

# The Experiences of Virtual Communities in Conducting Health Promotion During the COVID-19 Pandemic: A Qualitative Study in Indonesia

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## Abstract

**Background:** Virtual communities (VCs) have emerged as vital platforms for health promotion, remaining highly relevant during and beyond the COVID-19 pandemic. This study aimed to explore the experiences of VCs in health promotion during and after the COVID-19 pandemic in Indonesia, focusing on sustainability and potential enhancement.

**Methods:** This qualitative study employed a storytelling approach involving ten managers of VCs in Indonesia. Participants uploaded audiovisual recordings to Google Drive, which were shared with the researcher through a link to be transcribed verbatim and analyzed using OpenCode 4.02. For clarification and additional data, participants communicated via WhatsApp and provided follow-up information through Voicenotes, Zoom, and re-uploaded videos to Google Drive.

**Results:** VCs serve as crucial platforms for planning, social action, and local development to optimize the potential of community members. Key planning activities included member involvement, routine meetings, the nature of participation, strategies for maintaining the continuity of activities, and recruiting new members for discussion. Social action initiatives encompassed health education, training activities, development of learning media, overcoming obstacles, collaboration, habit change initiatives, and activities with stakeholders. Furthermore, local development activities featured evaluation processes, member stories, and socialization.

**Conclusion:** VCs prove to be effective media for health promotion during the COVID-19 pandemic. To sustain their existence, these communities must engage in strategic planning, comprehensive social activities, and local development initiatives.

**Keywords:** Community organizing, Health promotion, Virtual community

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## Introduction

The COVID-19 outbreak has led to a significant shift from offline to online activities. Technological advancements have provided new options, such as multimedia technology, voice messaging, and virtual communities (VCs), which support the learning process. A virtual health community is an online discussion group focused on specific health topics. VCs can empower patients and improve healthcare coordination (1). Users within VCs offer mutual support, promote social awareness, and help prevent harmful habits (2).

Previous studies have shown that participation in virtual health communities offers psychological benefits, including improved self-esteem, self-efficacy, and self-control in addressing health issues. Participation also increases

satisfaction in helping others, enhances trust in healthcare providers, and facilitates access to health services. Moreover, it improves social well-being and quality of life (3). The rapid development of technology has expanded the use of electronic devices and online communities. VCs potentially enhance health literacy through health promotion programs organized by governments, private sectors, or non-governmental organizations (NGOs). However, there is limited research on how VCs have been managed in health promotion, particularly during and beyond the COVID-19 pandemic. Accordingly, this study aimed to explore VCs involved in health promotion during and after the COVID-19 pandemic in Indonesia. The findings will serve as a guide for those seeking to establish or utilize online communities for health promotion.



## Methods

### *Research Setting*

This study involved three Indonesian VCs that have operated for about 2 to 15 years and have the highest number of followers in Indonesia. The first and third VCs focused on maternal and child health, while the second VC was more active in women's empowerment.

### *Study design*

The study employed formative research with a qualitative approach as preliminary research to develop an online community-based health promotion initiative in Indonesia. Formative research involves collecting data that inform the development and implementation of intervention programs (4). All authors were experienced in qualitative research. The first author (VSM) was a midwife, EPP was a health professional education specialist, RSP was an anthropologist focusing on women's issues, and AP was a medical doctor trained in public health research. The study adhered to the Consolidated Criteria for Reporting Qualitative Research (COREQ) guidelines (5).

### *Study population*

The study was conducted from March to December 2020 in three Indonesian VCs with thousands of participants. All participants and research team members were women who had not met each other before the study. Ten participants, all VC administrators, were selected using snowball sampling techniques in early participant recruitment. Participants were approached through the contact person listed in the VC activity e-flyers, and their WhatsApp numbers were then traced to reach the administrators of other selected VCs. The exact process was repeated for the other selected VCs. One participant withdrew from the study during data collection due to time constraints. The final sample consisted of ten activists from the three Indonesian VCs: three leaders, two vice-leaders, and five division managers (overseeing human resources and development, education and training, research, communication, and regional branch operations). Only participants and researchers were present during the sessions.

### *Data collection and analysis*

Data were collected using digital storytelling methods in Indonesian. The researcher (VSM) contacted participants via WhatsApp, provided questions, and requested them to record discussions about VC establishment and management, health literacy, social planning and action, and local development as health promotion efforts during the COVID-19 pandemic. Each recording averaged 30 to 60 minutes in length. Participants uploaded their audiovisual recordings to Google Drive and shared the link with the researcher to be transcribed verbatim and

analyzed using OpenCode 4.02 (6). Field notes were made during and after each data collection session. Additional clarification was sought from participants through WhatsApp, with responses given via Voicenotes, Zoom, and re-uploaded video to Google Drive.

Two coders (VSM and AP) generated codes, and all authors participated in categorizing the data and determining themes. Preliminary results informed subsequent data collection, with the process repeated until data saturation was reached. To ensure the trustworthiness of the qualitative research, we adhered to criteria for credibility, dependability, confirmability, and transferability (7). Trustworthiness was established through follow-up questions during interviews for detailed information through WhatsApp Messenger and Zoom Meeting (credibility), member checks on the results, discussions with supervisors (peer debriefing), and detailed reporting of the research procedures (dependability). Source triangulation was implemented by cross-checking participants' responses against existing literature or other answers to ensure the quality of research data (confirmability).

## Results

This study involved three VCs. VC1, established in 2007, operates in the maternal and child health sector with a focus on breastfeeding. It functions across 19 regions/provinces in Indonesia and maintains branches in 11 districts outside provincial capitals. VC1 and VC2 have established websites and are active on platforms such as Facebook, Instagram, WhatsApp, YouTube, and TikTok. VC3 has only an Instagram account and a WhatsApp group. VC1 has approximately 200 000 followers and was formed through a mailing list and has since been actively organizing workshops, breastfeeding fairs, domestic and international conferences, and training sessions. VC2, founded in 2011, focuses on empowering women and has 70 000 followers. It operates in 57 cities in Indonesia and ten countries, facilitating online learning forums and offline discussions. VC3, established in 2018, has 2000 followers and is centered on maternal and child health, offering activities such as pregnancy and health education programs. While VC1 and VC2 have gained international recognition through collaborative programs and involvement in overseas community activities, VC3 remains focused on national initiatives.

### *Characteristics of participants*

The characteristics of the participants are detailed in Table 1. All participants were women aged 33 to 45 years, held bachelor's degrees, and were privately employed. The duration of volunteering ranged from two to fifteen years.

### *Major themes*

This study identified three major themes regarding the

roles of VC organizations in Indonesia (Figure 1, Table 2) in conducting health promotion during the COVID-19 pandemic, including planning, social action, and local development.

### Community organizing planning in VCs

To ensure the sustainability of the virtual health community, managers must take various steps, such as planning VC activities and budgeting. Chairpersons conceptualize planning activities, which are then executed by the administrators.

The virtual health community comprises members from diverse regions, holding regular meetings at both central and regional or branch levels. Planning is mainly based on evaluations from previous programs and strategies established by higher levels of the organization.

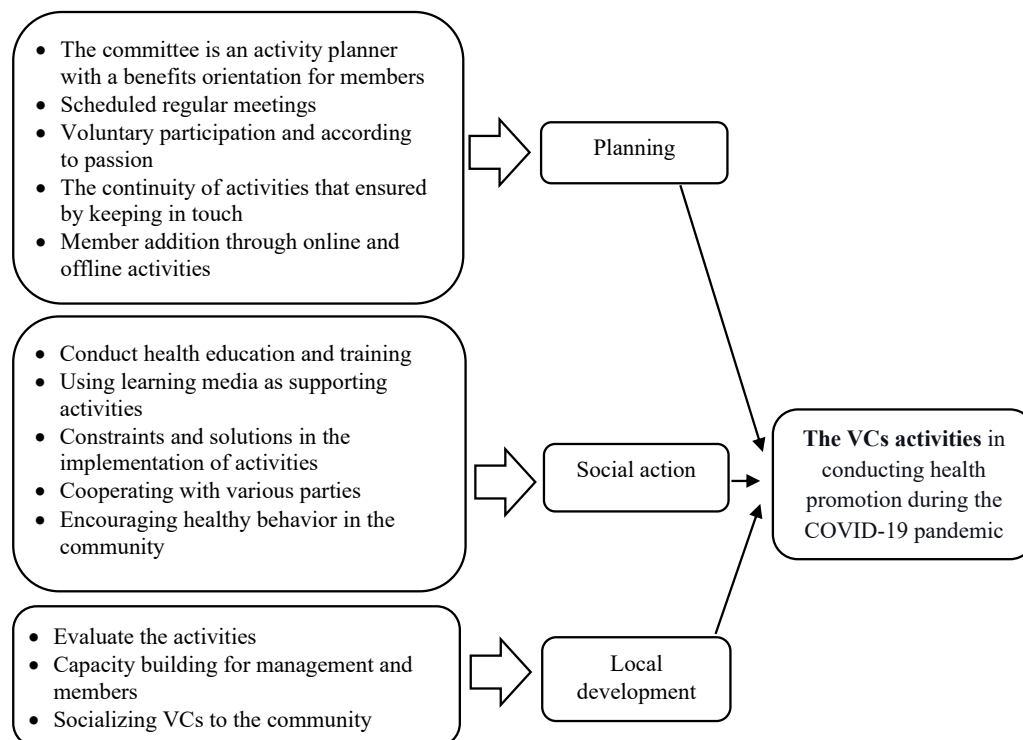
As one participant noted, "At the end of each year, the community evaluates all activities and plans for next year's programs"(Leader VC2). Another participant remarked, "Meetings are also conducted at the regional level to plan and evaluate activities"(Regional Branch Manager VC1).

Monthly meetings are held to plan, evaluate, and coordinate activities, allowing for the preparation of addressing potential problems. The content planning for health promotion is responsive to the community's health conditions, with updates frequently drawn from WhatsApp groups. High-impact VCs can schedule regular meetings with government representatives and play an active role in developing health-related policies.

"We also have a research team that shares the latest information or updates in our WhatsApp group and

**Table 1.** Characteristics of participants

No.	Initial	Ages (y)	Gender	Main occupation	Education	Status in VCs
1	NU	44	Female	Lactation consultant	Master's degree	Leader VC1
2	FD	42	Female	Lecturer	Master's degree	Vice-leader VC1
3	IA	40	Female	Psychologist	Master's degree	Human resources and development division VC1
4	LD	42	Female	Lactation counselor	Master's degree	Education and training division VC1
5	MK	40	Female	Private employee	Master's degree	Research division VC1
6	ST	43	Female	Private employee	Bachelor's degree	Communication division VC1
7	AA	45	Female	Private employee	Bachelor's degree	Regional branch manager VC1
8	CK	42	Female	Entrepreneur	Bachelor's degree	Leader VC2
9	YS	43	Female	Private employee	Bachelor's degree	Vice-leader VC2
10	RA	33	Female	Lecturer	Master's degree	Leader VC3



**Figure 1.** Roles of Indonesian VCs during COVID-19

*updates our information from there*”(Human Resources and Development Division VC1).

*“Monthly meetings are conducted to plan and evaluate monthly activities and address any apparent problems”* (Vice-leader VC1).

During the COVID-19 pandemic, the need for timely health information updates increased, leading to the adoption of online classes. An informant illustrated this by stating, *“The essential achievement of this community is our ability to catch up with the current conditions by holding online classes during the pandemic, scheduled on commemorative days and anniversaries”* (Education and Training Division VC1).

Another informant mentioned their efforts to deliver education appropriately: *“We are constantly searching for the best formula to conduct an effective online class. We believe planning is crucial. Therefore, we have both plan A and plan B in place. For instance, if plan A fails, we are prepared with the next steps”* (Leader VC1).

The administrators of the virtual health community are responsible for communicating new information and socializing activities at both central and regional levels. New members are added to disseminate credible health information throughout the region.

*“Administrators share information about the latest health journals and the development of science”* (Research Division VC1).

*“We consistently encourage administrators to participate in various seminars and share insights from these seminars ...”* (Regional Branch Manager VC1).

Disseminating information and enhancing the virtual health community’s visibility involves utilizing social media. Individuals seeking health information or health-related social support can find online virtual health communities. An informant illustrated this by stating, *“This community utilizes a variety of social media platforms to promote activities and share health information”* (Communication Division VC1). The health promotion content should be up-to-date and evidence-based: *“Administrators share information about the latest health journals and scientific advancements”* (Research Division VC1).

Community members who benefit from joining the VC are encouraged to invite others to participate in community activities. Though virtual health communities typically operate on a non-profit basis, emphasizing volunteerism, not all members are involved in program planning. Furthermore, the involvement of VC administrators is driven by their passion and interest. Everyone contributes, shares, and supports one another, with member recruitment primarily conducted through inner-circle communication.

*“The administrators in this community work according to their passion and interests ... This community adds members using inner-circle communication, both*

*from existing members and non-members”* (Human Resources and Development Division VC1).

### **Social actions in community organization within VCs**

Before the COVID-19 pandemic, VCs conducted offline health promotion activities, including workshops, face-to-face counseling, community gatherings, and maternal health classes.

*“We organized workshops in various cities across Indonesia. In a single workshop, the number of participants ranged from around 40 to 100, depending on the meeting room’s capacity. There were also community gatherings, maybe once a month”* (Vice-Leader VC2).

Due to the difficulties associated with physical meetings during the pandemic, VCs transitioned to utilizing Zoom meetings and instant messaging for face-to-face interactions and brainstorming sessions with members to innovate new activities. This shift led to the implementation of online health promotion methods, such as webinars, live sessions on social media (Instagram and YouTube), health consultations in WhatsApp groups, and increasing health-related content on social media. The content shared on social media is tailored to the needs of the followers, conveyed through comments on Instagram and Q&A sessions in live events and webinars.

*“Now we have started adapting; workshops have turned into webinars; we are also having talk shows on Instagram Live, and we have many participants, approximately 50 to 3,000 participants depending on the themes, speakers, and events”* (Education and Training Division VC1).

The community must ensure its members can access educational activities and informational sharing. During the COVID-19 pandemic, virtual health community managers sought new ideas and breakthroughs, utilized various kinds of learning media, and optimized social media to contribute to health promotion programs and improve the quality of life of their members.

*“We created a handbook for maternal support groups ... In offline events, we used PowerPoint, InFocus projectors, and laptops”* (Education and Training Division VC1). *“We also provided materials on parenting”* (Vice-leader VC2).

VCs face obstacles related to volunteerism. One participant mentioned, *“Due to its voluntary nature and unpaid work, only one person regularly attended meetings, fitting them in around their regular jobs”*(Vice-leader VC1).

Non-profit VCs must collaborate with various stakeholders, such as government entities, professional organizations, the private sector, and policymakers. Input from these stakeholders is perceived as necessary to overcome the challenges faced by VCs.

*“We regularly conduct hearings with stakeholders to*

monitor the implementation of government regulations and laws that align with our focus" (Leader VC2).

"Labour unions and professional organizations also inquire about our recommendations and input and collaborate on organizing activities" (Vice-leader VC1).

Moreover, VCs face challenges related to limited human resources for carrying out activities, as illustrated by the following statements:

"Resources are limited; administrators who are not health workers may not be able to address clinical issues" (Human Resources and Development Division VC1).

In response, problem-solving strategies include referrals to hospitals.

"If there is an indication of necessary medical action, we immediately visit health workers or hospitals" (Education and Training Division VC1).

Differences in members' opinions on health issues also pose challenges for health promotion through VCs. "Much of the information on the internet is not objective, and each person has their own opinion and understanding" (Leader VC3). However, these differing opinions do not create a toxic communication environment in VCs, since they are viewed as a normal aspect of community discourse.

To overcome these problems, VCs employ several strategies, such as applying flexible communication principles, filtering information by seeking solutions from credible sources, and terminating debates between netizens by disabling the comment section.

"We seek information from credible sources and disable comments on social media if debates arise among netizens" (Communication Division VC1).

Funding challenges are another concern in carrying out activities, as illustrated by the following statement:

"Running an organization requires funds, but as a non-profit, we cannot finance all training expenses" (Vice-leader VC2).

VCs have developed financial solutions by engaging in cross-funding and seeking additional funding for community events.

"We utilize cross-funding from paid mid-sized events to support free events, apply for grants, and sometimes receive donations" (Vice-leader VC2).

The issue of plagiarism regarding VC material by members presents ongoing challenges. "Some participants record, use, and reproduce the material without permission. Our online activities sometimes face internet connectivity issues" (Education and Training Division VC1).

Misuse of digital literacy rights has also occurred, with participants creating and uploading content by copying from original authors without consent. "It is difficult to receive authentic feedback" (Research division VC1).

To address plagiarism, the VC displays a disclaimer on all content shared.

"We display a disclaimer, so there should be no plagiarism" (Education and Training Division VC1).

At the onset of the COVID-19 pandemic, most VC activities were hampered. "It has been tough during COVID-19, so our activities have paused temporarily" (Leader VC3).

In response, the VC organized online activities through Instagram live sessions, webinars, and Zoom meetings, while also increasing content on Instagram and YouTube. "We formulated a pattern of online activities" (Education and Training Division VC1).

To promote behavior change, the virtual health community can take advantage of holidays, international commemorations, and events organized by the government and other entities related to community issues.

"We also organize events based on holiday themes and national and international commemoration days" (Leader VC3).

"Since the COVID-19 pandemic, we have regularly held webinars and zooming [a seminar through Zoom]" (Education and Training VC1).

#### **Local development in community organization within VCs**

Managers must regularly monitor and evaluate activities to foster development within VCs.

"At the beginning of an educational activity, we provide a pre-test and conduct a post-test at the end" (Education and Training Division VC1).

"We conduct evaluations through our research division and external evaluators" (Research Division VC1).

VC managers should organize activities that encourage individuals to share their experiences or accomplishments in dealing with stressful situations.

"Socialization events are regularly conducted in public places, such as shopping malls and local health centers" (Vice-leader VC2).

"We motivate members to disseminate health information to the public; senior members also help share information with new members" (Regional Branch Manager VC1).

Besides, managers can motivate administrators to improve the quality of human resources through regular in-house training, capacity building, and knowledge sharing among members.

"Administrators regularly participate in the WHO training modules, counseling, public speaking, etc." (Vice-leader VC2).

"Our capacity-building efforts aim to improve organizational skills and boost teamwork" (Human Resources and Development Division VC1).

There were similarities in the approaches taken to community organization regarding planning, social action, and local development. Evidence of the success of VCs in community organization includes increasing recognition in the broader community, demonstrated by a growing number of followers on social media, involvement of researchers in decision-making by

**Table 2.** Roles of Indonesian VCs during COVID-19

Theme	Category	Code	Quote
VCs' activities in conducting health promotion during the COVID-19 pandemic	Planning	Committee as an activity planner tending to benefit members	"We also have a research team that shares the latest information or updates in our WhatsApp group and updates our information from there" (Human Resources and Development Division VC1).
		Scheduled regular meetings	"Monthly meetings are conducted to plan and evaluate monthly activities and address any apparent problems" (Vice-leader VC1).
		Voluntary participation according to passion	"The administrators in this community work according to their passion and interests" (Human Resources and Development Division VC1).
		Continuity of activities ensured by keeping in touch	"The essential achievement of this community is our ability to catch up with the current conditions by holding online classes during the pandemic, scheduled on commemorative days and anniversaries" (Education and Training Division VC1).
		Member addition through online and offline activities	This community adds members using inner-circle communication, both from existing members and non-members" (Human Resources and Development Division VC1).
	Social action	Conducting health education and training	"We also provided materials on parenting" (Vice-leader VC2).
		Using learning media as supporting activities	"We created a handbook for maternal support groups ... In offline events, we used PowerPoint, InFocus projectors, and laptops" (Education and training division VC1).
		Constraints and solutions in the implementation of activities	"If there is an indication of necessary medical action, we immediately visit health workers or hospitals...We display a disclaimer, so there should be no plagiarism... We formulated a pattern of online activities..." (Education and training division VC1).
		Cooperating with various parties	"We regularly conduct hearings with stakeholders to monitor the implementation of government regulations and laws that align with our focus" (Leader VC2).
	Local development	Encouraging healthy behavior in the community	"We also organize events based on holiday themes and national and international commemoration days" (Leader VC3).
		Evaluation of activities	"We conduct evaluations through our research division and external evaluator" (Research division VC1).
		Capacity-building for managers and members	"Our capacity-building efforts aim to improve organizational skills and boost teamwork" (Human Resources and Development Division VC1).
		Socializing VCs to the community	"Socialization events are regularly conducted in public places, such as shopping malls and local health centers" (Vice-leader VC2).

stakeholders and the government, sustained success over five to sixteen years, and consistent implementation of diverse and well-attended programs.

## Discussion

This study identified one overarching theme with three categories regarding the roles of VCs in Indonesia in conducting health promotion during the COVID-19 pandemic, including planning, social action, and local development.

### Planning

The founders of VCs were motivated by difficulties in accessing health information, addressing health problems, managing family care issues, and meeting social support needs. Dedicated leaders and administrators in these communities are keen to help others by sharing their experiences and knowledge with those in need. According to Bromley, virtual health communities offer support to individuals facing various health conditions (8). Community leaders can cultivate a shared identity to create a large community with many connections, comparisons between groups, and superior social categorization compared to other communities. This is accomplished by emphasizing the community's uniqueness and selectively allowing participation from

certain groups. VC managers should develop sustainable plans to enhance the knowledge and skills of their members and volunteers. The findings of this study align with previous research that emphasizes the importance of equipping individuals with skills to critically assess digital health information, thereby enhancing trust. Educational programs should focus on fostering critical thinking, information evaluation, and digital citizenship, allowing individuals to make informed health decisions in today's complex VCs (9).

VC managers need to be open to innovation, pursue personal development, and accept the responsibilities associated with their roles. Members of virtual health communities primarily seek access to credible health information (3). VCs that value the process of sharing information, support among members, the possibility of members leaving the community, and a sense of belonging should focus on establishing a shared identity with community members (10). Some of them are invited by friends who have already joined the community. Thus, they can join an online group that provides an opportunity to discuss and share health experiences and solutions. Socializing activities and events can promote public awareness of VCs and draw in new members.

Leader support is a significant determinant of knowledge contribution (11). The presence and

involvement of VC leaders during meetings positively influence administrators' sense of support. Moreover, recognition from community leaders can further bolster members' commitment.

VCs tend to develop naturally in accordance with community plans; thus, control efforts are necessary to adapt and improve based on the latest community developments (12). Best practices for planning VC activities highlight the importance of developing strategies that enhance the community's uniqueness.

### **Social action**

The assistance and support available in VCs are critical for the sustainability and success of these communities. Members who actively engage in the VC are more likely to exhibit beneficial behaviors that contribute to community well-being.

Virtual health communities can effectively utilize social media for various purposes, such as increasing public awareness of the community's existence, connecting with users, gathering information, reducing costs, enhancing user relationships, and improving accessibility to information (13). VCs provide a platform for discussions and activities that foster the community's prestige. By continuously offering innovative and engaging tools, games, and support services, VCs can meet members' needs and create a positive and satisfying atmosphere (14).

Members frequently seek online encouragement from their communities, especially those who require social support but may struggle with direct emotional expression. In turn, this can encourage other VC members to provide support, uniting individuals facing similar problems and concerns. Such a forum fosters fast and free sharing of information and advice (15). The prestige and uniqueness that members derive from their community positively influence individual identification within the community (14).

As many VCs operate on a non-profit basis, they rely on volunteerism. Individuals experiencing relatively lower levels of stress in their lives find it easier to engage in volunteer activities. Conversely, those with higher stress levels may face health challenges and lack the psychological resources to commit to non-profit endeavors. An extensive social network enables volunteers to see or hear information about healthy behaviors, such as getting preventive health care checks. Literature indicates that increased social interactions can enhance opportunities for individuals to share health information, provide advice, or work together to achieve healthy lifestyle goals (16).

A critical finding of this study regarding social action was that VCs can provide online support, positively impacting self-efficacy, self-esteem, and subjective well-being. This study highlighted the importance of VCs in complementing conventional health promotion efforts through a hybrid approach, thereby increasing program

flexibility and accessibility despite existing barriers. Similarly, previous studies have suggested that post-COVID-19 interventions should integrate digital and physical approaches, demonstrating that improvements in digital health literacy can benefit even those with low literacy levels, enhancing self-efficacy and leading to positive interactive outcomes (17).

### **Local development**

Online communities can play a crucial role in influencing government policy, serving as research entities whose insights contribute to decision-making, drafting regulations and laws, and developing health programs. This is informed by the experiences of community leaders who actively participate in international conferences, consistently update their knowledge, and directly interact with the community as users of these programs, hence significantly increasing the likelihood of obtaining crucial findings beneficial to the government.

Online communities are social media in low- and middle-income countries, facilitating disease surveillance, mass communication, health education, knowledge translation, and collaboration among healthcare providers. However, they also contribute to the spread of misinformation or poorly communicated information, leading to negative health behaviors, adverse health outcomes, hysteria, and chaos. Therefore, official social media organizations need to provide accurate and easy-to-read information. Moreover, previous research highlights that promoting digital health literacy by governments, healthcare professionals, and researchers, as well as education on the proper use of social media, can mitigate the impact of misinformation (18).

As the number of volunteers in online communities increases, their capacity to spread and support health literacy expands. Founders and managers of these communities play a crucial role in ensuring that volunteers adhere to credible health literacy standards. Volunteers assist healthcare professionals by disseminating health information, recommending services, and promoting healthier lifestyles. This study aligns with previous research emphasizing the importance of engagement at both professional and public levels in developing digital health literacy. Furthermore, social and cultural factors significantly influence the development of digital health literacy, highlighting the need for a fixed model to contextualize it alongside other literacy types and societal determinants (19). Previous studies suggest that social factors influencing healthcare services in rural communities impact individuals' utilization of these services. Hence, addressing these social determinants within healthcare processes is crucial when developing new promotional strategies for healthcare services (20).

From the analysis of these three VCs, several lessons and best practices emerge regarding the management and

sustainability of VCs on an international level. Notably, a VC has successfully garnered thousands of followers in a short period (two years). Another noteworthy aspect of all three VCs was their ability to engage with the government, eventually becoming research entities with contributions recognized in government programs. Collaboration between the government and online communities, along with other stakeholders, is crucial. Besides, this study uncovered that VCs provide valuable solutions for busy individuals or those with limited mobility, enabling them to access important information from home.

While this study was limited to three VCs in Indonesia and primarily explored the perspectives of organizers, the findings sufficiently capture their experiences and perceptions. VCs are considered crucial, relevant, and sustainable even after the COVID-19 pandemic, as communities increasingly embrace online activities for their accessibility and time flexibility. Individuals can easily access updated information and choose program topics that align with their interests.

### Conclusion

VCs are highly relevant as effective media for health promotion. Successful implementation of VC organizations requires effective planning, comprehensive social activities, and local development to optimize the potential of community members. By leveraging these three factors, virtual health communities can strive to maintain their presence and impact. The researchers recommend that other parties interested in establishing or organizing online communities apply principles of community organization to create sustainable and beneficial VCs. For leaders in the early stages of establishing VCs, preparing effective and efficient programs is essential. Subsequently, they should engage with government bodies by conducting hearings with stakeholders and proposing VC initiatives that align with existing government programs.

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### Competing Interests

None.

### Ethical Approval

The study was approved by the Research Ethics Committee at the Faculty of Medicine, Universitas Sebelas Maret, Surakarta, Indonesia (No. 001/UN27.06/KEPK/EC/2020).

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