kinship ties.

Purposive sampling was employed to recruit participants, supplemented by snowball sampling to identify additional individuals recommended by existing participants. Various strategies were employed to engage potential participants. Official border checkpoints, border guard quarters, and local public health facilities were approached in order to connect with government officials. In order to build rapport with community leaders and residents, researchers resided in local homestays, frequented local eateries, and initiated conversations with the owners, workers, and guests. This encouraged participation in the study and facilitated referral to additional participants.

Data collection was conducted from October 2023 to May 2024, at a location agreed upon by the participant. Each interview session ranged from approximately 30 to 90 minutes, depending on the participant's availability and capacity to recall relevant experiences. Interview sessions were digitally audio-recorded and stored in a locked electronic drive, accessible only to the researchers. The interviews continued until data saturation was reached. When information became repetitive, this indicated that further data collection would be redundant, and that a sufficient sample size was achieved. The collected data were analysed through inductive thematic analysis, which allowed codes and themes to emerge directly from participants' narratives. The iterative process of generating and refining codes and themes continued until thematic saturation was achieved, with no new codes or themes emerging.

In order to strengthen both rigor and trustworthiness of the derived findings, multiple strategies were employed. Member checking was conducted by sharing interview transcripts with participants and inviting them to verify the accuracy of the content. Key issues emerging from each interview were discussed with participants to elicit clarification and confirm interpretation. The coding structure, developed through data analysis, underwent continuous review and refinement in collaboration with the research team members, as part of the study's peer debriefing process. Furthermore, this study deliberately bracketed preconceptions during data collection and analysis to minimise bias and enhance the overall rigor of the study.

This study adhered to the Declaration of Helsinki (World Medical Association, 2013) and was approved by the

Universiti Malaysia Sarawak Medical Research Ethics Committee (Reference: UNIMAS/TNC(PI)/09-65/ 01 Jld.2 (52)). This study was funded under the Universiti Malaysia Sarawak Postgraduate Research Grant (Project ID: UNI/F05/GRADUATES/ 86159/2023).

RESULTS

Of the 40 participants, 22 participants were drawn from six official border checkpoints: Nanga Badau, Entikong, and Aruk in Indonesia and Lubok Antu, Tebedu, and Biawak in Malaysia. The remaining 18 participants came from six locations characterised by traditional crossing paths, namely Gun Tembawang, Jagoi Babang, and Temajuk in Indonesia and Sapit, Serikin, and Telok Melano in Malaysia. Table 1 presents detailed information of each participant.

Table 1. Information of Research Participants

Gender	Age	Citizenship	Ethnicity	Occupation	Roles in the Research
Male	30	Malaysian	Dayak Iban	Health personnel	Government official
Female	28	Indonesian	Batak	Health personnel	Government official
Male	26	Indonesian	Jawa-Padang	Health personnel	Government official
Female	48	Malaysian	Melayu	CIQ personnel	Government official
Male	32	Malaysian	Dayak Iban	CIQ personnel	Government official
Male	41	Malaysian	Melayu	Ex-SDMC	Government official
Female	43	Indonesian	Melayu	Business	Resident
Male	62	Indonesian	Melayu	Business	Community leader
Male	45	Indonesian	Melayu	Business	Resident
Male	34	Malaysian	Melayu	CIQ personnel	Government official
Female	30	Malaysian	Melayu	Health personnel	Government official
Female	45	Indonesian	Jawa	CIQ personnel	Government official
Male	46	Indonesian	Jawa	Health personnel	Government official
Female	22	Indonesian	Melayu	Daily worker	Resident
Female	41	Indonesian	Chinese	Housewife	Resident
Female	25	Indonesian	Jawa	Teacher	Resident
Male	34	Malaysian	Melayu	PGA	Government official
Male	23	Indonesian	Dayak Ngaju	TNI	Government official
Male	63	Malaysian	Dayak Bidayuh	Farmer	Community leader
Male	38	Indonesian	Dayak Bidayuh	Farmer	Resident
Female	50	Malaysian	Dayak Bidayuh	Farmer	Resident
Male	38	Malaysian	Dayak Bidayuh	Unemployed	Resident
Male	34	Malaysian	Melayu	PGA	Government official
Male	28	Indonesian	Jawa	TNI	Government official
Female	48	Indonesian	Melayu	Health personnel	Government official
Male	63	Malaysian	Melayu	Business	Community leader
Male	78	Indonesian	Melayu	Farmer	Community leader
Female	48	Indonesian	Melayu	Daily worker	Resident
Female	50	Indonesian	Melayu	Business	Resident
Female	39	Indonesian	Batak	Health personnel	Government official
Male	71	Indonesian	Dayak Bidayuh	Farmer	Community leader
Female	37	Malaysian	Dayak Bidayuh	Business	Resident
Female	50	Malaysian	Dayak Bidayuh	Business	Resident

Gender	Age	Citizenship	Ethnicity	Occupation	Roles in the Research
Female	43	Indonesian	Dayak Bidayuh	Business	Resident
Male	38	Malaysian	Melanau-Melayu	CIQ personnel	Government official
Male	30	Indonesian	Jawa	TNI	Government official
Male	34	Indonesian	Munah	CIQ personnel	Government official
Male	45	Indonesian	Melayu	Health personnel	Government official
Male	25	Indonesian	Melayu	Business	Resident
Male	41	Indonesian	Melayu	Plantation worker	Resident

This study underscored the divergent orientations of Malaysia's and Indonesia's policies concerning access to healthcare for Sarawak–West Kalimantan border communities. As illustrated in Table 2, these approaches were categorised into three main themes: cross-border healthcare mobility, rural healthcare delivery, and public health procedures at official border checkpoints.

Table 2. Themes, Sub-Themes, and Codes of Malaysia's and Indonesia's Policies Related to Healthcare Access for Sarawak–West Kalimantan Border Communities

Themes	Sub-Themes	Codes
Cross-border healthcare mobility	- Simplified medical access across borders - Flexible mobility during emergencies - Specific immigration policies	- Open-door policy - Cross-border medical procedures - Close-knit relationship - Agreement between communities - Passport versus cross-border pass - Border security
Rural healthcare delivery	- Healthcare personnel assignment - Outreach programmes - Healthcare financing system	- Special assignment for medical personnel - Multitask - Satellite health clinic - TNI equipped with medical supplies - Mobile health clinic and village health team - Flying doctor - Insurance versus subsidy - Pros and cons of BPJS - Fees between locals and foreigners - Save life first
Public health procedures at the official border checkpoints	- Transporting corpses or human remains - Cross-border collaboration to prevent and control communicable diseases	- Different perceptions on the transporting procedure for corpses or human remains - Communicable disease screening at the official border checkpoints - No mutual agreement on examination and reporting procedures

Cross-Border Healthcare Mobility

Cross-border healthcare mobility emerged as a key theme, highlighting how both countries enable streamlined medical access across the Sarawak–West Kalimantan border and facilitate flexible mobility during emergencies. Specific immigration policies are also in place to reduce bureaucracy.

Simplified medical access across borders

Findings showed that Malaysia and Indonesia sustain policies facilitating smooth medical movement across the Sarawak–West Kalimantan border. Malaysia's open-door policy approach permits all patients to receive care within its health facilities, enabling Indonesian residents to seek treatment easily. A port health officer in Tebedu, Malaysia, stated: "*The Ministry of Health has no closed-door policy for the border community*."

Indonesians residing in border regions can conveniently cross through any official border checkpoint in West Kalimantan to enter Sarawak. Although there is no formal agreement on cross-border medical movement using ambulance, patients with critical illness can still access healthcare services across border through ambulance exchange at the border checkpoint. A resident near PLBN Aruk, Indonesia, described the procedure: "*An ambulance from Indonesia will arrive and relay here. In the neutral zone, they will switch the ambulance*."

Flexible mobility during emergencies

Close-knit relationships enable the communities in border villages to access cross-border healthcare services during emergencies. A community leader in Sapit, Malaysia, said: "*I saw that time the kid was sick; he went here, and the doctor got him. The doctor took good care of him, just as the family here is being taken care*."

However, such flexibility does not always persist. In Serikin, Malaysia, and Jagoi Babang, Indonesia, previously supported access arrangement by coordinated agreement deteriorated when protocols were not maintained. A community leader in Jagoi Babang, Indonesia, said: "*We went there several times. We also had a meeting here, so our ambulance could enter Bau and Kuching. I remember that at that time, the agreement was with the Malaysian police; they approved it because it was more of an effort to save human lives, but we had to wear uniforms. After a while, we are no longer permitted as we no longer wear official clothes. That is our fault, our mistake*."

Specific immigration policies

Although passports remain the standard travel requirement, both countries issue cross-border passes for border residents. However, the use of these passes has declined, largely because of distance restrictions. An immigration officer in Lubok Antu, Malaysia, stated: "*There is no distance limitation with an international passport. It is unlimited. Even further is also allowed. For cross-border passes, the distance is limited*."

Border residents typically favour cross-border passes for their low cost and quick processing. An Indonesian resident residing in Lubok Antu, Malaysia, remarked: "*Stamped, but easy to make, because the price is only RM 20 and can be used for one year. Easy, right? Even if it has expired, it is easy to make again. An international passport is difficult; it will take a long time to get one in Indonesia*."

Nonetheless, from a security standpoint, such passes complicate monitoring. A General Operation Force (PGA) officer in Telok Melano, Malaysia, observed: "*You can enter until Telok Melano, but you know there are car or motorcycle facilities that can get you to Kuching, so why don't you enter Kuching? Perhaps one of the reasons for the pass being removed is to curb or prevent unauthorised entry*."

Interestingly, residents of Temajuk and Telok Melano are not required to

present a passport or cross-border pass when they cross between these two locations. They are permitted to do so by simply presenting their national identity cards to the border guards, reflecting a highly localised and flexible border arrangement. A resident in Temajuk, Indonesia, stated: "*But for the border residents here, usually we are permitted to enter. We ask permission here, we ask permission there, and enter. But only as far as Melano and Telok Serabang. Just write our names. Sometimes, also photos of our identity cards*."

Rural Healthcare Delivery

This study identified distinct approaches to rural healthcare delivery in Malaysia and Indonesia, particularly in regards of healthcare personnel assignment, outreach programmes, and healthcare financing systems.

Healthcare personnel assignment

Indonesia's Special Assignment programme supports equitable staffing in remote areas. Medical personnel in Nanga Badau, Indonesia, stated: "*In my opinion, it is beneficial for the border area. At least one, for example, one dentist or one team in the area. because if not, who wants to give themselves*."

Meanwhile, healthcare personnel in Malaysia often multitask, addressing specialist duties, so it does not depend on centralised expertise. A general practitioner in Tebedu, Malaysia, who attained her medical degree in Indonesia, said: "*But in Indonesia, it is like, only a specialist doctor can check on patients. In Malaysia, we, the general practitioners, are taught to multitask. We must master the things that are considered specialisation over there. Here, everything is done by general practitioners*."

Outreach programmes

Different outreach programmes reflect contrasting philosophies. Indonesia expands coverage through satellite clinics. A health officer in Aruk, Indonesia, noted Indonesia's satellite clinic plans: "*In the latest meeting, we encouraged having one satellite clinic in each village. Possibly next year or in two years, we will develop new satellite clinics. So, every village will have one satellite clinic*."

In addition, Indonesia's approach incorporates the Indonesian National Army (TNI), whose personnel are trained and equipped to deliver healthcare services in their respective areas. One of the TNI personnel in Aruk, Indonesia, explained: "*The main target is the community. Because we are in the border areas, we must calculate with territorial guidance, such as how we interact with the community; it is like we help each other. Every year, in each battalion, logistical support in the form of medicines has been prepared*."

Residents sometimes prefer TNI services due to convenience and perceived quality. A resident in Aruk, Indonesia, affirmed: "*If you want to ask for medicine. Just come, it is open. Here, not many people go to health centres. Usually, they think that TNI medicine is better than those from health centres*."

On the other hand, Malaysia adopts a different model, deploying Village Health Teams that operate at the community level to provide basic medical services and expand coverage in underserved rural areas. Medical personnel in Tebedu Health Clinic, Malaysia, stated: "*We have a village health team service, which means we come to the villages. We offer free treatment during our village visits, free for all patients. We do not see whether the person has an identity card; we just come to the village and check everyone*."

In some parts that are difficult to access by road, the Malaysian government deploys flying doctors to deliver healthcare services to the communities. A community leader in Sapit, Malaysia, mentioned: "*In the past, when this road did not exist, we had flying doctors, so doctors came here*

once a month. From the government hospitals. No charge, free medicine."

A community leader in Telok Melano, Malaysia, also confirmed the flying doctor's visit to his community. However, that visits may be delayed due to weather: "*Once a month, if the weather permits. That is the issue. Let's say it was announced on the radio; they will come on the 25th of this month. If the weather is not good, we will miss. Must wait until next month. Because they already have a full schedule*."

Although these services are not formally intended for cross-border use, their proximity to the border facilitates occasional access to healthcare for border communities, highlighting a casual cross-border healthcare dynamic. An Indonesian resident in Temajuk stated: "*In the past, I used to go there. What year was it ... I recently moved here. There was no road, and nothing available yet; indeed, we went to Malaysia for treatment. The flying doctor often came every month for a pregnancy check. I checked my pregnancy there*."

Healthcare financing system

Indonesia has implemented the National Health Insurance Programme, known as BPJS, to expand inclusivity in access to healthcare, particularly for rural populations. This national policy aims to offer affordable medical coverage by requiring a modest monthly premium. Medical personnel in Nanga Badau, Indonesia, noted a generally positive response to BPJS: "*The community's response to BPJS is very positive because it can cover medical costs, which, of course, cost a lot and are sometimes expensive. I see that, for example, people are okay to go to Putussibau for treatment using BPJS, and the community is also happier. Enthusiastic about the existence of BPJS. Some want it because we educate them that BPJS only needs to pay 30,000 per month, but it can cover many diseases, and it is better than paying a lot of money out of pocket when they are sick*."

Despite this policy intent, implementation faces challenges. Remote residents encounter difficulties registering for BPJS due to the requirement to open accounts at a specific bank located in urban centres. Health personnel in Temajuk, Indonesia, explained: "*Because it must be a BNI bank, West Kalimantan Bank cannot. The only bank in Paloh is the West Kalimantan Bank. They must go to Sambas. Paloh can be reached in one and a half hours. Crossing is usually the obstacle, Ma'am. Because we must use a ferry to cross. There is no bridge here*."

Furthermore, the BPJS referral system adds to its complexity. Patients must navigate a strict referral chain, travelling from district health clinics to regency hospitals and then to provincial hospitals without shortcuts. A resident from Nanga Badau, Indonesia, illustrated this convoluted process: "*If you use BPJS, it will be from Badau to Putusibau. And then, from Putusibau to Pontianak, or Sintang. That is the way it is. So, we cannot cut from here. You cannot jump right away. That is the problem*."

These systemic issues translate into tangible lived experiences. For example, a resident from Entikong, Indonesia, recounted a frustrating episode of being referred to a distant hospital only to be sent back without treatment due to the doctor's unavailability: "*At that time, I was sick. I was referred to Sanggau because the equipment was lacking here, so I was sent there. When I arrived in Sanggau, I was told to go back to Entikong, which was confusing. I spent many hours travelling to Sanggau, and they said there was no doctor. Why do we have to wait for a doctor? It is weird. They said the doctor would come later in the evening. I said, 'I already cannot bear the pain, why do I have to wait for a doctor again?', 'Well, there is nothing we can do about it. The doctor will only come at 8:00 pm. So, go back to Entikong.' Even though I brought this referral, they told me to go home, so I went home*."

Such perceptions extend beyond Indonesia's borders. A Malaysian resident in Serikin, Malaysia, noted reports of arrogance among Indonesian civil servants and neglect of poorer patients, which motivated some to seek treatment in Malaysia: "*The problem is that civil servants in Indonesia are different from our civil servants; they may feel arrogant among the community because they are civil servants. That is not supposed to happen. Ah, they are different. The problem is that I often hear it from my workers, about the underprivileged, 'Depend on the people too, if poor people like us are, they will let us sit on the floor, if you want to die, then die,' 'Really?' I spoke. 'True,' they said. We have never seen it; I have never seen it. I only hear their story. Finally, we bring them here for treatment, where it is cheaper, and the service is also good*."

In contrast, Malaysia uses a government subsidy model, allowing citizens to pay a nominal fee of RM 1 per treatment. Medical personnel in Lubok Antu, Malaysia, explained: "*As Malaysian citizens, we pay the same cost; however, we have health subsidies. Malaysian citizens only pay RM 1 for any treatment here. RM 1 includes the blood check, medicine, and the cost of a doctor consultation*."

Due to the subsidy system, Malaysia has a policy of different fees for its citizens and foreign citizens. The port health personnel in Tebedu, Malaysia, said: "*Government hospital services have two fees, a citizen fee and a foreigner fee*." In certain circumstances, the price paid is determined by the prevailing policy in the field. Pregnant foreign women often face reduced charges, paying only once for antenatal registration, with subsequent visits frequently free. Medical personnel in Tebedu, Malaysia, revealed: "*So, for a pregnant woman, we usually only charge once. Only when she registers to open the pink book do we charge. But then when she comes again, we are like, ah, that is it ... We should have to charge every time she comes, but because we are used to doing that, we pity the patient if we charge 40 every time she comes*."

Foreign residents married to Malaysians can enjoy subsidised healthcare by providing proper documentation, such as marriage certificates. An Indonesian citizen living in Lubok Antu, Malaysia, said: "*Even though I did not have a permit, I have a marriage certificate. At that time, I did not have a visa. But I have a marriage certificate, so it is free of charge. We only pay RM 1 for registration*."

In the meantime, there are no diverse fees for foreigners in Indonesia. Every patient has to pay the amount regulated by the government. Health personnel in Entikong, Indonesia, stated: "*If residents from outside the country want to use it, it is the same; we must serve. We will continue to use the service tariffs established by the government*."

Public Health Procedures at the Official Border Checkpoints

This study demonstrates that both countries enforce international public health protocols at official border checkpoints, including the transportation of corpses and human remains, and participate in cross-border collaboration to prevent and control communicable diseases. However, significant enforcement deficiencies persist.

Transporting corpses or human remains

Both countries adhere to established international public health procedures, including the transportation of corpses or human remains. However, perceptions of the required protocols vary on the Malaysian side. For instance, some personnel implement methods aligned with international standards, as noted by the port health personnel at Lubok Antu, Malaysia: "*We use an international procedure, where a permit to export corpses is required because this is an international border. So, the issuance of permits and documentation of sealed coffins is necessary. It is*

mandatory." Conversely, a slightly different approach was observed at another border checkpoint. Port health personnel in Biawak, Malaysia, stated: "*We take information and snap pictures, that is all. Check their coffin seals*."

This procedural discrepancy has the potential to generate conflicts in practice. As expressed by the port health personnel in Aruk, Indonesia: "*Most often, our problem is undocumented corpses. It is a headache here. They died without a letter to the hospital, without a police certificate, whether it was criminal or not, and we do not know if they were sick. They came without coffins. Automatically, it became a risk for officers and passersby. They will not check; that is our problem. They just let the corpses go. Meanwhile, if there are Malaysians who die in Mempawah or elsewhere, we will not let them pass the border without any documents. Hospital documents are minimal, stating he died of an infectious or non-infectious disease, as well as a police certificate, whether he died of a criminal or non-criminal. Because if he died in a criminal case, and we let him go, we would be considered helping a fugitive. We can have conflicts with the community. Procedurally, they should not come without a death certificate, documents from the police, and health documents, making sure of the cause of death*."

This issue was brought to the Malaysia–Indonesia Socioeconomic (*Sosek Malindo*) Forum. Direct meetings were also held with personnel on the Malaysian side, but it remained unresolved. As noted by the port health personnel in Aruk, Indonesia: "*Often, we went to join the Sosek Malindo Forum. We had included it in the health quarantine. We also went there many times. 'Sir, if possible, just reject corpses without documents first to make sure.' They say yes, but still let them through, because no one stays there. They feel it is not their citizens, so it becomes Indonesia's affair*."

Cross-border collaboration to prevent and control communicable diseases

Malaysia and Indonesia have collaborated to prevent and control communicable diseases. Both countries conduct disease screening at official border checkpoints. The port health personnel in Aruk, Indonesia, emphasised the screening process and the subsequent reporting to the Regency Health Agency in Sambas, highlighting efforts in cross-border disease surveillance: "*If we find tuberculosis here, we report it to the Agency, and the Agency will monitor it. Many of our people also go to Malaysia for treatment to take tuberculosis medicine, but they do not report to the Health Centre*."

To date, both countries have yet to establish a mutual agreement on examination and reporting procedures at their shared borders. Indonesia requires the submission of a Ground Crossing Declaration of Health for all vehicles entering from abroad, underscoring a formalised approach to cross-border health monitoring. Conversely, Malaysia does not enforce a comparable declaration. This divergence highlights challenges in harmonising cross-border public health measures, as emphasised by the port health personnel in Aruk, Indonesia: "*There is no mutual understanding of whether our examinations are the same as theirs. Here, we have GCDH, the Ground Crossing Declaration of Health, which requires all incoming vehicles to report the health status of the person they are transporting, whether carrying sick people, corpses, or medicines*."

In contrast with Indonesia's requirement for formal health declarations, the Malaysian authorities maintain that such declarations or reports are unnecessary if individuals crossing the border are not found to carry communicable diseases. As stated by port health personnel in Biawak, Malaysia: "*I do not think there is an issue if*

they want to enter for treatment because not all treatment is related to communicable diseases. We are more of it. They just entered; when they have a necessity, they can enter and announce that they want to take medicine."

The absence of a unified and enforceable framework can hinder effective cross-border collaboration and accentuate the urgent need for both countries to establish mutually agreed-upon standards. This ensures effective cross-border disease control, as well as consistent enforcement to prevent potential conflicts.

DISCUSSION

Access to healthcare has been defined as the suitability of services to the individual's health needs (Núñez et al., 2021). This perspective evolves and reflects a shift in scholarly understanding, from viewing access to healthcare as a structural form to viewing it as an interactive experience between people and the healthcare system.

In this study, such dynamic view of healthcare access is essential to understand how individuals navigate and negotiate cross-border healthcare access under complex social and institutional conditions. While no formal cross-border healthcare policies currently target the Sarawak–West Kalimantan border region, the identified three key characteristics of Malaysia's and Indonesia's healthcare policies in this study offered transferrable insights that can inform strategies to address their persistent accessibility challenges.

Cross-Border Healthcare Mobility

Cross-border healthcare mobility in the Sarawak–West Kalimantan border region illustrates the complex interplay between formal policies, local practices, and social networks. Findings revealed that access to healthcare is not determined solely by national regulations but by how policies are interpreted, negotiated, and adapted in practice.

Malaysia's open-door policy enables Indonesian residents to access medical treatment beyond their local healthcare services: "*The Ministry of Health has no closed-door policy*." However, unlike certain European countries where predefined pathways and standardised response criteria are established for healthcare personnel to facilitate coordinated cross-border interventions (Rodríguez et al., 2025), Malaysia's approach does not institutionalise cross-border patient mobility through formalised legal arrangement, highlighting the gap between policy openness and institutional formalisation in cross-border healthcare access governance.

Beyond formal policy, cross-border medical procedures demonstrate how adaptive practices fill gaps in institutional arrangement. Ambulance relays at neutral zones, for instance, ensure continuity of care when formal bilateral agreements are absent: "*They will switch the ambulance in the neutral zone*." Such improvisation highlights the flexibility inherent in border healthcare systems, where trust and coordination among local actors compensate for regulatory limitations. However, the reliance on informal mechanisms exposes these arrangement initiatives to fragility, as changes in personnel, resources, or regulations can disrupt service delivery.

Social cohesion among border communities further enhances healthcare accessibility, particularly during emergencies. Their similar ethnical backgrounds facilitate rapid responses from local healthcare services: "*The doctor took good care of him, just as the family here is being taken care of*." These close-knit networks suggest that cross-border access to healthcare relies as much on social embeddedness as on policy frameworks.

Agreements between communities, such as in the Serikin–Jagoi Babang case, exemplify both opportunities and inherent constraints of formalised cross-border cooperation. While these arrangement

initiatives enable direct operational access— "*We also had a meeting here, so our ambulance could enter Bau and Kuching*"—their success is reliant on strict adherence to the agreement: "*After a while, we are no longer permitted as we no longer wear official clothes. That is our fault, our mistake*." Therefore, sustaining cross-border healthcare cooperations requires continuous oversight and the active engagement of local communities to ensure compliance and operational resilience.

The distinction between international passports and cross-border passes further illustrates governance trade-offs in border healthcare. Both countries maintain a Border Crossing Agreement (BCA), enabling border communities to obtain cross-border passes (Yanti & Muawanah, 2020). Both Malaysian and Indonesian governments officially recognise these passes as valid travel documents. While the cross-border pass was originally designed to facilitate trade, it also plays an indirect role of improving access to healthcare for residents along the Sarawak–West Kalimantan border. Cross-border passes reduce bureaucratic barriers, offering affordability, speed, and convenience, as residents mentioned: "*Stamped, but easy to make*." Their simplicity poses security challenges, as border guards worry about unauthorised entry: "*Perhaps one of the reasons for the pass being removed is to curb or prevent unauthorised entry*." This tension highlights a delicate balance between facilitating convenient access and maintaining regulatory control, revealing a fundamental governance dilemma in border regions.

Localised arrangement, such as allowing residents to cross borders with identity cards, rather than passports, reflects adaptive governance that is responsive to geographic and social realities. Such flexibility underscores that effective healthcare access emerges not from rigid policy enforcement but from the negotiated interaction between formal rules, enforcement discretion, and community practices. Although some challenges persist, such arrangement reflects the political will of both nations in upholding the customary right of border communities, a right rooted in generations of cross-border mobility predating the formation of modern state boundaries (Raharjo & Idris, 2025). Therefore, this right should be preserved.

Together, this study's findings highlighted the hybrid nature of cross-border healthcare mobility, where institutional frameworks and community practice converge. Open-door policies and cross-border passes establish structural accessibility, while informal procedures, close-knit relationships, and localised adaptation ensure operational effectiveness. At the same time, security concerns and procedural compliance create constraints that require continuous negotiation and formalised agreement.

Rural Healthcare Delivery

Healthcare delivery in rural areas often suffers from insufficient funding, outdated or inadequate equipment, limited infrastructure, and a shortage of health personnel—factors that are critical for ensuring the provision of high-quality healthcare services (Menona Jacob, 2022). This study revealed that Indonesia and Malaysia have adopted markedly different strategies to address these systemic gaps. These differences become visible across the scopes of outreach programmes, healthcare personnel assignment, and financing system. Rather than operate in isolation, these scopes reinforce one another and reflect broader questions of government capacity and policy inclusivity.

From a government capacity perspective, the institutionalisation of outreach programmes is a critical indicator of whether the government can extend services consistently across its territory. Malaysia has formalised the flying doctor service as a government-supported programme, ensuring systematic coverage in remote regions (Koshy et al., 2013):

"*From the government hospitals. No charge, free medicine*." In contrast, Indonesia continues to rely on fragmented initiatives. While mission-based services operate in certain areas (Sulaksono et al., 2018), the government relies heavily on its national army to reach communities in rural areas (Buhroni & Albertus, 2022): "*Every year, in each battalion, logistical support in the form of medicines has been prepared*." Indonesia's strategy demonstrates cost-effective outreach programmes but lacks long-term sustainability, as it depends on military, rather than the health sector.

In terms of policy inclusivity, Malaysia's General Practitioner-centred model illustrates how trust in primary care providers can expand effective coverage under resource constraints. Malaysia emphasises government-funded public clinics (Lim et al., 2017), where General Practitioners play a central role in treating common illnesses, maintaining community health, and functioning as gatekeepers to specialist care (Jamal et al., 2023): "*Here, everything is done by general practitioners*." In contrast, procedures employed by the National Health Insurance scheme in Indonesia have restricted the General Practitioner's professional autonomy and authority (Syah, 2019). This structural constraint is compounded by troubling accounts from patients, who describe experiences of neglect— "*If poor people like us are, they will let us sit on the floor, if you want to die, then die*"—and arrogance— "*Even though I brought this referral, they told me to go home*". Such testimonies resonated with previous literature, which highlighted the restrained General Practitioner's patient-centred practices in Indonesia (Ekawati & Claramita, 2021).

The financing domain further highlighted how policy inclusivity shapes access. Indonesia's BPJS embodies an aspiration towards universal health coverage by reducing out-of-pocket costs (Agustina et al., 2019). Medical personnel affirmed its value: "*It is better than paying a lot of money out of pocket when they are sick*." However, bureaucratic requirements, such as bank accounts— "*The only bank in Paloh is the West Kalimantan Bank. They must go to Sambas*"—and rigid referrals— "*We cannot cut from here*"—function as hidden barriers, excluding the very populations that the scheme was intended to include. Malaysia's subsidy-based model achieves affordability and simplicity but only for citizens: "*Government hospital service has two fees, a citizen fee and a foreigner fee*." This creates sharp boundaries of inclusion, illustrating how universality is contingent on legal status rather than need.

Synthesising these findings, two distinct rationalities emerged. Malaysia represents a model of bounded inclusion, where strong state capacity institutionalises outreach programmes, subsidises services, and invests trust in primary care but restricts these benefits to citizens. Indonesia embodies a model of aspirational inclusivity, yet bureaucratic hurdles and personnel mistrust erode effective coverage. Both cases in this study highlighted that rural healthcare delivery requires both capacity and inclusivity; without both, coverage remains partial.

Public Health Procedures at the Official Border Checkpoints

Ground crossing entry points are pivotal yet highly vulnerable nodes in national health security systems. Their complex operational settings, coupled with infrastructural constraints, make them prime risk zones for lapses in epidemic prevention (Sami & Chun, 2024). International public health measures to control communicable diseases and established protocols for the transport of corpses and human remains have been adhered to in Malaysia's and Indonesia's official border checkpoints. However, these measures are weakened by divergent interpretations of procedural requirements and differences in perceived institutional mandates. For instance, port health

personnel at Lubok Antu, Malaysia, emphasised strict compliance: "*The issuance of permits and documentation of sealed coffins is necessary*." In contrast, one of the port health personnel in Biawak, Malaysia, admitted to a lighter approach: "*We take information and snap pictures, that is all*."

Divergent interpretations generate tensions with their Indonesian counterparts, as an officer in Aruk stated, "*Most often, our problem is undocumented corpses. It is a headache here*." Although these issues are raised repeatedly at the Sosek Malindo Forum, participants noted that the meetings produce minimal change: "*They say yes but still let them through*." This gap between dialogue and enforcement aligned with the existing literature, which observed sectoral fragmentation of border-related institutions (Darajati et al., 2023). Divergences are not merely administrative irregularities; they represent systemic failures in mutual role recognition (Adrot et al., 2018).

A similar divergence emerged in disease surveillance. Both sides conduct health screenings, but the scope and formality differ. Indonesian officers highlighted this issue: "*There is no mutual understanding of whether our examinations are the same as theirs. Here, we have GCDH, the Ground Crossing Declaration of Health*." In contrast, Malaysian personnel appeared to downplay the necessity of such declaration: "*I do not think there is an issue if they want to enter for treatment because not all treatment is related to communicable diseases. We are more of it*." These divergent institutional judgments revealed how even routine border health measures are filtered through competing perceptions of mandate and responsibility. Previous studies highlighted that the lack of harmonisation may directly slow epidemic detection, as critical information is not transmitted promptly or acted upon in a coordinated manner (Adrot et al., 2018).

Taken together, Indonesia and Malaysia's bilateral arrangement demonstrate that structured cross-border governance is both possible and sustainable. Under the revised 1984 BCA, the General Border Committee (GBC) was established to address matters of border security. In 1985, the GBC initiated the development of the Indonesia–Malaysia Socioeconomic Committee (Sosek Malindo), tasked with addressing economic and social issues in the border region. Sosek Malindo Forum's primary objective is to foster collaborative development initiatives that benefit both nations, thereby promoting stability, prosperity, and cooperation along the shared border (Fauzan et al., 2024).

The long-standing cooperation between Indonesia and Malaysia illustrates how negotiated accords can address shared border concerns. However, these mechanisms have remained primarily oriented towards trade, security, and social interaction without extending access to healthcare. This underscores a critical policy gap: although bilateral instruments can effectively coordinate cross-border activities, they have yet to be leveraged to address the healthcare needs of border populations.

CONCLUSION

This study revealed that healthcare access along the Sarawak–West Kalimantan border is shaped by a complex interplay of dynamic mobility patterns, divergent national policies, and entrenched systemic barriers. While flexible mobility arrangement, diverse rural healthcare strategies, and varied public health protocols demonstrate bilateral cooperation, these initiatives also expose inconsistencies that obstruct equitable access. These include reliance on informal cross-border practices, uneven rural healthcare provision between Malaysia and Indonesia, and divergent interpretations of procedures at official border checkpoints. Such inconsistencies underscore that access depends not only on formal, written policies but also on unwritten, locally adapted

practices that communities rely on to navigate structural gaps.

Although bilateral communication has been established, this study found that the mechanism functions inefficiently, as several issues raised have remained unresolved. This limited effectiveness reflects the lack of enforceability and follow-through in the current arrangement. Therefore, bilateral communication should be elevated into a binding cross-border standard operating procedure endorsed by both governments, encompassing emergency mobility, disease surveillance, and referral systems, complemented by active community involvement. Strengthening these mechanisms would transform cross-border healthcare from an informal, ad hoc practice into an institutionalised framework that ensures equitable and continuous care for border communities.

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