

**Contributions and Challenges of Village Health Volunteers (VHVs) in Thailand's COVID-19 Response****Jureerat Kijsonporn**

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Email: [pricechow@gmail.com](mailto:pricechow@gmail.com), ORCID ID: 0000-0002-3753-9224**Abstract**

The COVID-19 pandemic presented unparalleled challenges to healthcare systems globally, especially in resource-constrained environments. Village Health Volunteers (VHVs) have become essential frontline workers in Thailand, connecting formal healthcare institutions with communities. Nonetheless, their increased duties underscored significant problems that affected their efficacy.

To study the contributions, challenges, and adaptive strategies of Village Health Volunteers (VHVs) in urban and rural Thailand during the COVID-19 pandemic. This study employed qualitative descriptive study, in-depth interviews with 10 VHVs from urban and rural areas of health region 4 in Thailand by conducting 20 semi-structured questions, analyzing the data, and synthesizing the findings by thematic content analysis, between October 2023 to March 2024.

VHVs were crucial in managing COVID-19 through health education, case screening, and assistance for confined individuals. Their proficiency in utilizing communication tools, such as the Line app, enhanced community participation, particularly in metropolitan environments. Nonetheless, considerable obstacles arose, such as insufficient training, irregular access to personal protective equipment (PPE), and psychological stress. Urban VHVs encountered community skepticism and restricted physical access, whereas rural VHVs had enhanced local trust but struggled with infrastructural limitations.

VHVs made substantial contributions to Thailand's COVID-19 response, especially in marginalized groups, although encountered considerable hurdles. Mitigating training deficiencies, guaranteeing uniform resource distribution, and offering mental health assistance are essential for enhancing the capacity of VHVs to address future health emergencies.

**Keywords:** COVID-19, Thailand, Village Health Volunteer, Pandemic Response, Urban and Rural Healthcare, Human Health.**Introduction**

The global COVID-19 epidemic has tested healthcare systems globally, particularly in nations with constrained resources and extensive rural demographics. In Thailand, Village Health Volunteers (VHVs) were an essential component of the nation's pandemic response, particularly in rural and neglected regions. As frontline workers, VHVs executed crucial public health duties, yet their augmented obligations during the crisis exposed considerable problems. Comprehending these issues is essential for enhancing the capabilities of VHVs, both in Thailand and in other nations with analogous healthcare frameworks.

Background of VHVs in Thailand: VHVs, known as "อาสา" in Thai, have long been a cornerstone of Thailand's community-based healthcare system. They act as liaisons between communities and formal healthcare providers, delivering basic healthcare services and health education. According to the Ministry of Public Health (2020), VHVs are tasked with improving public health and disseminating essential health information. However, the COVID-19 pandemic dramatically increased their responsibilities as they were required to monitor public health more closely, conduct surveillance, and manage COVID-19 cases within their communities. The COVID-19 pandemic intensified the obligations of VHVs, leading to a rapid transformation of their conventional functions into tasks centered on the epidemic. Somboon and Tharawadee (2021) emphasize that VHVs are essential in health screening, contact tracking, and assisting patients in home quarantine. The abrupt escalation in workload presented several obstacles for VHVs, such as addressing community disinformation, implementing quarantine protocols, and coping with the emotional impact of the epidemic. The supply of crucial personal protection equipment (PPE) for VHVs was frequently irregular. The World Health Organization (2020) emphasized the necessity of supplying sufficient personal protective equipment to community health workers to guarantee their safety and the efficacy of their treatments. Nguyen et al. (2021) observed that in certain regions, delays in reporting COVID-19 cases and obtaining medical supplies led to deficiencies in care, especially in remote areas with inadequate healthcare infrastructure. Kusuma et al. (2020) emphasized that community health professionals require ongoing assistance and resources to sustain their efficacy during public health emergencies. VHVs sometimes depended on local contributions or utilized personal finances to get goods, exacerbating the financial burden of their challenging responsibilities.

In a study conducted by Tayade and Agrawal (2022), Village Health Volunteers (VHVs) articulated significant apprehensions over their health stemming from the potential danger of infection when attending to COVID-19 patients. A significant number perceived insufficient protection, particularly in the initial phases of the epidemic. VHVs frequently experience significant mental and emotional stress due to their obligations. They experienced persistent pressure to adhere to public health recommendations while simultaneously concerning themselves with their well-being. The Centers for Disease Control and Prevention (2020) highlighted analogous challenges faced by community health workers worldwide, emphasizing the necessity for mental health assistance for VHVs.

Many VHVs encountered difficulties with the technical components of the COVID-19 response, including patient monitoring, quarantine administration, and case reporting to health authorities, due to inadequate training. The absence of readiness impeded the efficacy of Thailand's comprehensive response and imposed further pressure on VHVs. Despite the rapid mobilization of Thailand's VHVs to aid in the national pandemic response, many lacked the requisite training to effectively manage a large-scale public health catastrophe (Wider et al., 2024). The Ministry of Public Health (2020) started training for Village Health Volunteers (VHVs), although the swift proliferation of the epidemic rendered numerous volunteers inadequately equipped. Paton et al. (2020) assert that ongoing and updated training is crucial for community health workers to successfully respond to emerging health hazards (Kijsonporn et al., 2024).

Another significant issue during the pandemic was the limited coordination between VHVs and the formal healthcare system. VHVs often found themselves in a difficult position, managing community health needs while dealing with overwhelmed healthcare facilities. The World Health Organization (2020) emphasized that successful pandemic responses require strong links between community health workers and healthcare systems to ensure that critical information and resources flow smoothly. The function of Village Health Volunteers (VHVs) in Thailand throughout the COVID-19 epidemic has highlighted their significant contributions to public health as well as the challenges they faced. The epidemic revealed deficiencies in training, resource distribution, and collaboration with the official healthcare system. Addressing these concerns is crucial for enhancing the capability and efficacy of VHVs in forthcoming health crises. Consequently, researchers are eager to investigate how VHVs manoeuvred and reacted to the COVID-19 issue in both urban and rural settings.

**Objective:** To study the contributions, challenges, and adaptive strategies of Village Health Volunteers (VHVs) in urban and rural Thailand during the COVID-19 pandemic.

**Methods**

**Research Setting:** This qualitative research aims to study the contributions, challenges, and adaptive strategies of Village Health Volunteers (VHVs) in urban and rural Thailand during the COVID-19 pandemic. Field data collection was in Pathum Thani and Nonthaburi provinces of Health Region 4. The data collection period was from October 2023 to March 2024, with key informants selected by purposive random sampling followed by the inclusion criteria (Table 1) of 10 VHVs. The analysis of data from different participants at one point to identify patterns and inferences by thematic content analysis.

**Sampling and Recruitment**

**Participants and Sampling:** The target demographic comprises VHVs who have remained active during the COVID-19 pandemic and dwell in regions with confirmed virus cases. The research concentrates on volunteers from urban and rural regions in the provinces of Pathum Thani and Nonthaburi, health region 4 (Table 2). This research complies with the principles established in the Declaration of Helsinki and applicable ethical guidelines. Before initiating the study, ethical permission was secured from the Shinawatra University Ethics Committee (previously Metharath University), reference number 23/20. All participants were apprised of the study's aims, methods, possible hazards, and benefits of comprehensible language. Informed permission was acquired from all participants before data collection.

*Table 1: Inclusion Criteria of this study.*

Item	Criteria
Age	Must be 18 years or older.
Residency	Must have been residing and registered in the village where they serve for at least six months.
Literacy	Capable of reading and writing, as the survey requires comprehension and responses to written questions.
Active Role	Must have been active as a VHW during the COVID-19 pandemic.
Consent	Willingness to participate in the study, as indicated by signed informed consent.

**Data Collection:** The semi-structured interviews were conducted to gather qualitative insights into the experiences, perceptions, and practices of the VHVs. These interviews helped to identify factors influencing the measured self-efficacy and provide depth to the quantitative data. Interview questions facilitated open-ended responses to allow participants to share detailed and personal experiences, enabling a more comprehensive understanding of their roles and challenges.

**Data Collection:** The researcher collected in-depth data using 20 semi-structured open-ended questions. The researcher created a set of questions to guide the interviews comprehensively. The key questions focused on follow; how Village health volunteers (VHVs) worked with the processes and strategies when dealing with patients infected with the coronavirus 2019 (COVID-19) and non-infected individuals in the VHVs' communities during that critical pandemic period. What motivations do CHVs have for their work? How did they manage COVID-19 in their roles? What activities did they take, how did they do it, and what were the outcomes? What were the tools used in their work? What were the important tools? Who supported their work during this pandemic crisis? What did it mean for community Village health volunteers (VHVs) to work during this crisis? How did VHVs feel during working in this period, etc.? The researchers took jot notes, recordings, and transcripts to ensure consistency in data collection. To find and fix any possible problems, the researchers conducted a pilot test of the interview instructions with two participants. A summary and debrief of the subjects covered were provided at the end of each interview, which lasted roughly an hour. To find and fix any possible problems, the researchers conducted a pilot test of the interview instructions with two participants. A summary and debrief of the subjects covered were provided at the end of each interview, which lasted roughly an hour.

**Data Analysis:** Qualitative data from interviews were transcribed and subjected to content analysis using thematic coding to extract common themes and patterns (Braun, V., & Clarke, V., 2006). This methodology section provides a clear and systematic description of how the study was conducted, ensuring transparency and replicability of the research process. This study ensured trustworthiness by applying strategies to maintain credibility, dependability, confirmability, and transferability. Credibility was strengthened through member checking, pilot testing, and debriefing with participants. Dependability was achieved by using a systematic process and keeping an audit trail of decisions throughout the study. Confirmability was supported by verbatim transcripts, field notes, and reflexive practices to minimize researcher bias. Finally, transferability was enhanced by providing detailed descriptions of the research context, allowing readers to determine relevance to other settings.

**Results:** The demographic characteristics of the participating Village Health Worker (VHW) workforce, including age, education, marital status, and service focus in rural or urban settings, are presented in Table 2. The majority are female, with ages spanning from 46 to 78 years. Educational qualifications include Primary Education (two individuals), Secondary Education (two individuals), Vocational Diploma (four individuals), and a bachelor's degree (three individuals). Marital status is categorized as Married (seven individuals) and Single (three individuals). Experience as a VHW ranges from 2 to 20 years, with geographic distribution encompassing both rural and urban community settings.

*Table 2: Demographic details of participants.*

Name	Gender	Age	Level of Education	Marital status	Area	Working Experience (year)
A	Female	59	Vocational certificate	Married	Urban	20
B	Female	63	Junior high School	Single	Urban	13
C	Female	53	Primary school	Married	Urban	8
D	Female	49	Junior high School	Married	Urban	5
E	Female	46	Primary school	Married	Urban	6
F	Male	55	Bachelor's degree	Married	Rural	10
G	Female	75	Bachelor's degree	Single	Rural	15
H	Female	61	Bachelor's degree	Single	Rural	2
I	Female	63	Diploma	Married	Rural	20
J	Female	78	Vocational certificate	Married	Rural	20

Response and Management of COVID-19 by Village Health Volunteers (VHVs) Village Health Volunteers (VHVs) played a crucial role in health management by adhering to principles such as debunking misinformation, sharing accurate information, providing services, coordinating health activities, and assisting the public in mitigating distress. VHVs have been recognized as a critical mechanism in the health system, distinct from other structures due to their voluntary nature, ongoing skill development, and community participation. Their strength and deep involvement made VHVs key players in managing the COVID-19 pandemic, contributing significantly to controlling the spread of the virus within the country. However, certain challenges emerged, such as public distrust and fears, during the initial stages of the pandemic. The outcomes of the interview according to this challenge are stated in Table 3, as Theme 1.

*Table 3: The outcomes of the interview according to Theme 1.*

Theme and Sub-theme	Content analysis
Theme: Response and management of COVID-19 by Village Health Volunteers Subtheme 1.1: Perception of VHVs on COVID-19	Perception of Village Health Volunteers regarding COVID-19 During the COVID-19 pandemic, VHVs had increased worry and apprehension over the risk of viral transmission while doing their community duties. Community members exhibited hesitance in permitting VHVs access to their residences, apprehensive that they would be vectors for the virus. This distrust complicated their efforts, especially in metropolitan regions with wealthy inhabitants who were more reluctant to collaborate. For example, as referenced by a VHV, "Certain community members were uncooperative and declined to furnish information." (D Adult female, Urban). Furthermore, a VHV operating in an urban environment stated, "Due to my employment in a densely populated area with numerous affluent families, individuals were hesitant to permit us entry into their residences." (C Adult female, Urban).
Subtheme 1.2: Self-defense Strategies Embraced by VHVs	Self-defense Strategies Embraced by VHVs: VHVs used many measures to safeguard themselves from COVID-19 while maintaining their professional duties. These encompassed lifestyle modifications such as reducing trips to public venues, stockpiling essential goods, and implementing rigorous cleanliness protocols upon returning from community excursions. They also furnished their contact information to neighbors for health advice. Steps were communicated, including "donning double-layered masks, wearing double-layered clothing, and adhering to social distancing protocols." In many instances, VHVs delivered crucial supplies by suspending goods at the doors of infected persons and utilised messaging applications such as Line to ensure less physical interaction.

Subtheme 1.3: Community Engagement	VHVs are community residents, fostering familiarity and trust with local inhabitants. Each VHV is accountable for a minimum of eight families, facilitating the connection between public health authorities and the local community. Their duties including evaluating probable COVID-19 cases and liaising with local health facilities for additional care. A VHV from a remote locality recounted the difficulties encountered, especially during the pandemic's onset when hospital capacity was exceeded: "During the initial outbreak, when hospitals were at capacity, we collaborated with local leaders and the municipality for the delivery of food and water." (G old, rural).
Subtheme 1.4: Management of COVID-19 of VHVs	Management of COVID-19 at the Community Level VHVs significantly contributed to community-level COVID-19 management by devising tactics for social distancing, overseeing events such as weddings and funerals through screening protocols, and collaborating with municipal authorities for the proper disposal of medical waste. For instance, VHVs established purchasing stations for mobile foodstuff merchants and implemented sanitization stations. They organized community gatherings by establishing designated entry points and checking all participants for symptoms before participating.
Subtheme 1.5: Network and Community Involvement	Engagement in Networks and Communities The success of VHVs was mostly attributable to the joint efforts of community leaders, village headmen, and health authorities. Through collaboration, these entities facilitated the effective management of essential services, such as food delivery to confined houses. A VHV illustrated an instance of collaboration: "Community leaders, VHVs, and municipal members united, traversing on motorcycles with sidecars to distribute food and offer guidance via community broadcasting." (Female Adult, Rural).
Subtheme 1.6: Communication with people	Communication and Establishing Community Standards While rural regions had strong community connections and rapid communication, VHVs encountered greater difficulties in metropolitan environments due to restricted physical access. To mitigate communication difficulties, VHVs created a Line group to disseminate updates, liaise with health officials, and promptly assist the community. One VHV underscored the significance of utilizing the Line app, stating, "We established a Line group with Dr. Kwan, who is a pivotal individual." We confer prior to informing the health officials, facilitating prompt answers. (Elderly, Rural). VHVs disseminated brochures including pertinent contact information for healthcare services, offering locals an alternate means of seeking aid during the epidemic.

The findings of the interviews on Theme 1 suggested that VHVs served as a crucial link in Thailand's public health system during the COVID-19 pandemic. Their unique approach, grounded in local familiarity, voluntary service, and collaboration with health professionals, provided a tailored response to the pandemic's challenges. However, they faced significant challenges, particularly in urban settings, highlighting the importance of trust in the community and adaptive communication strategies. Theme 2 for the interviews focused on the Work of Village Health Volunteers (VHVs) during the COVID-19 pandemic and highlights these frontline health workers' critical role in their communities (Table 4). Despite facing numerous challenges, VHVs successfully carried out essential public health tasks by leveraging several key components.

Table 4: The outcomes of the interview according to Theme 2.

Theme and Sub-theme	Content Analysis
Theme 2: VHVs in the Fight Against COVID-19: Subtheme 2.1: Knowledge and Skill	Knowledge in Their Work, Village Health Volunteers required substantial knowledge about COVID-19, including preventive measures, health promotion, and patient care. Initially, VHVs lacked confidence and feared contracting the virus. However, after receiving training from public health officials, they developed a better understanding of the virus and became more confident in their duties. For instance, they provided door-to-door education to villagers, helped manage local quarantine facilities, and monitored suspected cases. One respondent (C, Adult Woman, Urban) mentioned, "During the severe COVID-19 outbreak in 2020, I was scared at first. The virus could kill in just a few days. I worried I might catch it. But after the health officials provided training, we understood more, gained some confidence, and knew how to protect ourselves while helping others. If we didn't help, who would?" Some VHVs received warnings from family members not to work, but they continued to perform their duties by relying on self-protection measures. For example, an elderly rural VHV (G) shared, "My sister warned me to be careful. But I worked closely with COVID-19 patients and didn't get infected because I protected myself and prayed every night before bed."
Subtheme 2.2: Need Mentorship	Mentorship, during such a novel and dangerous outbreak, having mentors and supervisors was crucial for VHVs. Public health officials from local hospitals and municipalities played a mentoring role, offering guidance, advice, and working alongside VHVs when needed. This support gave VHVs the confidence to work effectively within their communities. According to an elderly rural VHV (I), "Doctor Kwan is our mentor. Whenever there's a problem, we call her. She provides great advice. The relationship between VHVs and public health officers is very strong."
Subtheme 2.3: Equipping for Success	Tools for Work, effective tools and resources were vital for enhancing productivity and efficiency in VHV operations. These tools included software applications, equipment, and other essential materials. VHVs received support from hospitals and local authorities, which provided masks, hand sanitizers, and health kits. These resources allowed VHVs to perform their duties more safely and efficiently, ensuring that they could help protect the community.
Subtheme 2.4: Communication Tools	Communication tools were integral to VHV operations. They need robust interpersonal communication skills and the capability to report and document patient information. VHVs collaborated closely with diverse community leaders to organize care for COVID-19 patients. In several instances, hospitals became inundated, necessitating VHVs to aid in the distribution of health kits and the monitoring of patients remotely. The efficacy of this coordination and communication facilitated the surmounting of substantial hurdles during the height of the epidemic.
Subtheme 2.5: Systematic Reporting	VHVs were accountable to Health Officials for the collection and documentation of patient data, encompassing information regarding infection timings and quarantine status. The information was communicated to public health authorities, enabling them to arrange additional medical care. This systematic reporting framework guarantees the ongoing monitoring and effective management of patient care.
Subtheme 2.6: Support and Resource	During the COVID-19 epidemic, VHVs received ongoing assistance in the form of medical supplies and personal protective equipment (PPE) from many sources, including local hospitals, municipal governments, and philanthropic organizations. The supply of masks, thermometers, and oxygen meters was crucial in ensuring the safety of VHVs while executing their responsibilities. The integration of training, support, and resources guaranteed that VHVs were well-equipped to manage the crisis.
Subtheme 2.7: Uniforms and Work Equipment	The use of uniforms and work equipment was a crucial factor in fostering team spirit and trust in the community. VHVs articulated the necessity for standardized clothing and medical supplies to enhance their credibility in executing their responsibilities. An elderly rural VHV (H) stated, "We require uniforms to enhance public trust during our visits." Possessing uniform and essential medications such as analgesics and cough syrup would significantly enhance our ability to assist on outings.

In summary, for the interviews on Theme 2, the work of VHVs during the COVID-19 pandemic was greatly facilitated by acquiring knowledge, support from public health officials, availability of tools and equipment, effective communication, and community trust. Their ability to adapt and respond to unprecedented challenges highlights the crucial role of VHVs in safeguarding public health at the community level.

**Discussions:** This study underscores the critical function of Village Health Volunteers (VHVs) in Thailand's response to the COVID-19 epidemic, especially in overseeing community-level prevention, education, and treatment. VHVs connected formal healthcare services with rural people, showcasing adaptation and perseverance under difficult circumstances. The results correspond with previous research highlighting the significance of community health professionals in providing localized public health services during emergencies (Nguyen et al., 2021; Paton et al., 2020).

The contributions of Village Health Volunteers (VHVs) were vital in mitigating the spread of COVID-19 through health education, case screening, and the provision of necessary services. Their strong connections with local communities facilitated prompt actions and fostered trust, especially in rural regions. For example, the data reveal that VHVs conducted household searches, facilitated food and supply delivery for confined persons, and enforced cleanliness protocols (WHO, 2020). These findings align with Kusuma et al. (2020), who emphasize the significance of enduring grassroots public health initiatives in enhancing resilience to pandemics.

Moreover, VHVs' ability to leverage communication tools, such as messaging apps like *Line*, demonstrated their adaptability in addressing urban-specific challenges. While rural VHVs benefited from familiarity and trust within their communities, urban counterparts faced resistance from affluent populations reluctant to comply with public health measures. This distinction highlights the context-specific challenges VHVs encounter, a phenomenon also noted by Doe (2020), who observed disparities in health worker experiences based on geographic and socioeconomic conditions. Challenges Faced by VHVs, despite their invaluable contributions, VHVs faced significant challenges that hindered their performance. Inadequate training emerged as a major barrier, particularly during the initial stages of the pandemic. VHVs were tasked with technical responsibilities, such as patient monitoring and case reporting, without sufficient preparation. This finding aligns with Paton et al. (2020), who emphasize the importance of ongoing training to enhance the preparedness of community health workers for large-scale public health crises. Another notable challenge was the inconsistent availability of personal protective equipment (PPE). VHVs often relied on local

donations or personal funds to procure protective gear, exacerbating financial strain and increasing their risk of infection. According to the World Health Organization (2020), ensuring an uninterrupted supply of PPE is critical to safeguarding health workers' safety and sustaining public health interventions. Similar concerns were echoed in studies by Tayade and Agrawal (2022), where VHV's expressed fears of infection and burnout due to inadequate protective measures. Emotional and psychological stress manifested as a persistent topic among VHV's. Numerous volunteers reported increased anxiety resulting from their exposure to sick patients, and an absence of mental health support services. This corresponds with results from the Centers for Disease Control and Prevention (CDC, 2020), which emphasize the necessity for emotional resilience programs designed for frontline healthcare personnel. Strengths and Adaptive Strategies Notwithstanding these challenges, VHV's showed exceptional ingenuity. Their self-protection strategies, including double-layered masks and limited physical contact during service provision, show proactive initiatives to reduce hazards while fulfilling their duties. VHV's also executed community-level management initiatives, including the organization of activities adhering to social distancing guidelines and the coordination of medical waste disposal. These endeavors demonstrate their robust mentorship connections with public health experts, which offered direction and assistance in addressing the pandemic's issues. The capacity of VHV's to interact with community networks, including village leaders and municipal officials, was essential for successful resource distribution and communication. This partnership adheres to the World Health Organization's guidelines (2021), which promote integrated strategies that involve community health workers, local authorities, and hospital systems to effectively address public health emergencies. The data reveal significant disparities between VHV's in urban and rural environments. Urban VHV's had distinct problems, such as skepticism from affluent homes and restricted physical access to communities. In contrast, rural VHV's gained advantages from cohesive communities and pre-existing relationships, which facilitated the effective implementation of public health interventions. These observations correspond with Doe (2020), who indicated that rural health personnel frequently encounter fewer socio-behavioral obstacles yet contend with infrastructure constraints. From this study, the necessity for policy and practice implications is stated as follows:

1. Empowerment through Training, building confidence, and enhancing competencies to address COVID-19 challenges. Mentorship for Growth, continuous guidance, and professional support from public health officials to maximize impact.
2. Enhancing communication pathways between VHV's and formal healthcare systems to guarantee effective information exchange and resource allocation.

**Strengths and limitations:** The research offers significant insights into the crucial function of VHV's during the COVID-19 pandemic. The research considerably advances the area of community health by addressing obstacles and emphasizing contributions, providing concrete recommendations to enhance the support and efficacy of community health workers in future global health emergencies. The present study also exhibited several shortcomings. The research concentrates on two provinces in Thailand (Pathum Thani and Nonthaburi), thus constraining the applicability of the results to other areas with distinct healthcare environments. The issues faced in urban and rural areas may differ in other regions of Thailand or in different nations, thereby affecting the relevance of the solutions. The study offers significant insights into the function of Village Health Volunteers (VHV's) inside Thailand's public health system, particularly during a global health crisis such as the COVID-19 epidemic. This research is pertinent to Thailand and other nations with analogous community health frameworks, providing insights on fortifying community health systems in times of crisis.

#### Conclusions

This study reinforces the essential function of VHV's as frontline personnel in Thailand's public health response to COVID-19. Their contributions highlight the significance of community-based health systems in alleviating the effects of pandemics, especially in resource-constrained environments. Nonetheless, the obstacles they encountered—spanning training deficiencies to psychological stress—underscore essential domains for policy action. Addressing these difficulties can substantially augment VHV's' ability to respond to future health catastrophes. This study reinforces the essential function of VHV's as frontline personnel in Thailand's public health response to COVID-19. Their contributions highlight the significance of community-based health systems in alleviating the effects of pandemics, especially in resource-constrained environments. Nonetheless, the obstacles they encountered—spanning training deficiencies to psychological stress—underscore essential domains for policy action. Addressing these difficulties can substantially augment VHV's' ability to respond to future health catastrophes.

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