

Increasing Indonesia-Timor Leste Borders Diplomacy through Community-Based Health Security

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ABSTRACT

This research focuses on the growing importance of health security in Indonesia-Timor Leste border diplomacy after the Covid-19 pandemic. This study uses qualitative methods to reveal a paradigm shift from traditional security to non-traditional security, especially health. The data comes from observations and documents collected in border areas related to health security in response to cross-border threats in both countries. The community-based health security perspective is used to analyze the expansion of health threats and the role of border diplomacy in addressing public health threats. This analysis reveals three important issues: (1) redefining the border security paradigm, (2) positioning border health security diplomacy as a collaborative mechanism, and (3) the participation of border communities in border security diplomacy. This research makes an important contribution to the development of a collaborative model of border health security diplomacy through community participation in improving health security in the border areas of the two countries. The findings offer an alternative health security policy in border diplomacy between Indonesia and Timor Leste and other border areas in Indonesia.

Keywords: *Border health security, Health diplomacy, Community empowerment, Indonesia-Timor Leste, Covid-19*

Penelitian ini berfokus pada semakin pentingnya keamanan kesehatan dalam diplomasi perbatasan Indonesia-Timor Leste pasca pandemi Covid-19. Penelitian ini menggunakan metode kualitatif untuk mengungkapkan pergeseran paradigma dari keamanan tradisional ke keamanan non-tradisional, khususnya kesehatan. Data tersebut berasal dari pengamatan dan dokumen yang dikumpulkan di daerah perbatasan terkait keamanan kesehatan dalam menanggapi ancaman lintas batas di kedua negara. Perspektif keamanan kesehatan berbasis masyarakat digunakan untuk menganalisis perluasan ancaman kesehatan dan peran diplomasi perbatasan dalam mengatasi ancaman kesehatan masyarakat. Analisis ini mengungkapkan tiga isu penting: (1) mendefinisikan kembali paradigma keamanan perbatasan, (2) memposisikan diplomasi keamanan kesehatan perbatasan sebagai mekanisme kolaboratif, dan (3) partisipasi masyarakat perbatasan dalam diplomasi keamanan perbatasan. Penelitian ini memberikan kontribusi penting bagi pengembangan model kolaboratif diplomasi keamanan kesehatan perbatasan melalui partisipasi masyarakat dalam meningkatkan keamanan kesehatan di wilayah perbatasan kedua negara. Temuan ini menawarkan alternatif kebijakan keamanan kesehatan dalam diplomasi perbatasan antara Indonesia dan Timor Leste dan daerah perbatasan lainnya di Indonesia.

Kata-kata Kunci: *Keamanan kesehatan perbatasan, diplomasi kesehatan, pemberdayaan masyarakat, Indonesia-Timor Leste, Covid-19*

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The Covid-19 pandemic has prompted a significant change in the border security paradigm between Indonesia and Timor Leste, namely the transformation from a traditional security approach to health security. The global Covid-19 crisis has exposed the limitations of conventional approaches in dealing with non-traditional threats, such as transboundary infectious diseases, forcing various countries to re-evaluate and strengthen their cooperation mechanisms, including in the border areas of the two countries (Albert, Baez, and Rutland 2021; Fontana 2022). In this context, health-based border diplomacy has emerged as a promising approach to enhancing regional resilience to future health threats (Renganathan and Matsoso 2023).

Before the pandemic, Indonesia's border policy was dominated by a conventional national security perspective, which focused on migration control, transnational crime prevention, and the protection of territorial integrity (Anuar and Raharjo 2022). These traditional security measures are primarily concerned with managing illegal immigration, preventing smuggling, and defending national sovereignty. However, the emergence of Covid-19 has revealed the limitations of this approach in overcoming non-traditional threats such as infectious diseases (Nurhasanah, Napang, and Rohman 2020; Silva and Skotnes-Brown 2023). The Covid-19 pandemic has strengthened the urgency of health security measures in border areas to prevent the spread of the virus and protect public health (Sami and Chun 2024).

Despite these positive developments, the pandemic has also exposed some weaknesses in the cross-border health security system between Indonesia and Timor Leste. Limited health infrastructure in border areas, especially in testing and intensive care facilities, has posed challenges in handling cases that require immediate medical intervention (Mangku et al. 2022). Differences in health protocols and reporting systems between the two countries make it difficult to coordinate an effective response, especially in the early phases of the pandemic (Anuar and Raharjo 2022). In addition, the sudden and prolonged border closures during the Covid-19 pandemic have significantly impacted border communities (Rocha-Jimenez et al. 2023). Communities in border areas are hampered in cross-border mobility for health and livelihood access and create complex socio-economic challenges (Lantang et al. 2024).

Post-pandemic, several structural challenges in cross-border health security governance are still unresolved. The harmonization of health policies and regulations between the two countries is still hampered by differences in national priorities and limited resources (Giarola et al. 2021). The involvement of border communities in the planning and implementing cross-border health security policies is still limited, reducing the effectiveness and sustainability of existing initiatives (Ramanzin 2016). In addition, despite increased cooperation, the integration of health information systems and early warning mechanisms between Indonesia and Timor Leste is still not optimal (Manurung et al. 2020). As a result, both countries' ability to respond rapidly to health threats in the border area is limited.

Given the persistent complexity of cross-border health security challenges faced by Indonesia and Timor Leste, this paper seeks to fill a critical gap by proposing a community-based health security model as a transformative approach to border diplomacy. While previous studies have primarily focused on government-led and policy-centered initiatives, this research explicitly emphasizes the novelty of integrating community participation into health security frameworks. By analyzing opportunities and obstacles in implementing this approach, the paper develops actionable policy recommendations aimed at harmonizing health resilience in border areas. Unlike conventional health diplomacy efforts, which often overlook the grassroots level, this study highlights the adaptive and inclusive potential of community-driven mechanisms in addressing multifaceted health, social, economic, and political dynamics (Kickbusch et al. 2021). The primary contribution lies in formulating a governance model that positions local communities not merely as beneficiaries but as active agents of border health diplomacy. This model enhances the development of a more adaptive and responsive border governance model that integrates health security into a broader security framework, enhancing regional resilience to contemporary health threats.

Literature Review

Border security and health diplomacy have received much attention across both the academic literature and popular press with so-called global health crises (the Covid-19 pandemic in particular) dominating news. The Mexico-United States border proved to be an important study, with implications calling for the

re-formulating of bilateral health diplomacy to better address the socio-economic and political challenges of the pandemic (Guerra et al. 2021). The study comes to reaffirm the need to integrate health considerations into border security policies as a tool to better manage transnational health threats (Cai et al. 2022).

A further important contribution is the work of Kickbusch et al. (2013), that suggest an overview of global health diplomacy including concepts, issues, actors and instruments. This study highlights the importance of health diplomacy in influencing global health policy and addressing transnational health challenges. In line with this, the World Health Organization (WHO) has released several reports highlighting the role of health diplomacy at the PoE in enhancing public health preparedness and response capacity (World Health Organization 2022). Research work in the field of Southeast Asia looking into health security challenge for countries, such as Indonesia and Timor Leste. Anuar and Raharjo (2022) analyse the paradigm shift in border security prompted by the Covid-19 pandemic, highlighting the move from traditional security approaches to a comprehensive health security framework. This change is crucial for tackling unconventional threats, such as infectious diseases, that transcend national boundaries.

This study operates under the theoretical framework of global health diplomacy and border security. Global health diplomacy (GHD) is the intersection between public health and international relations, where health is addressed through diplomatic negotiations and international cooperation (Kickbusch et al. 2013). GHD is a multi-level response formed by diverse actors, including (but not limited to) governments, international organizations, and civil society, to address global health threats and ensure the equal distribution of health (Lee and Smith 2011). Health safety is one of the key concepts in GHD. It is the concept of protecting the community from health threats. Another key concept is health diplomacy, which refers to the use of diplomatic tools to achieve health objectives. Health security as a part of national and regional security is significant as it can be dealt with the threat of infectious diseases, bioterrorism, and other health emergencies (Khan et al. 2022). In contrast, health diplomacy is concerned with the negotiation process that reflects global health policy and fosters international cooperation (Almeida 2020; Ruckert et al. 2022).

Border security has traditionally been associated with controlling

migration and preventing transnational crime, but it will now also have to include health security. This evolution is motivated by the understanding that health threats can have security consequences. Such evolution obligates a much more integrated approach to border management (Reuben, Kigen, and Stephen 2022). The inclusion of health security in border security policies means that health screening, quarantining, and cross-border health setups are being implemented (Sami and Chun 2024).

Despite abundant literature on both border security and health diplomacy, some gaps persist. One area in which we have fallen short: there is a great need for quantitative data on the effectiveness of health security measures when introduced at border crossings themselves (Grépin, Aston, and Burns 2023). Although the theoretical framework and policy recommendations are well documented, there is surprisingly limited research on the practical implementation and outcomes of these measures (Gituanja 2013). This gap underlines the need for more field-based studies evaluating the effects of health security protocols on border management and public health outcomes. Another gap is the insufficient attention to the role of community participation in health security efforts. Most studies highlight the role of government and international cooperation, but neglect the role played by local communities in border areas in managing health threats (Baatz et al. 2022; Kay and Williams 2009). To ensure sustainability and effectiveness, health security efforts must rely on the participation of border communities.

In addition, there is a need for more research on the harmonization of health protocols and reporting systems between neighboring countries. Health policy and practice differences can hinder effective cross-border cooperation, as seen in the early stages of the Covid-19 pandemic (Ferhani and Rushton 2020; Filip et al. 2022). Addressing these differences requires a coordinated approach to policy development and implementation, which is currently underexplored in the literature.

Finally, the impact of socio-economic factors on border health security still receives little attention. The Covid-19 pandemic has shown that health threats can exacerbate existing socio-economic inequalities, especially in border areas (Lantang et al. 2024). Understanding the interaction between health security and socio-economic conditions is critical to developing a comprehensive and inclusive border security policy. While significant progress has

been made in understanding the intersection of border security and health diplomacy, this study aims to address these gaps. This study focuses on the empirical assessment of health security measures, the role of community participation, the harmonization of health protocols, and the socio-economic dimension of health security in the border area between Indonesia and Timor Leste.

Method

From the perspective of this research, the qualitative method is analytical such as interpreting and discovering social phenomena based on textual data collected from academic literature and policy documents (Creswell and Poth 2017). This is an interpretive paradigm, which sees social reality as dynamic and context-dependent, emerging from processes and meanings subjectively constructed in social systems (Pham 2018). Data collection for this study was done through a systematic review of academic articles and policy documents that discuss the Indonesia-Timor Leste borders health security diplomacy post-COVID-19 pandemic. To achieve this, the review's priority was to select peer-reviewed journal articles from the last five years to ensure the maintenance of contemporary and relevant perspectives (Snyder 2019). By adopting a qualitative approach, this study can effectively theorize the role of Indonesia in using health diplomacy to improve border health security, especially with Timor Leste. This approach outlines the interactions of health governance, community engagement, and cross-border collaboration, eliciting in-depth insights on adaptable measures for addressing health security concerns in border zones in both countries, immediate and long-term.

Transformation of the Border Security Paradigm

The Covid-19 pandemic Scenario has led to a paradigm shift in border security between the Republic of Indonesia and its neighboring countries, especially the Republic of Timor Leste. Historically, border security has concerned itself with managing migration, combating transnational crime, and safeguarding territorial sovereignty. What the pandemic has also revealed is a need to consider health security as part of wider, cross-sectoral frameworks, and there has been a growing recognition of the need

to focus not just on national security, but also on health security.

Before the pandemic, Indonesia and Timor Leste's border policy was driven primarily by conventional security concerns. These challenges encompass illegal immigration, smuggling prevention, and national sovereignty protection (Anuar and Raharjo 2022). However, the rise of Covid-19 unveils the inadequacies of this conventional strategy in addressing the imperative issues of non-traditional security, specifically that of infectious diseases. The pandemic underscores the importance of robust health security measures to prevent the spread of the virus in border regions and protect public health (Grépin, Aston, and Burns 2023; Sami and Chun 2024; World Health Organization 2022).

Each country has a health-focused approach to border security. This transfer includes conducting well-being screening procedures, establishing quarantine facilities, and cross-border well-being initiatives. The integrated health checkpoint in Motaain in East Nusa Tenggara, Indonesia and Batugade in Timor Leste is an example of this effort (Jong and Pereira 2021). These checkpoints enable health screenings and help manage whether travelers satisfy health-based conditions of crossing borders (World Health Organization 2022).

This policy according to Indonesia and Timor Leste border security policies has a macro impact that is still negligible until October 2023. In particular, a paradigm shift focusing more on public health preparedness and response capacity at Points of Entry (PoE) has been marked as one of the key changes. To assess and scale up this capacity, WHO worked with Ministries of Health in both countries to detect and respond to health threats in border crossings (World Health Organization 2022). The joint assessments and exercises at border points revealed strengths and challenges of the existing system (World Health Organization 2023).

This exercise has underscored the need for coordination between health authorities and border security agencies to responding effectively to public health risks. In the post-pandemic era, a joint assessment in the border areas of Motaain and Batugade is focused on the monitoring of new viruses, specimen collection, field investigations, and coordination of international contact tracing (World Health Organization 2022). With the 2024 Joint External Evaluation highlighting Timor Leste's resolve to improve its public health emergency capabilities. The assessment

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recognized progress made to prevent, detect, and respond to health threats, with a particular focus on the importance of cross-border collaboration with Indonesia (World Health Organization 2024b). These actions are consistent with the broader transition of border security architectures towards health security.

The pandemic has also prompted new policies to boost health resilience in border regions. Some of these policies are the establishment of health corridors, enabling the rapid transfer of health workers and resources during emergencies, and the harmonization of health protocols between the two countries. For example, the measures will guarantee timely and coordinated action in response to future health emergencies, as well as strengthen PHC and regional healthcare security (World Health Organization 2022). The ASEAN One Health initiative, launched 2024, a regional response towards a One Health approach integrating human, animal and environmental health. This multisectoral framework fosters the transformation of border security policies which, in turn, will allow Indonesia and Timor-Leste to improve their health governance at borders (ASEAN Secretariat 2024; Zhou et al. 2024).

Despite these advances, there are still challenges. Weak health infrastructure in border areas, mainly in terms of intensive testing and care provision, is a major challenge for health security. Furthermore, coordination during the pandemic has been impacted by health protocol and health reporting differences between Indonesia and Timor Leste (Anuar and Raharjo 2022). The pandemic has also provided opportunities to bolster cross-border health security. More cooperation between Indonesia and Timor Leste has fostered a regionally coordinated response approach to health threats Timor Leste and Indonesia share a long border but their bilateral relations and support a coordinated approach to public health, although separations to health governance systems but closer the environment of health threats (e.g. SARS, H1N1, and tuberculosis) and biological threats that can spread across the two countries. These encompass patient referral mechanisms; cross-border engagement; joint training programs for health workers; joint health information systems; community engagement in border health security projects (World Health Organization 2022).

Covid-19 pandemic confirmed a major shift in border security paradigm between Indonesia and Timor Leste. From safety in the conventional sense to health security in the broader sense of

the term. This change in paradigm represents changing nature of global threats and border governance resiliency. By embedding health issues into their border security policies, the two nations are better positioned to bolster public health and regional resilience to future health crisis.

Development of Border Health Security Diplomacy

The need for strong health security measures at international borders has been highlighted once more as there has been the emergence of the Covid-19 pandemic. Indonesia and Timor Leste – Bilaterally, Indonesia and Timor Leste have markedly increased joint efforts to control health threats in their common borders (Lantang et al. 2024). These efforts are crucial to stopping infectious disease spread and protecting the health and safety of border communities.

This includes jointly assessing and strengthening capacities for public health preparedness and response at border posts. These efforts have been aided by the WHO that performed a joint assessment at the Motaain cross-border post in Indonesia and Batugade in Timor Leste from August 29–September 1, 2023 (Asian Development Bank 2019). This shift is intended to pinpoint strengths and difficulties in public health preparedness and subsequently formulate strategies to enhance health security at these entry points (World Health Organization 2022).

The joint assessment's activities include monitoring for emergence of new viruses, collecting samples, field investigation, and coordination of international contact tracing. The goal of these activities is to improve the ability of both countries to detect and respond effectively to health threats. Coordination between health authorities and border security agencies has been emphasized as a key to effectively manage public health risks and this is reiterated in the assessment (World Health Organization 2022). One notable achievement from collaborative efforts between Indonesia and Timor Leste is the establishment of integrated health checkpoints at the most important border crossings (World Health Organization 2019). There are health checks, quarantine and emergency medical treatment facilities at these checkpoints. They are a vital function, to help control infectious disease spread, by verifying that travelers are meeting health requirements prior to entering borders.

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Integrated health checkpoints that exist in Motaain and Batugade are flagship of this action. These checkpoints ensure health screenings are conducted for symptoms of infectious diseases, quarantine facilities for suspected cases, and medical care when needed directly on-site for travelers. The checkpoints are run by trained healthcare professionals who closely collaborate with the border security officials to manage any health risk at the border (World Health Organization 2022). International organizations such as the WHO and the IOM have backed the creation of such checkpoints. These organizations have offered technical assistance and training and resources to help expand the capacity of checkpoints to respond to health threats. Integrated health checkpoints have vastly strengthened the capacity of both countries to stop the control of infectious diseases and promote public health at the border (World Health Organization 2022).

Besides the agreement on integrated health checkpoint in Indonesia, Timor Leste and Indonesia also implements joint training of health, and border security officers. We therefore have these programs to train the border health security personnel. A notable case is the joint training organized by Indonesian and Timor Leste Ministries of Health with support from the WHO. The program trains health workers in disease surveillance, outbreak response, and emergency medical care. The training consisted of hands-on practice, simulations, and workshops, which are intended to enhance participants' capacity to detect and respond to threats to health (World Health Organization 2022).

Indonesia and Timor Leste have established a joint initiative in developing border health security diplomacy between themselves, allowing for an improvement in public health preparedness and response capacity on their border. In May 2024, Indonesian Ministry of Health (MoH), with the support of the Lakespra Saryanto (Air Force Health Service/Aeromedical Command) and other relevant sectors, conducted a simulation exercise at the Motaain Border Post in Belu Regency, East Nusa Tenggara (NTT). This exercise was conducted with a specific focus on the management of potential outbreak diseases at the Indonesia-Timor-Leste border, showcasing not only both countries' priorities, but their commitment to collectively addressing health threats (Nong 2024).

This cooperation has been a part of Indonesia's contribution to Timor-Leste health development since 2019. In Dili, both

countries held the Second Cross-Border Initiative Collaboration Meeting on prevention and control of communicable diseases along the border between the two countries. The meetings promoted information and best practices exchanges, and fortified health security framework between the two countries (Ramadhan 2019). While access is limited, those healthcare facilities are a major effort from both nations, which highlights the necessity to continue investing and facilitating well community needs in health diplomacy programs (Farisi and Rusiana 2023). These initiatives underscore the need for international collaboration in tackling global health challenges and protecting the health and safety of cross-border communities.

Empowerment of Border Communities

Community participation is very useful for enhancing health security, particularly in border areas of health services access. Community engagement has played an important role in the health sector in Indonesia and Timor Leste in tackling health problems and improving public health outcomes. It is also important to involve populations and local communities in health security-related strategies.

In Timor Leste, civil society organizations and voluntary public health workers have been extensively engaged in health security. These organizations actively engage with government stakeholders to raise awareness and promote fulfillment on health rights (Butterworth 2022). As a result, the USAID IDIQ Integrated Health System Local Health System Sustainability (LHSS) Project has prioritized community engagement as a critical element for both strengthening health systems and achieving equitable access to timely and quality essential health services (USAID 2022).

CBM programs are particularly effective for improving accountability and increasing health services access. Through the Community-based initiative, the CBM Health program was organized by the Ministry of Health (*Kementerian Kesehatan*) in Timor Leste, which focuses on the involvement of the community in planning together, dialogue and action. The program enables communities to monitor health services delivery, spot problems, and advocate for improvements (Sousa 2023). Involvement by communities in health security efforts will aid in delivering health services that are tailored to their needs and priorities. Many health

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programs in society in both Indonesia and Timor Leste have proven the role of community in health security. For example, in Timor Leste there is the Village Health Assembly (VHA). The assembly aims to gather community members, health workers, and local leaders to discuss health issues and come up with action plans. VHAs use data to support conversations, set priorities, and track their work (USAID 2023).

In Indonesia, the role of public health volunteers in the border area becomes an important instrument in carrying out public health programs in the border area. Most of the time, local health authorities or NGOs train these volunteers. They held health education sessions, distributed health supplies and supported vaccination campaigns. These professionals play a pivotal role in educating people on health issues and enhancing health outcomes in hard-to-reach and marginalized communities (Gituanja 2013). These diplomatic health efforts have been led by local authorities. The Governor of NTT, Viktor Bungtilu Laiskodat, echoed the same, underlining the strategic position of the border area and the need for building comprehensive infrastructure, including health facilities, in border communities to establish their welfare. These initiatives are deemed essential to turn border areas into gateways of prosperity and security (Woso, R. 2023).

The chief of NTT Regional Border Management Agency (*Badan Pengelola Perbatasan Daerah/BPPD*), Petrus Seran Tahuk, also emphasizes that three basic programs are focused on by borders, namely 1) basic economic infrastructure; 2) education; 3) health services for the border community. These interventions also intend to pave the way for sustained health security by ensuring that border communities are adequately supported (Rebon 2022). Local leaders have noted the importance of a participatory border governance process. Local communities should be engaged in decision-making processes to ensure that development plans are culturally appropriate and effectively address the unique challenges faced by border residents.

This is evident as the Indonesian government has acknowledged the urgent need for better access to healthcare for those residing in border areas, resulting in a focused effort to construct and develop *Pusat Kesehatan Masyarakat (Puskesmas)*. In the delivery of essential health services and promotion of well-being in remote areas of Indonesia, *Puskesmas* as primary health care providers are very important. As an example, two *Puskesmas* has

established in 2023 that located in Amfoang Utara and Amfoang Timur subdistrict, Kupang Regency, which directly borders with Timor-Leste (Jahang 2023). In the meantime, the *Puskesmas Wini* at the border is an essential health facility within the community in Timor Tengah Utara Regency. It is situated about two kilometers from the Wini Border Crossing Post and has been the primary health facility (RSUD) for the local populace for decades (Farisi and Rusiana 2023). However, as the population grows and changes, so too does the need for expanded health care services. These facilities are meant to deliver all-inclusive medical services for underserved care populations which can improve the community health status.

For Timor Leste, another successful initiative is an integrated health service program called *Servisu Integradu Saúde Comunitária* (SISCa-*Sistem Kesehatan Keluarga* or Family Health System) provides integrated health services at the community level, even covering the most remotes of communities, so that even isolated communities can access the very basic health care—primarily preventative. This includes regular checkups, vaccinations and health education activities through mobile health teams. SISCa has successfully promoted maternal and children health; decreased incident cases of infectious diseases; and facilitated healthy behavior (World Health Organization 2024a). Beyond these efforts, USAID's Health System Sustainability Activities have facilitated the establishment of Village Health Councils in nine additional villages in the municipalities of Manufahi and Covalima in Timor Leste (USAID 2022).

The basic components of the expansion are to increase service utilization, to enable them to take control of their health and to get the community to participate in solving health problems. To enhance health outcomes and guarantee the longevity of health interventions, border communities should be empowered and actively engaged in health security programs (Byrne and Nichol 2020). In Indonesia and Timor Leste, community-based health initiatives have shown that local community people can and do play important roles in health planning, implementation, and monitoring. The health systems constructed in border areas during such initiatives will lay the foundation for health security through the inclusion of communities.

Structural Challenges

A serious structural challenge in cross-border health security between Indonesia and Timor Leste has been discovered through the Covid-19 pandemic. Weak infrastructure at PoE (points of entry) such as Motaain and Batugade border crossings is one of the major issues. These regions often do not have the infrastructure and resource necessary to respond adequately to health threats, thus becoming particularly susceptible to endemic outbreaks of infectious disease (World Health Organization 2022). Regent of Belu, Indonesia, dr. Agustinus Taolin, said, “This joint activity enhances coordination and collaboration between PoE in Indonesia and Timor-Leste to strengthen cross-border capacity from health threats. This helps us understand PoE capacity and coordination mechanisms and address public health and resource needs” (World Health Organization 2023). The coordination mechanism between the two countries works from time to time but sometimes delays and/or lack the response to health emergencies.

Timor Leste and Indonesia have limitations in their health infrastructure, in particular in rural and border areas. Past conflict in Timor Leste has severely impacted the health system, with poorly developed health facilities and a lack of trained health professionals (Price et al. 2016). Similarly, limited access to health services, inadequate medical supplies, and a lack of trained personnel are common in Indonesia’s border regions (Arifin 2022). These constraints make it difficult to offer timely and effective health care, particularly in emergencies.

Border communities face the socio-economic cost of health security challenges. These are often poor areas with low access to basic services, further compounding the impact of the health crisis. Border closures implemented during the Covid-19 pandemic, for instance, have had significant repercussions on trade and mobility, impacting the economic well-being of those individuals dependent on cross-border activities for their livelihoods (Capello, Caragliu, and Panzera 2023).

Moreover, the absence of accessible and effective health services has amplified the vulnerability of these communities to health threats, consequently affecting their socio-economic well-being (Zhang et al. 2020). The residents near the Motamasin Border Crossing Post, Malaka Regency, experience geographical barriers and accessibility in accessing health services. The nearest Puskesmas is approximately 10 kilometers away, with deplorable

access roads that are filled with potholes and are often impassable due to landslides. Such conditions are detrimental to the provision of the local population timely medical assistance (Ayu and Ditta 2024). There are few healthcare facilities in this region (this is called Mannapollaguda and Habshiguda) making it difficult for the population to access healthcare services.

Border areas must enhance health resilience by dengue health infrastructures and coordination networking. This involves investing in healthcare infrastructure, training healthcare workers, and ensuring the availability of medical supplies. Moreover, integrated health checkpoints and joint hiring programs will improve the ability to respond to health threats (Gooding et al. 2022). Cross-border health security will be more effective with harmonization of health policies and regulations between two countries. This requires harmonizing health protocols, standardizing reporting systems, and setting up joint surveillance and response mechanisms. Examples of how joint efforts can be aligned include joint assessments and dialogue on policies to harmonize and ensure a coordinated response to health emergencies (World Health Organization 2022).

Health security initiatives must involve the community. Engaging community members in the planning, implementation, and monitoring will ensure that proposed interventions are culturally relevant and sustainable (Durrance-Bagale et al. 2022). Community participation in health programs has been observed to positively affect health outcomes, exemplified by programs like the Village Health Council in Timor Leste and public health volunteer initiatives, for example *Puskemas*, in Indonesia. Community involvement can enhance the actionability of health security measures and help build resilience at the border.

Conclusion

The study focused on the paradigm shift of border security in Indonesia and Timor Leste from the traditional way of security to include health security. Thus, this research, by positioning people (local communities) as active agents, who drive the implementation of the border security pillar of the diplomatic health agenda, identifies the residents as the ones whom the border diplomacy attempts to service, rather than treating them as passive beneficiaries. It shows how a participatory approach to bottom-up

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health and foreign policy publicly can promote health diplomacy, a unlike top-down Government initiatives which have dominated the field. Community-based approaches focusing on health initiatives like Village Health Councils and public health volunteer programs (*Puskesmas*) can aid in resolving health issues and building a resilient community in border areas. The findings also highlight the significance of collaborative strategies, including integrated health checkpoints and joint training initiatives, that have immensely bolstered the preparedness and response capacity for public health. But while progress is being made, there are significant barriers to overcome, including inadequate health infrastructure, coordination gaps, and socioeconomic inequalities. Solving these demands coordinated health policies, more investment in the infrastructure and ongoing community engagement. It thus serves as another piece in constructing a new paradigm of global governance where health security is embedded in other security paradigms. This model provides a sustainable and inclusive framework for tackling modern-day health risks by empowering local communities and encouraging global collaboration, building resilience in both border regions and beyond communities.

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