Original Research Article

The Role of Communication and Information Access for Persons with Disabilities during the COVID-19 Pandemic in Thailand: A Qualitative Research

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ABSTRACT

Purpose: This study aims to explore the role of communication and information access for Thai persons with disabilities during the COVID-19 pandemic.

Method: The study employed a qualitative research approach, with an in-depth interview, as well as on-site and online focus groups. Criterion and snowball sampling were used to select participants. A total of 71 participants were recruited from different regions of Thailand.

Results: This research identified the role of communication in helping persons with disabilities and their caregivers during crisis time, separated into different levels of communication. First, the self-reflection, the particular context influenced persons with disabilities to play different active and passive roles in surviving the COVID-19 crisis. Second, group communication was beneficial in various aspects, such as gaining social capital and strengthening family cohesion, and these contradict some recent studies that reported sibling conflict during the lockdown. Finally, there was unequal access reflected from the mass communication level, and there was no critical, timely information, and insufficient accessibility support for PWDs in mainstream media.

Conclusion: Overall, this research advocates for a multi-level communication policy that ensures the inclusion of PWDs in crisis management. Recommendations include strengthening the role of Disabled People's Organizations, enhancing digital accessibility, and incorporating family-based communication support in social policies.

Keywords: crisis communication, information accessibility, COVID-19, qualitative research, persons with disability, SDG 3: Good Health and Well-being.

INTRODUCTION

An estimated 2.2 million individuals with disabilities hold official identification cards, accounting for approximately 3.08% of the Thailand's total population (Department of Empowerment of Persons with Disabilities, 2023). Persons with Disabilities (PWDs) need targeted support, especially during periods of crisis. Often burdened by comorbid

health conditions and socioeconomic disadvantages, they have been disproportionately affected by the COVID-19 pandemic (Tan et al., 2023).

In Thailand, a significant number of persons with disabilities depend greatly on government services and community assistance to fulfill their daily needs. During the pandemic, numerous reports indicated severe disruptions in healthcare, education, and social support systems for Thai PWDs. For instance, Chaiteerakij et al. (2025) found that Thai children with "invisible" disabilities, such as autism or learning disabilities, faced critical challenges in accessing essential health and educational services. Similarly, nationwide surveys revealed that lockdowns intensified financial hardship and limited accessibility for families with PWDs.

These findings align with global studies. Authorities and researchers emphasize that while PWDs often demonstrate high awareness of COVID-19 and a strong willingness to follow public health guidance, they simultaneously face unique barriers in accessing timely and accurate information (Lakkhina et al., 2021; Phromphak et al., 2022). Mitigation strategies in several countries have demonstrated that, without disability-inclusive planning, the pandemic can undo decades of advancement in health and social equity (Tan et al., 2023). For example, in their global review, Tan et al. (2023) concluded that COVID-19 had an "inequitable and disproportionate impact on vulnerable populations," including PWDs. In Thailand, although emergency measures such as financial aid, priority vaccinations, and designated shopping hours were implemented, many PWDs continued to face systemic barriers due to limited resources and inconsistent policy enforcement.

Communication is crucial in ensuring that persons with disabilities can access important information and services. It is the process of exchanging messages at intrapersonal, interpersonal, group, and mass levels, and is key to making informed decisions. While the Convention on the Rights of Persons with Disabilities (CRPD) upholds the right of PWDs to access information through all forms of media, and Thailand's Persons with Disabilities Empowerment Act promotes communication accessibility , mainstream communication channels often fail to accommodate the needs of PWDs.

Globally, studies have reported that official COVID-19 information was frequently inaccessible to PWDs. These shortcomings included a lack of sign language interpretation, captions, and plain-language guides (Meltzer et al., 2025). An Australian survey of organizations producing accessible COVID-19 materials found chronic under-resourcing. These providers struggled with frequently changing health guidance, unclear source materials, and inadequate funding—factors that left many PWDs "without sufficient accessible information" (Meltzer et al., 2025). In the United States, similar issues arose: many state vaccine websites featured design barriers that made it difficult or impossible for PWDs to access updates or register for vaccinations (Guo et al., 2021).

Dobransky and Hargittai (2021) reported social media use in the United States during the early stages of the widespread pandemic. Their findings discovered that PWDs were more actively engaged with COVID-19-related information on social media compared to non-disabled users. PWDs participated at higher rates in sharing, interacting, and offering support. The study links this behavior to the previous experience of persons with disabilities using accessible digital tools, including features based on universal design, which allowed them to quickly and efficiently utilize these platforms for sharing information. The results highlight the critical role of inclusive online media in ensuring access to health information during times of crisis.

During the pandemic, digital technology proved to be a double-edged sword. While information and communication technology (ICT) enabled ongoing work, education, and social interaction amid physical distancing measures (Arjadi et al., 2022; Xie et al., 2023), it also highlighted existing inequalities. For persons with disabilities, digital media tools—such as social networks, messaging apps, telehealth services, and online learning

platforms—served as valuable supports. However, in Thailand, access to these technologies has remained limited. A recent national survey found that only 27% of visually impaired individuals in Thailand were Internet users (Phochai et al., 2023). Several factors have been linked to reduced digital engagement among persons with disabilities, including advanced age, limited income and education, and higher levels of impairment. Studies from Europe and Asia have shown that individuals with disabilities are less likely to have reliable access to high-speed internet, own various digital devices, or use multiple technologies. Despite often exhibiting digital skills on par with the general population, their unique technological requirements frequently remain unmet (Duplaga, 2023; Johansson et al., 2021).

Where accessible technologies were available, they significantly helped reduce social isolation. Videoconferencing and social media played a key role in maintaining services and mitigating loneliness during lockdowns (Gabbiadini et al., 2020; Xie et al., 2023). A study in the United States by Xie et al. (2023) revealed that in 2020, adults with functional disabilities were more likely to use telehealth services compared to those without disabilities, with usage rates rising according to the severity of the disability. Nonetheless, the accessibility of online services varied widely. Jesus et al. (2021) reported that numerous tele-education and tele-rehabilitation platforms were ill-prepared to accommodate the needs of PWDs. Identified barriers ranged from non-intuitive user interfaces and lack of captions to the unaffordability of broadband services. Consequently, PWDs living in rural or economically disadvantaged Thai communities often found that digital solutions could not fully substitute for the lost in-person support (Jesus et al., 2021).

Therefore, addressing the academic gap in communication and information access for persons with disabilities (PWDs) is essential. Further knowledge development is needed to respond effectively to the complexities revealed during the COVID-19 pandemic. This study examines the role of communication in supporting PWDs in Thailand between 2021 and 2022. It focuses on three levels of communication: intrapersonal (internal reflection shaped by personal experience and context), group (collaborative processes in teams and small groups), and mass communication (broad dissemination of information). The study also explores how technology facilitated or hindered access to critical information and services for PWDs during the crisis.

METHODS

A qualitative research with in-depth interviews, as well as on-site and online focus groups, was conducted. Criterion and snowball sampling were used to select participants. A total of 71 participants were recruited from different regions of Thailand.

Participants

A total of 71 participants were recruited from the North, Northeast, South, and Central regions of Thailand, with 16,29,17, and 9 participants respectively. The participants were divided into two groups based on the following inclusion criteria:

a) 27 people with disabilities and 18 main caregivers (in case of severe disabilities and inability to communicate with PWDs).

b) 26 stakeholders from related service sectors for PWDs were also included, with the following individuals:

- 8 participants from the health sector, including 4 physical therapists, 2 nurses, 1 health academic, and a doctor in a Sub-district Administrative Organization.
- 16 participants from the education sector, including 4 school directors and 12 teachers.
- 2 participants from livelihood and social engagement: 2 SAO officers (Sub-district Administrative Organization)

Furthermore, those participants were required to be 18 years old or above, able to communicate and provide information and willing to participant voluntarily in the research.

Instrument

A six-question guideline was developed. Those six open-ended questions were used to obtain data through in-depth interviews or focus groups to ensure the flexibility and readiness of participants and fieldwork.

Procedure

Research ethics approval was obtained from the Committee for Research Ethics (Social Sciences) Mahidol University: MUSSIR2021/158(B2). Participants' consent was obtained in advance, and official letters were issued before collecting data. In practice, data collection occurred between December 2021 and March 2022 under the COVID-19 safety measures. For instance, the appropriate research field was selected, and participants' risk information, symptoms of illness, and ATK (Antigen test kit) results were checked. The data collected involved conducting seven in-depth interviews and ten focus groups within various communities and fieldwork.

Data were collected in five regions of Thailand. The northern region included Chiangmai and Mae Hong Sorn provinces; The northeastern region included Udon Thani, Nong Kai, and Bueng Kan provinces; The southern region included Nakorn Si Thammarat and Krabi province, and the central region included Bangkok and Chonburi province.

Data Analysis

The raw data from the tape recording from focus groups and In-depth interviews were transferred to a full transcript for triangulation. The researchers subsequently identified and grouped the responses into the related main themes and sub-themes, encoding the data accordingly. Participants' transcripts were manually analyzed to extract the main findings. The data were decoded, conclusions were drawn and critiqued into the related main themes and sub-themes.

RESULTS

Table 1: shows participants' characteristics

	Type of disability	Type of stakeholders	Totals	Code
Person with disability	1. Physical Disability = 8 2. Visual Impairment = 14 3. Learning Disability = 2 4. Hearing Impairment = 1 5. Autism = 1 6. Intellectual Disability = 1	-	27	P 1-27
Caregivers	-	1. Caregivers for persons with Intellectual Disability = 5 2. Caregivers for persons with Autism = 7 3. Caregivers for persons with Learning Disability = 2 4. Caregivers for persons with Physical Disability = 3 5. Caregivers for persons with Visual Impairment = 1	18	CG 1 - 18
Health sector	-	1. Physical Therapists = 4 2. Nurses = 2 3. Public Health Professionals = 1	8	H1-8

	4. Village Health Volunteers = 1		
Education sector	1. school directors = 4 2. teachers =12	16	E 1-16
Livelihood and social engagement	SAO officers (Sub-district Administrative Organization) = 2	2	L1-2
Total		71	

The findings from the open-ended questions revealed that participants narrated their experiences with obstacles related to the role of communication and information access during the crisis. The results are portrayed according to the following levels of communication.

Intrapersonal communication: "Living with a disability already entails significant challenges."

The data collected from in-depth interviews conducted in both rural and urban areas revealed different perspectives on the hardship faced during the pandemic. PWDs living in remote areas primarily relied on word-of-mouth information from family members, neighbors, or the mainstream program, yet community broadcasting social media are not the main channels for them. Those in urban contexts utilized alternative media platforms such as social media and messaging applications more effectively than mainstream media.

> "...*I have no smartphone; it is not necessary for my daily life. For COVID information, I perceived from my daughter and my wife, in case of community service, they announced via community broadcasting...*" *(P7, PWDs.)*

In exploring the reflection of self-consciousness during the pandemic, researchers highlighted critical issues experienced by other individuals, including job losses, confinement at home, limited access to medical services, and students facing school closure. These circumstances resulted in unexpected behavior and an increased suicide rate due to heightened anxiety and depression. Surprisingly, participants narrated that they did not experience additional suffering or feel any worse during the pandemic compared to their normal situation. They explained that living with a disability had already presented them with numerous obstacles throughout their lives.

> *"… I heard tourists rarely visit shops and restaurants, along with a decrease in tourism. Have you been affected by economic hardship? It may bring about financial challenges. Your children stopped working. How do you feel about this situation."? (Researcher1)*

> "...*I did not feel down from the COVID-19 situation, although economic hardship affected my family, we could handle it and did not suffer from this much. I have needed permanent work since before the widespread. I used to apply for a job, but they did not accept me because of my physical impairment. I am a housewife and look after my grandchildren...*" *(P5, PWDs.)*

The self-reflection (intrapersonal communication) of participants was revealed through dialogue as the researcher addressed the hardship brought about by COVID-19. Interestingly, participants did not express thoughts of self-harm. Instead, there was a sense of empowerment observed among participants who held leadership positions within disability organizations. They reflected on the significance of combating discrimination and stigma in their lives. Thus, during this challenging period of the crisis, individuals did not solely focus on their own hardships; rather, they expressed concern for the well-being of others.

Group Communication: Social Capital, Family Cohesion, and Digital Networks

Benefit for financial support

Based on the data collected, it was found that there was a strong connection between members of the PWDs community and their associated disability region during hardship situations. For instance, associations for the blind were connected with local savings groups, local enterprise networks, or local organizations for PWDs in various areas of Thailand. These local collaborations were crucial in providing financial support to PWDs and their families.

Leader of such associations played a pivotal role in facilitating group communication and contributed to finding solutions to the economic system problem. Top-down communication was used to inform and connect with the higher-level organization to seek support for alternative occupations, finance, and charitable life support.

> *"...For the blind organization, we connected to the country and regional blind organizations to support us. We needed them to provide more channels to show us how to work online or run the agriculture project. We were stuck at home due to social distancing measures, and blind people could not go out to sell the lottery as usual. We (the Local Association of the Blind) consulted with the committee to cope with this problem." (P1, PWDs.)*

> *"…Before COVID, we had established funding for our blind members to collect money separate from wages. We aim to help a member who needs financial support obtain a required loan, and we have no interest charges. Moreover, we set up a group of enterprises to encourage the blind members to work independently…" (P20, PWDs.)*

An empowered family communication

Family communication was identified as a part of group interaction, serving as a vital emotional and practical support system for PWDs. During COVID-19, effective communication within the family shows mutual understanding and facilitates joint problem-solving. Insights from in-depth interviews and focus group discussions highlighted the importance of these intimate dialogues in helping individuals cope with the crisis.

P4 (PWDs), one of the participants with physical disability shared that he has two children who are preparing to attend university next year. However, they experienced financial hardship during the pandemic. In response, he decided to have a direct conversation and openly shared the family's financial situation with his children. After a family conversation, he realized that his children were no longer the young kids he once thought they were, and they tried to seek a way out of this situation.

> *"…they are always a kid in my eyes, but in this situation, I was pleasantly surprised by their understanding and perspective on our situation. They grasped the importance of saving money and stepped out of this bad situation together… I'm also proud of their sibling relation…."*

Another illustration is by C7(Caregiver), the father of a student with mental disability. He recounted a meaningful story about his daughter that led to a transformative experience for him. He admitted that he had never trusted in his daughter's ability until the COVID-19 situation compelled him to delve deeper and discover her remarkable capabilities.

> *"…my daughter showcased her ability to adapt and survive during the restriction by independently talking and taking care of herself, which she has never done before. We were surprised to see her helping her mother with cooking rice and performing simple household tasks.*

Her actions not only decreased my stress but also highlighted her capabilities…" (C7,Caregiver)

Family communication involves the interaction of family members through messages, and effective communication becomes even more crucial during times of crisis and hardship. It enables a deeper level of understanding among family members, facilitating the sharing of information and support in difficult circumstances.

An effective small community for sharing information through social media and technology.

Furthermore, the key informants in this study were participants who experienced inflection. The study consisted of six blind participants and one participant with physical impairment from various regions of Thailand. Due to the peak inflection rate at that time, in this case, we conducted the two-and-a-half-hour focus group via an online setting with the Zoom application. During the session, participants shared their challenges in their infection periods and discussed how online communication and social media platforms aided their survival.

Interestingly, blindness was not a primary difficulty for blind individuals when contracting the infection. Instead, they faced confusion due to the lack of clear and relevant preliminary healthcare information from primary healthcare staff that didn't align with the reality.

"…I am so sad for any confusion caused it appears that when I called the Covid Hotline, they informed me that If I needed to serve free primary healthcare service, I should return to my domicile, where located in a remote area, but I live in Bangkok for several years … This advice did not make sense in my situation…" (P24, PWDs.)

Meanwhile, P23, a woman with a physical impairment, also shared a similar experience of receiving confusing information. Her result from the ATK (Antigen Test Kit) was positive. She called the Medicare call center to inquire about her social health insurance. Unfortunately, the response she received from the hotline made her feel disappointed.

"…I felt that her suggestion... it was complicated to serve primary healthcare service. I gave up and paid on my own… then connected to our Facebook community with fifteen to twenty blinds joining this group, and we always share information, life experiences, jokes, and provide counseling to one another. They advised me on how to prepare myself during the quarantine…" (P27, PWDs.)

Besides communication through social media, particularly Facebook, using direct pop-up messages through the "Line application" also facilitates communication for blind people. The Line application is Thailand's most popular texting application, allowing users to communicate through voice messages, peer-to-peer or group chatting, and video calls without any payment. This channel allows timely and accessible communication for the blind.

"…we also connected via Line group or private chat if I didn't want to disturb other friends by sharing my quarantine experience or asking about identifying medications through touch or alternative methods. It was difficult for us to manage pills without assistance or the Brille labels they delivered. The healthcare service for blind people doesn't seem to be well-aligned with our actual needs. The process was unrelated to the real situation… I don't think it is effective for persons with disabilities who are infected and need self-quarantine…" (P23, PWDs.)

Group Communication for Education: Disparities and Digital Adaptation

The majority of students with disabilities in rural areas are economically disadvantaged and have limited access to communication devices and reliable internet services. This finding highlights the division between two groups of students in the rural and urban areas: those without technical support and those with access to technical resources.

The first group comprises students in the early stages of education, particularly those aged 0 – 6 years. Early childhood education for students with disabilities (SDWs) allows them to enroll in each region's special education center. In this context, teachers play a crucial role as facilitators in delivering education, while technology serves as an assistive tool.

The unexpected closure of special education centers and the abrupt interruption of routine activities had a profound effect on students with disabilities (SWDs). The absence of a crisis response plan within the school system left both educators and communities unprepared for the challenges brought on by the pandemic. In rural areas, where many SWDs reside in distant disability centers, some of these centers had part-time school schedules to accommodate the needs of individuals. This arrangement was necessary because the parents of these students often had work commitments and lacked the time to send the children to school regularly.

> *"…The children did not have access to smartphones or tablets to participate in remote learning like mainstream students. My friends and I were at risk by visiting students at home during the outbreak, as neither the necessary devices nor reliable internet connections were available..." (E1, Educator)*

Mass communication

Delay and unequal mass communication

In remote areas, the lack of sufficient devices is the major factor hindering PWDs from accessing up-to-date information. This is in contrast with PWDs in urban areas, where there is better access to information due to improved technological infrastructure. Mass communication is commonly defined as a one-way communication. Regarding the COVID-19 situation in Thailand, the Office of Public Administration, under the Department of Disease Control, conducted official statements in 2020, These statements, coordinated by the Center for COVID-19 Situation Administration (CCSA), were considered effective means of providing health information, vaccine updates, and infection reports to the public through Thailand Broadcasting.

Regarding data collection, PWDs and their families primarily received information through mainstream media such as television, particularly in the early stage of the pandemic. However, there were some arguments highlighting the unequal distribution of information for PWDs. For instance, no specific guidelines were provided to PWDs or vulnerable groups for instruction and practical advice on preventive measures and preparedness strategies for this hardship situation.

Overall, the influence of COVID-19 on PWDs were adequately highlighted in the media or included in the government's practical roadmap. Despite voicing my concerns to the government, I did not receive a clear answer regarding the specific measures and support available for PWDs (P16,PWDs.)

Researcher 2: "…How did you voice to the government?"

> *"…Communicated through all government platforms, I remember that at that time, they promoted effective two-way communication between citizens and government. We made several attempts to connect to these platforms, but the information we received was often impractical and unhelpful. This shows that the government ignored us and there were no proactive campaigns for vulnerable groups..." (P16, PWDs.)*

Online social media and other digital platforms effectively provide information and keep connections for PWDs who can access technology devices.

Although mass communication still presents several challenges, particularly in terms of access for persons with disabilities in rural areas and the lack of direct information related to their rights, it continues to serve as a valuable tool and medium for maintaining social connections during difficult times.

> *"…Sometimes there is no direct information delivery to our members. Some of us were left alone with a radio or television at home, while some accessed information via mobile phones. Facebook is the most popular social media platform for the blind to access information such as health information, vaccine quotas, real-time situations, and government measures. Moreover, we use the "Line" application to connect and share information between members and our connections…" (C5, Caregiver)*

> *"…Since the social distancing measures, all activities had to stop, and we were stuck at home. Parents had no plan and couldn't handle the situation, and support academic work at home. Some of them can use mobile phones it's useful for monitoring students' development by call and video call, the rest of them had no technology support because of remote areas where there are no signals it's risky for teachers to visit them, but we still set the team to visited onsite because we cannot leave them alone..." (E2, Educational sector)*

DISCUSSION

This study explored the role of communication and information access among persons with disabilities (PWDs) in Thailand during the COVID-19 pandemic, through the framework of intrapersonal, group, and mass communication. In addressing reviewer feedback, this discussion integrates relevant international research to enrich the argument and reinforce the empirical insights gained from qualitative data.

Intrapersonal communication: "Living with a disability already entails significant challenges."

People with disabilities (PWDs) in both urban and rural settings view disability as a continuous and persistent challenge in their lives, reflected in their self-expression. They convey how living with a disability impacts their self-awareness and coping strategies. However, while both groups acknowledge the difficulties of disability, individuals who live in urban areas are more likely to express their struggles in a direct and confident manner. This difference is influenced by the greater access to resources, technology, and opportunities for self-expression available in urban environments. In rural areas, people with disabilities often rely on word-of-mouth communication from family members or community broadcasts, as access to modern communication tools and technologies is more limited. On the other hand, urban-dwelling PWDs are more likely to utilize digital platforms, social media, and messaging applications to share information and advocate for their needs. This aligns with van Deursen's (2020) concept of the "digital divide," which emphasizes on how unequal access to digital resources exacerbates disparities in communication and information access among vulnerable groups (van Deursen, 2020).

Urban environments, characterized by enhanced access to technology and more vibrant social dynamics, offer PWDs with greater opportunities to engage in more proactive communication. They are empowered by the ability to connect, share their experiences, and advocate for their rights through digital platforms, social media, and advocacy groups. Having experience with fighting for their rights and confronting systemic inequality, urban PWDs develop a sense of agency and resilience, drawing on both individual and collective empowerment to challenge and navigate social barriers. The empowerment gap between urban and rural PWDs underscores the need for inclusive

communication strategies that consider the contextual differences in access to resources, technology, and social networks. This disparity emphasizes the importance of bridging the digital divide, ensuring that all PWDs, regardless of location, have the necessary tools to communicate effectively and assert their rights.

Group Communication: Social Capital, Family Cohesion, and Digital Networks

Group communication emerged as a central survival mechanism during the crisis, offering both tangible and intangible support. Financially, disabled people's organizations (DPOs) functioned as key brokers of social capital. Top-down and lateral communication through digital platforms such as Facebook and Line allowed for the dissemination of health updates, coordination of mutual aid, and organization of charity campaigns. This reflects Lin's (2001) theory that social capital is embedded in relational networks, as well as findings by Dobransky and Hargittai (2021), who reported that PWDs leveraged social media to sustain information flow and emotional support.

Nonetheless, relying heavily on community-led or digital solutions risks shifting responsibility away from public institutions. As Baldwin et al. (2023) pointed out, the absence of state preparedness in ensuring accessible information formats meant that civil society often had to fill a gap that should have been covered by public policy. The proactive role of DPOs, while commendable, may inadvertently obscure failures in inclusive governance.

Family communication also played a transformative role during the COVID 19 pandemic. While existing literature suggest increased familial conflict during lockdowns (Toseeb & Asbury, 2022), this study found that caregiving relationships deepened, and autonomy in PWDs was recognized and supported and mutual understanding were strengthened. This finding resonates with Baldwin et al. (2023), who emphasized that involving PWDs in the design of communication formats reduces confusion. The normalization of home-based interaction facilitated mutual understanding and role renegotiation, resonating with Sonnenschein et al. (2022), who underscored the significance of parental attitudes and adaptability during school closures.

Small community networks—particularly those created online—proved vital for bridging information gaps during infection and quarantine. Participants shared personal experiences, accessed peer support, and clarified confusing health directives. This supports the work of Dai and Hu (2022), who found that informal disability networks compensated for government communication failures, and Goodyear et al. (2021), who noted the power of digital tools in managing behavior and well-being.

Effective small community communication to sharing information through social media and technology.

In addition to the aforementioned dimensions, this study highlights the critical role of group communication through digital technology among PWDs who had access to relevant devices and platforms. As face-to-face interaction became restricted during the pandemic, community members increasingly transitioned to digital communication environments. Wu and Yu (2021) observed that social media and messaging applications such as Facebook and Line became vital tools, enabling users to maintain social connections, access timely information, and coordinate support. These platforms not only replaced physical interaction but also contributed to life-saving exchanges during quarantine periods.

Dobransky and Hargittai (2021) provided further evidence that PWDs actively engaged with COVID-19-related content across digital platforms by sharing their personal experiences, viewing pandemic-related information, disseminating such content, and engaging in interactive exchanges with others. Similarly, Goodyear et al. (2021) found that social media enabled PWDs to self-manage behaviors related to physical activity, dietary habits, and general well-being, reinforcing its value during public health emergencies. Dai

and Hu (2021) further emphasized that chat applications served as central hubs for real-time communication and collaboration within disability networks, reinforcing the transformative role of digital group communication during crises.

Despite these advances, the necessity for immediate, accessible information via alternative digital channels exposed significant shortcomings in government policy and practice. Structural discrimination manifests in delayed, limited, and inaccessible communication, particularly regarding infection prevention and health service guidance. Ara and Sik-Lanyi (2022) identified critical usability issues in many official websites, including disorganized navigation structures, inadequate explanatory content, and outdated information—barriers that hinder access for users with disabilities. Additionally, Mhiripiri and Miszi (2021) highlighted that public health messaging often lacked sign language interpretation, leaving deaf individuals underserved. Effective risk communication must be timely, accurate, and presented in formats that are both inclusive and trustworthy. As Goggin and Ellis (2020) noted, successful examples—such as captioned and sign language-interpreted daily press briefings—demonstrate the necessity of accessible, multimodal dissemination strategies in fostering inclusive public health communication.

Group Communication for Education: Disparities and Digital Adaptation

The educational domain revealed stark digital inequalities. While students with medium-impact barriers managed to maintain learning via devices, those in high-impact categories (e.g., remote rural students) lost access altogether. Teachers served as communication anchors, conducting home visits and facilitating hybrid learning, reflecting the importance of educator-parent partnerships noted by Meda and Waghid (2022).

UNESCO's (2021) matrix of education access barriers during COVID-19 is a useful analytical tool here. Inaccessible teaching methods, limited assistive technology (AT), and unreliable internet compounded the marginalization of PWDs. These findings align with Chiluba et al. (2020), who stressed the need for systemic digital inclusion policies. This underscores that while digital platforms offer opportunities, they also risk widening gaps unless inclusivity is prioritized.

However, it is crucial to critique the lack of institutional preparedness. As Acosta-Vargas et al. (2022) found, many education portals failed accessibility compliance, suggesting that digital learning was designed with normative assumptions about user abilities. The failure to incorporate universal design principles exposed PWDs to educational exclusion and demonstrates an urgent need to embed inclusivity at the design stage.

Public and Mass Communication: "Delay in formation and unequal mass communication".

At the mass communication level, this study identified significant delays and inequalities. While official COVID-19 information was widely broadcast, it often lacked accessible formats, such as real-time sign language interpretation or plain language summaries. This finding corresponds with the global review by Armitage and Nellums (2020), who argued that inaccessible communication perpetuates exclusion.

Participants expressed frustration over impractical or confusing messages, especially via national COVID-19 hotlines and websites, which reflects Acosta-Vargas et al.'s (2022) web audit showing widespread noncompliance with accessibility standards. In Thailand, PWDs often relied on informal sources or DPOs to interpret and repackage information, mirroring findings from Avby et al. (2024) in Sweden and Baldwin et al. (2023) in the U.S.

However, those with access to smartphones and social media experienced more timely and interactive communication. Platforms like Line enabled real-time problem-solving, advice sharing, and emotional support. This adaptive strategy reinforces the findings of Cho and Kim (2022), who emphasized that digital inclusion must be supported by skills training and device accessibility.

Nevertheless, these individual adaptations should not distract from broader structural critiques. As Bjornsdottir et al. (2023) and Friedman & VanPuymbrouck (2022) argue, technological access does not guarantee equity unless paired with tailored support, content simplification, and interface accessibility. Mass communication strategies must move beyond universal delivery to embrace differentiated and inclusive engagement.

CONCLUSIONS

The communication experiences of PWDs during COVID-19 highlight critical tensions between resilience and exclusion. While group and interpersonal strategies offered strength, systemic barriers in mass communication and education exposed structural neglect. Integrating insights from international studies not only validates local findings but underscores the global nature of disability-related communication disparities.

These results reinforce the need for a multi-level, inclusive communication policy in health emergencies—one that acknowledges intrapersonal agency, strengthens local networks, ensures digital equity, and mandates accessibility in all public communications. Moreover, future strategies must go beyond reactive measures and institutionalize inclusive practices, ensuring that persons with disabilities are not only informed but actively engaged as partners in health crisis communication and planning.

Importantly, this research offers novel insights by illustrating how the intersections of communication levels—particularly intrapersonal resilience, family-based dialogue, and digital peer networks—uniquely shape the adaptive responses of PWDs in the Thai context. Unlike studies that focus solely on technological access or policy gaps, this study foregrounds the lived agency of PWDs and their informal networks as active mediators of health communication. The findings call for a more participatory model of crisis response that recognizes PWDs not only as vulnerable recipients but as contributors to resilient communication ecologies.

RECOMMENDATIONS

1.Strengthen the Role of Disabled People's Organizations (DPOs)

Given the essential role DPOs played in disseminating information, organizing aid, and supporting their members, policies should formally recognize and fund these organizations as key stakeholders in crisis communication and disaster preparedness.In rural areas, where access to technology may be limited, facilitating interaction among PWDs through peer-to-peer communication becomes crucial. Local stakeholders should actively engage and communicate accurate information to PWDs in these areas.

2.Enhance Digital Accessibility and Inclusion

Investment in digital infrastructure must be accompanied by the development of accessible platforms and user interfaces that comply with universal design principles. Furthermore, digital literacy programs specifically tailored for PWDs and their families should be expanded to ensure equitable access to telecommunication, e-learning, and health services.

3. Integrate Family-Based Communication Support in Social Policy

The study highlights the potential of family dialogue in fostering resilience. Social support policies should consider interventions that strengthen intra-family communication, including family counseling, caregiver training, and flexible education programs that promote home-based learning in inclusive ways.

4. Ensure Educational Equity in Emergency Contexts

Preparing inclusive e-learning contingency plans that address infrastructural, pedagogical, and technological barriers faced by students with disabilities is equally important.

5. Foster Participatory Crisis Response Planning

This study underscores the agency of PWDs and their networks in navigating the pandemic. Future public health planning should move beyond viewing PWDs as passive recipients of aid and instead involve them as active contributors to the design of inclusive communication systems and emergency services.

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