

Stopping the Virus; Study on Participatory Journalism and Digital Humanitarian during a Non-Natural Disaster in Indonesia

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Abstract

Philanthropic initiatives during disaster events have become embedded in Indonesian society. It also manifests in a digital humanitarian practice during the COVID-19 pandemic, categorized by the government as a non-natural disaster from 2020 to 2023. The spreading of misinformation and inaccurate data on cases of COVID-19 patients, have become an obstacle in the early stages of efforts to stop fatalities. As the government imposes lockdown and restrictions access to information, the news media as one of the key sources of information is under attack. Thus, citizen initiatives in stopping the pandemic are worth documented as a lesson learned when managing disasters in the future. By conducting qualitative method, this research describes the implementation of participatory journalism in practice related to the data gathering and reporting on COVID-19 cases in Indonesia by "LaporCovid-19" and "KawalCOVID19". This research finds both platforms carry out digital humanitarian practices while organizing citizens and producing, curating, and disseminating information. As the government imposes lockdown and restricted access toward media and journalists, the digital humanitarian practice involves citizens through decentralization, self-organization, volunteerism, and the optimization of digital platforms. The collaboration is a multidisciplinary subject that combines crises management, communications, network collaborative organizational structures, social computing and technology. In conclusion, their efforts offer a model to develop citizen participation in the non-natural disaster using digital apps and citizen resources. The model intertwines participatory journalism and digital humanitarian practices that engage citizens during the pandemic on both digital platforms contribute to other citizens' efforts to prevent and overcome health crises.

Keywords: digital humanitarian; non-natural disaster; pandemic; participatory journalism; public participation

Abstrak

Inisiatif kederawatan selama bencana telah melekat dalam masyarakat Indonesia. Hal ini juga terwujud dalam praktik kemanusiaan digital selama pandemi COVID-19, yang dikategorikan oleh pemerintah sebagai bencana non-alam pada tahun 2020-2023. Penyebaran informasi yang keliru dan data yang tidak akurat mengenai kasus pasien COVID-19, menjadi kendala pada tahap awal upaya untuk menghentikan angka kematian. Ketika pemerintah memberlakukan karantina wilayah dan pembatasan akses informasi, kebebasan media sebagai salah satu sumber informasi utama berada dalam ancaman dan tekanan. Oleh karena itu, inisiatif warga dalam menghentikan pandemi ini layak untuk didokumentasikan sebagai pembelajaran dalam penanganan bencana di masa depan. Dengan menggunakan metode kualitatif, penelitian ini mendeskripsikan implementasi jurnalisme partisipatoris dalam praktiknya terkait pengumpulan data dan pelaporan kasus COVID-19 di Indonesia yang dilakukan oleh "LaporCOVID-19" dan "KawalCOVID19". Penelitian ini menemukan bahwa kedua platform tersebut menjalankan praktik kemanusiaan digital sambil mengorganisir warga dan memproduksi, mengkurasi, dan menyebarkan informasi. Ketika pemerintah memberlakukan karantina wilayah dan membatasi akses terhadap media dan jurnalis, praktik kemanusiaan digital melibatkan warga melalui desentralisasi, pengorganisasian diri, kesukarelaan, dan optimalisasi platform digital. Kolaborasi ini merupakan subjek multidisiplin yang menggabungkan manajemen krisis, komunikasi, struktur organisasi kolaboratif jaringan, komputasi sosial, dan teknologi. Sebagai kesimpulan, upaya mereka menawarkan sebuah model untuk mengembangkan partisipasi warga dalam bencana non-alam dengan menggunakan aplikasi digital dan sumber daya warga. Model ini mengaitkan jurnalisme partisipatoris dan praktik kemanusiaan digital yang melibatkan warga selama pandemi di kedua platform digital yang berkontribusi pada upaya warga lainnya untuk mencegah dan mengatasi krisis kesehatan.

Kata kunci: bencana non-alam; jurnalisme partisipatoris; kemanusiaan digital; pandemi; partisipasi publik

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INTRODUCTION

Philanthropic initiatives during disaster events as a part of the generosity attitude of Indonesian people, tend to be embedded in Indonesian society. As quoted from Katadata, Indonesia is a country with the most generous population in the world in 2022, which is a consecutive achievement in the last five years (Kusnandar, 2022). Not only in the real world but also in the virtual world, which is manifested in a digital humanitarian attitude. The digital humanitarian practice involves citizen initiatives through decentralization, self-organization, volunteerism, and the optimization of digital platforms in managing a disaster (Phillips, 2015, p. 2). One of the example is when the COVID-19 pandemic which was included in the non-natural disaster category occurred during 2020-2023. The COVID-19 pandemic shocked the world. In Indonesia, citizen and all government stakeholders are working hard to overcome the epidemic that has spread across regional boundaries (Susilo, 2020). From Jakarta, so-called the epicenter of the pandemic, the virus has rapidly spread to the neighboring cities. And in a few weeks, the Ministry of Health reported that the number of the COVID-19 cases had increased from Papua to Aceh province.

In responding the pandemic, the government released Keputusan Presiden (KEPPRES) Nomor 12 Tahun 2020 on the Determination of the Non-Natural Disaster of the Spread of Corona Virus Disease 2019 (COVID-19) as a National Disaster (Arifin, 2020). This Decree declares non-natural disasters caused by the spread of Corona Virus Disease 2019 (COVID-19) as national disasters. The implementation of this disaster is carried out by the Task Force for the Acceleration of Handling Corona Virus Disease 2019 (COVID-19) in accordance with Presidential Decree Number 7 of 2020 and its amendments. As for governors, regents, and mayors as Chairpersons of the Task Force for the Acceleration of Handling Corona Virus Disease 2019 (COVID-19) in the regions, in determining policies in their respective regions must pay attention to central government policies.

The pandemic has paralyzed many public sectors, especially public service agencies and health centers in many cities and residences (BBC Indonesia, 2020). Inequality between infrastructure and health services in a number of areas, exacerbated by the confusion of information and data on cases of COVID-19 patients, has become an obstacle in the early stages of efforts to prevent and deal with outbreaks. At that time, efforts to prevent the pandemic in the real-world were increasingly complicated. To make matters worst, the government and the public faced the rising number of disinformation and misinformation regarding COVID-19 spreading through social media platforms (Rahayu, 2021).

The “infodemic phenomenon” around COVID-19 is unavoidable, namely “a condition where the availability of information is abundant, some are accurate and many are not, which makes it difficult for residents to find reliable sources and referrals” (World Health Organization, 2020). The World Health Organization (WHO) even stated that, after a pandemic, infodemic is a “second disease” that spreads very quickly and is no less dangerous for the public. During this health crisis, news media is the citizens’ hope for obtaining correct information regarding pandemic, vaccine, and vaccination (Costantini & Fuse, 2022, p. 234). The media can assist them in making the right decisions in preventing and overcoming a pandemic. When the infodemic hit, the news media was a key in providing accurate and credible information to avoid and misinformation and disinformation (Nielsen et al., 2021).

But during the pandemic, media freedom is under pressure. Furthermore, Freedom House’s research report entitled “Democracy under Lockdown: The Impact of COVID-19 on the Global Struggle for Freedom” concludes that the COVID-19 outbreak has triggered a crisis of democracy in a number of countries (Repucci & Slipowitz, 2020, p. 3). The pandemic has

forced governments in a number of countries to make repressive policies, limiting freedom of the press and citizen expression. Similar pressures also occur in Indonesia, as revealed in the research publication conducted by the Institute for Criminal Justice Reform (ICJR). In a research report entitled “COVID-19 Pandemic: Press Freedom and Journalist Safety in Crisis” researcher found there was a practice of censorship related to reporting on the COVID-19 pandemic situation. In fact, the press company where a number of journalist work has received legal threats due to reporting and news publication during the COVID-19 pandemic. The most common form of legal threats either the media organization or individual journalist are reported to the police (Shader et al., 2021). Several threats, from legal, political, economic, to physical threat, to the press freedom also happens in several countries during the pandemic (Papadopoulou & Maniou, 2021, p. 9).

Limited access to information and availability of accurate data are also becoming obstacles in handling the pandemic. The accuracy of official information and data from the government often contains errors. Research conducted by Aziz et al. (2021), states that another problem that requires collaboration between the center and the regions related to data synchronization arose, after the nervousness of the relationship between the center and the regions in the early days of the pandemic. There are differences in the COVID-19 case data submitted by the central government and regional governments via the websites of each province. This data relates to positive patients and victims who died from COVID-19.

Iwan Ariawan, a lecturer in health statistical modeling at the Faculty of Public Health, University of Indonesia, as quoted from Aziz et al. (2021), stated that the asynchronous data from the central and regional governments was influenced by several factors. This includes differences in the definition of patient sampling methods and the stagnant flow of resources from local government to the center. Still quoted from Aziz et al. (2021), the discrepancy between central and regional government data is considered to have an impact on the handling of the COVID-19 problem in Indonesia.

This impact then triggered a number of elements of society to respond to the situation. One of them occurs in terms of collaboration when information is shared and formulated through information and communication technology (ICT) during a crisis. Batard et al. (2019) states that ICT and social media drastically change the information shared and structured during the crisis.

This is in line with the understanding that in certain situations, such as in crises and disasters, certain adjustments are made to deal with them. Crisis situations represent relatively fast moving and dynamic events that increase the need for adaptation, adjustment, and innovation in collaborative contexts (Parker et al., 2020).

In the Indonesian context, a number of initiatives have emerged which are the collaboration of a number of elements of society. The aim is to fix the problems surrounding the relatively lack of credibility of data and information related to the COVID-19 pandemic. Among a number of these initiatives are the “LaporCovid-19” platform at the website address laporcovid.org and “KawalCOVID19” on the kawalcovid19.id page which both began to be formed in March 2020.

Efforts to involve citizen participation in reporting in the form of factual data and information developed by the mass media have been studied by a number of academics. Several studies concerning citizen participation in reporting fact-based information in Indonesia are often identified with the practice of citizen journalism. This journalism practice utilizes communication and information technology-based mediums as information distribution channels (Wall, 2015, p. 812). Kurniawan’s research (2007), for example, revealed the role and

involvement of citizens in conveying factual information and events that occurred in a number of areas through Radio Elshintan. The Dayak indigenous people in West Kalimantan use cell phones to report incidents and cases of criminalization against farmers and residents to the RuaiTV editor (Suranto & Nusantara, 2015, p. 74).

Citizen participation is critical for the health of democracy and its sustainability. The term citizen is widely regarded as a political concept, yet the concept of citizen evolves among political scholars. The manifestation of citizen involvement in democracy reflects in a number of public policy and political decisions. However, some scholars define the citizen participation or civic engagement as “collective action in the form of collaboration or joint action to improve conditions in the civil sphere” (Ekman & Amnå, 2012, p. 284). In addition, Adler and Goggin (2005) highlight the significant goal of such engagement among the citizen. They describe citizen engagement as “how an active citizen participates in the life of a community to improve conditions for others or to help shape the community’s future” (Adler & Goggin, 2005, p. 236).

Citizen participation requires the availability of accurate and reliable information. The journalistic industry, namely media, supply the information to the public. The industry is well organized, structured and systematic shaped with principles and a code of ethics. The professionals and individuals who is working in such media industries are obliged to apply the principles and code of conduct (Peters & Broersma, 2013, p. 8). However, digital disruption has affected the existence and work of journalists (Nusantara et al., 2019, p. 9). This disruption has resulted in some media industries in Indonesia closing their businesses (Manan & Aswira, 2017).

Peters and Broersma (2013) argue that journalism practices in the digital era have undergone major changes. Press organizations are required to rearrange the definition of journalism, no longer being an industry with a structure, process flow and operationalization of work like a manufacturing or automotive industry (de-industrialized journalism) with the aim of making a profit. The evolving of news consumption by the public in the digital era has rapidly changed, it is no longer linear like in the glorious era of mass media. “[...] but literally assemble information associatively by interacting with it online.”

On the other hand, although there are differences of opinion from a number of practitioners and academics regarding the journalist profession, digital technology and the internet provide opportunities for every individual to obtain information from various sources and share information with anyone (Gant, 2011, pp. 31–33). The practice of journalism nowadays is no longer dominated by the press industry which is centered in newsrooms with a handful of individuals who are journalists with hierarchical positions. Some of the functions and roles in the production and dissemination of information have been taken over by citizen who are not journalists who work for the media industry. Though the participatory practices in several countries vary and depend on different context (Karlsson et al., 2015, p. 305), citizen involvement in journalism practices has raised pros and cons in some academics and practitioners. Opposing parties see that the legitimacy of professional journalists and the dominance of the media industry as institutions that produce facts are being challenged in the digital era (Peters & Broersma, 2019). Meanwhile, those who are pro consider that citizen involvement in informing facts is a form of participation in democracy. Domingo et al. (2008) refers to this form of journalism as participatory journalism, in which citizens act as “information providers” to meet the expectations of other citizens to obtain accurate and reliable information.

Similar to Domingo et al. (2008), citizen reporting in Allan’s view (2013), is a form of citizen witnessing which is increasingly being carried out along with the emergence of participatory culture phenomena. Previously, the function and role of being a witness to events

was carried out by professional journalists in order to obtain facts. But now digital technology and the internet make it easier for citizens to report information in photographs, videos, written or oral testimonies spontaneously at moments of crisis where professional journalists are very limited and unable to reach certain areas, especially areas hit by crises or disasters (Kurnia et al., 2020, p. 127).

Furthermore, according to Norris (2017), reports and testimonies from residents as well as information collected by volunteers in disaster areas, including the COVID-19 pandemic, uploaded via social media and other digital platforms is a form of journalism. In several cases, the people's confidence in the government determines how well risk communications to force the public to follow disease prevention measures work during an epidemic. According to Sheen et al. (2021, p. 10), the government can take the practical step of allowing information to flow from unofficial sources to solve the issue of a credibility gap during a pandemic since trust in the government increases when citizens perceived government transparency in handling the pandemic is higher.

The practice of citizen journalism in the midst of the COVID-19 pandemic intersects with the concept of digital humanitarian. The public's and journalists' involvement in gathering and sharing disaster information aids the government and emergency personnel in learning the true nature of catastrophe areas and the best way to manage them (Kurnia et al., 2020, p. 129). In a number of cases, digital humanitarian practices involving citizens are decentralized, self-organized, relying on volunteers and optimizing digital platforms (Phillips, 2015, p. 2). The practice of this activity involves collaborative work involving a relatively new interdisciplinary field that integrates social computing and technology, information systems, network collaborative organizational structures, communications and emergency management (Norris, 2017, p. 4). Such public participation could result in public awareness, preparedness, as well as public responsiveness toward disasters (Houston et al., 2019).

However, the practice of reporting and citizen journalism that utilizes platforms concerning health issues and disease outbreaks is still limited. Albeit, citizen journalism has opened the information gate and increased the instantaneity and virality of pandemic reporting. As a result, information regarding stopping and containing the pandemic is easily accessible online and on social media (Ugbo et al., 2022, p. 196). In addition, studies on digital humanitarian phenomena that arise as a result of a crisis and disasters that rely on digital connectivity have not been extensively explored. Several researchers questioned the lack of awareness in participation, the limited literacy and knowledge of citizens regarding techniques and how to report facts related to health issues (Davis, 2017; Krajewski & Ekdale, 2017). In Indonesia, research focused on reporting practices and citizen journalism that related to health issues, especially pandemics, is still limited. Though, national media benefit from the public participation by sharing content on the pandemic (Furqan et al., 2022). This study aims to fill these limitations.

This research intends to map the digital humanitarian practice of citizen participation in both platforms related to a non-natural disaster, in this case, the COVID-19 pandemic. In doing so, it focuses on identifying citizen participation through decentralization, self-organization, volunteerism, and the optimization of digital reporting platforms in managing a disaster. The mapping of the digital humanitarian that was exercised involving four question points, namely 1) how to organize citizens, 2) what was the information production process, 3) how to curate information on each platform, and 4) what were the methods of disseminating information about preventing and handling the COVID-19 pandemic? This research will describe the implementation of citizen and participatory journalism in practice related to the data gathering and publication of data and information on COVID-19 cases in Indonesia. The research focus

or research goal does not mention the practice of digital humanitarian efforts.

RESEARCH METHOD

This study is a qualitative research by applying the case study method. This method allows researchers to explore a case or phenomenon that occurs at a certain time (Creswell, 2014). Here, the subject of the research is the digital humanitarian practice of citizen participation in a non-natural disaster focusing on cases of citizen participation carried out on the LaporCovid-19 and “KawalCOVID19” platforms as research objects.

The research uses primary and secondary data. The latter is gathered through digital archives and desk research. While the primary data is gathered through focus group discussion and qualitative interviews with several informants who were involved and worked voluntarily on both platforms. Knowledge, attitudes and experiences of the informants will be captured in one group session. As one of data collection methods, the FGD has several benefits in the research, including ideas that come to the participants on the spur of the moment, candid confessions, a willingness to talk about sensitive and delicate subjects, and understanding of minds (Roller & Lavrakas, 2015).

The FGD was held on 7 March 2022. The informants are listed in Table 1. The secondary sources for the research rely on digital archives available on the LaporCovid-19 and KawalCOVID19 platforms and websites, organization reports and news publication on number of media outlets. The collected data is analyzed by applying pattern matching technic analysis. Interviewees’ comments and other verbatim records, including digital archives and other evidences are then analyzed into the required textual form (Yin, 2014, p. 129).

Table 1. Research informants

Informant	Organization of citizen initiatives	Role
Informant 1	LaporCovid-19	Volunteer/advocacy
Informant 2	LaporCovid-19	Volunteer/advocacy
Informant 3	LaporCovid-19	Volunteer/secretary
Informant 4	LaporCovid-19	Volunteer/advocacy
Informant 5	LaporCovid-19	Volunteer/research

Source: Processed by Researcher (2022)

The approach in this research is descriptive. Rossman and Marshall (2016) mention descriptive studies construct rich descriptions of complex states that have not been explored in the literature. The purpose of a descriptive study in this research is to document and describe the digital humanitarian practice of citizen participation in the both platforms related to the COVID-19 pandemic.

RESULTS AND DISCUSSION

The KawalCOVID19 Citizen Initiative

The KawalCOVID19 platform launched by some of the KawalPemilu.org volunteers are intended as a trusted source of information about the COVID-19 pandemic in Indonesia. Quoted from the kawalcovid19.id page, the platform was launched due to the confusion of information circulating in Indonesia regarding COVID-19. The platform is claimed to be a voluntary initiative of pro-data Indonesian citizens consisting of health practitioners, academics and professionals.



Figure 1. Front page of KawalCOVID19 website
Source: kawalcovid19.id, 2022

The KawalCOVID19 volunteer team is divided into three teams, namely the technology team which prepares the technology infrastructure. This team is led by Zain Fathoni and supported by artificial intelligence by Kata.ai. Then the data team which monitors the development of issues both in Indonesia and abroad, collects circulating information, checks its accuracy and analyzes it. The Content Team which creates writing and visuals for publication on our social media platforms, Digital/social media team is responsible for the communication strategy and implementation on social media channels. Some of the KawalCOVID19 volunteers are Indonesian citizens who live abroad and have experienced living in a community that is positive for COVID-19. However, details of the names and information regarding the backgrounds of the KawalCOVID19 site managers are not listed on this platform.

The focus of the KawalCOVID19 platform is more inclined to curate and present data on COVID-19 cases in Indonesia. It includes data on confirmed patients, under treatment, recovered and died. Quoted from Azanella and Nugroho (2020), the data for KawalCOVID19 comes from open data sources for each local government that can be accessed by the public. Data is collected from the lowest level, for example district/city, and so on to the highest level to obtain case numbers at the national level. Initiatives like this are also carried out by Resolve Philly Germantown Info Hub and Kensington Voice who collaborate to meet local information needs. The two main objectives of this activity are to provide information that suits the community's needs more accurately and to improve social cohesion between the community and local media. Another goal is to create a hub for disseminating information to the community (Wenzel & Crittenden, 2023).

Quoted from its website, KawalCOVID19 curates and analyzes information circulating to break it down into evidence and facts. In addition, in collaboration with the Masyarakat Anti-Fitnah Indonesia or MAFINDO, KawalCOVID19 also verified information. The KawalCOVID19 also conveys education to the public about things that need to be done in dealing with the COVID-19 pandemic. Recently, the latest information about COVID-19 presented on the KawalCOVID19 platform, which claims to be completely factual and comes from reliable sources, is no longer being updated. KawalCOVID19 is relatively more focused on data and information that comes from open sources, such as from public agencies and the media, and can be accessed by the public and sources that are trusted.

Facts are difficult to obtain due to infodemic. Rahardi (2020) seeing this uncertain situation, a number of parties took advantage of it to cause public panic. This effort was carried out by spreading false information (hoaxes) regarding COVID-19. The emergence of this false information raises serious concerns. The ease of sharing information has been one of the reasons fake news spreads so quickly (Harisanty et al., 2021).

Misinformation about COVID-19 adds to public health problems in Indonesia and globally. This has a negative impact, both directly affecting society and children, as well as causing harm to oneself due to beliefs and incorrect knowledge about the virus (COVID-19), prevention, vaccines, and treatment (Malik et al., 2023). Rahmawati et al. (2021) mapped 359 hoaxes based on a report from the Directorate General of Informatics Applications, Ministry of Communication and Informatics of the Republic of Indonesia with the title Hoax Issue Report in 2020. This research produced findings of five categories and 30 sub-categories of information the fake (Rahmawati et al., 2021). Meanwhile, Brennen et al. (2020) analyzed 225 pieces of false or misleading information published in English between January and the end of March 2020.

Thus, open sourcing methods by engaging citizen participatory applied by KawalCOVID19 team. They also use social media platforms such as Facebook to collect reports and information from residents. Through social media channels with the same account name as the site, managers share information related to prevention of transmission as an effort to educate residents. The Facebook account was created on March 1, 2020. As of the end of September 2022, the number of followers of the KawalCOVID19 has reached 71,000 accounts. On the social media platform, KawalCOVID19 managers also act as facilitators who connect residents with a number of competent experts. In addition to social media platforms, volunteers of KawalCOVID19 have also developed applications that can be downloaded and installed on Android-based citizen devices. The application with the same name is intended so that citizens can easily access information related to COVID-19 in Indonesia.

The LaporCovid-19 Citizen Initiative

Meanwhile, the LaporCovid-19 platform also involves public participation in reporting a number of cases related to the pandemic. Unlike KawalCOVID19, this platform does not use much open data and information sources from the media and public bodies. According to Informant 1, one of LaporCovid-19 volunteer, the platform tends to focus more on data and information that comes from citizen.

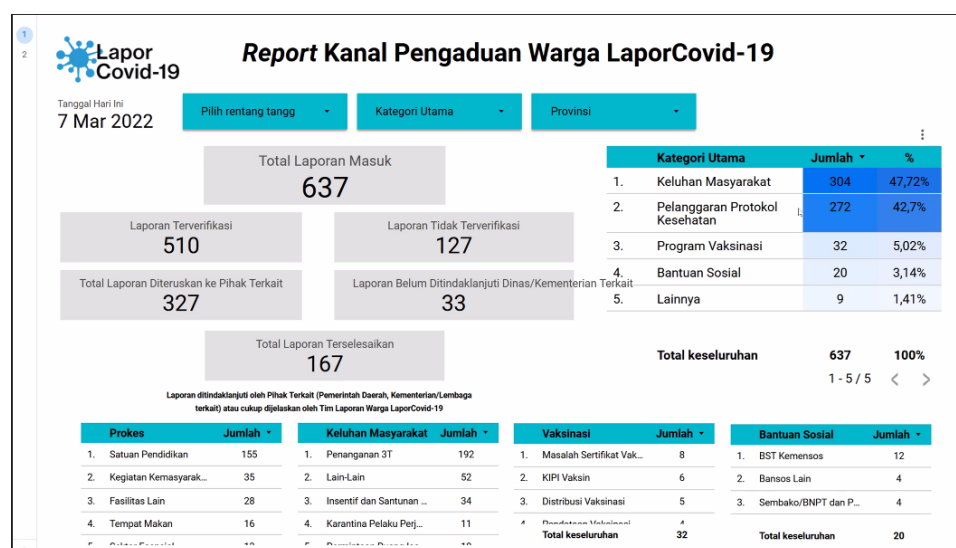


Figure 2. Backend dashboard of LaporCovid-19 platform. The dashboard contains several graphics and numbers regarding the citizen report related to the COVID-19 pandemic. Courtesy of LaporCovid-19

Source: laporcovid19.org, 2022

The platform was initiated and developed by several civil society activists, journalists, public health practitioners, and information technology experts under the umbrella of the “Koalisi Warga untuk LapoCovid-19” or Citizen Coalition for LapoCovid-19. The LapoCovid-19 digital platform uses the concept of citizen and participatory journalism. Buchholz, DeHartz, and Moorman call this participatory as citizenship. Citizenship is citizens in a community with the same values who are responsible in the field of social and political activities (Buchholz et al., 2020). Part of the practice is carried out with information provided by citizen to the LapoCovid-19 platform manager regarding certain conditions related to the COVID-19 pandemic. This includes personal health conditions, family members, and local residents. Certain symptoms experienced by some residents, a number of people who died before undergoing medical tests, and violations of health protocols are also some of the information that residents can report (Adyatama, 2020).

According to Informant 2, the platform uses the messaging application WhatsApp and Telegram which utilizes chatbot technology, in the form of a computer program to receive and respond to citizen reports automatically. Quoted from the LapoCovid-19.org page, several things that can be reported are violations of health protocols, bad experiences or stigma related to COVID-19, health and non-health services related to COVID-19, and social assistance services during the COVID-19 pandemic. Apart from that, residents can also report stories of family or close people who were infected with COVID-19 and died as well as stories of anxiety about the COVID-19 vaccine.

Within the LapoCovid-19 platform, there is a “Data” channel that contains a number of report menus related to the use of the citizen reporting concept. Among them are the “Report of Citizens’ Complaints Channel,” “Report of Citizens’ Complaints Channel regarding Vaccines,” and “Mapstory of Residents’ Reports.” Apart from that, there is also a “Publications” channel, in which there is a “Findings” menu. In the “Findings” menu, there is a rubric entitled “Findings of the LapoCovid-19 Newsroom” which contains the analysis of data, information, and citizen reports related to pandemic control in Indonesia which is a practice of the concept of citizen and participatory journalism. In the COVID-19 pandemic, the open source approach is deemed more effective for mitigation and detection of the COVID-19 virus due to its aforementioned characteristics. Specifically, open source COVID-19 diagnosis techniques are necessary to gain trust of medical staff and patients while engaging the research community across the globe. The organization emphasize that the COVID-19 pandemic demands a unified and collaborative approach with open source data and methodology so that the scientific community across the globe can join hands with verifiable and transparent research. Open source COVID-19 diagnostic techniques are needed to gain the trust of medical staff and patients while engaging the worldwide research community. The combination of AI and open source data sets results in a practical solution for COVID-19 diagnosis that can be implemented in hospitals around the world (Shuja et al., 2021). In addition, on the same channel, there is a “Press Release” menu which is also the embodiment of the concept of citizen journalism. A similar practice exists on the “Program” channel in the “Nakes Advocacy” and “Digital Pusara” menus which are the development of the concept of the citizen and participatory journalism.

The LapoCovid-19 platform was co-founded and led by an independent public health consultant Irma Hidayana and Chief Disaster and Crisis Journalist Ahmad Arif. Some activists and figures from civil society organizations participated in it, such as the Indonesian Legal Aid Foundation (YLBHI), Transparency International Indonesia, Lokataru, U-Inspire, Rujak Center for Urban Studies, Indonesia Corruption Watch (ICW), and several journalists.

The LapoCovid-19 platform manager also involves scientists from various fields and

several interdisciplinary experts. This was done according to the umbrella concept of a “coalition of citizens,” rather than public officials, which was advocated from the start. Technocrats, doctors, epidemiologists, and so on fall into this category of citizens. Those who were invited to join, coincidentally, were also considered individuals who had a highly progressive spirit and relatively disliked normative and bureaucratic policies. As stated by Informant 1, they are people who want science to be a major part of the policymaking foundation. A research describes how important coalition group on pandemic situation. Coalition helps to provide solution in complex situation. Coalition group more successful in influencing policy than individual movement (Raeymaeckers & Van Puyvelde, 2021).

The management of LaporCovid-19 considers the credibility of these people when facing the government as part of the process to provide recommendations for policymaking regarding the handling of the COVID-19 pandemic. The model of involvement is carried out with an invitation or solicitation mechanism from the platform initiator LaporCovid-19. Informant 3 and Informant 4, said that their involvement was voluntary and without incentives. Relatively there has not been independent registration and personal initiative. According to the both, most of the volunteer are Indonesian people. Some of them live in other countries, for example, Australia and Singapore.

As quoted from the document “Catatan Pandemi Indonesia 2020-2021, LaporCovid-19: Menuntut Transparansi Pandemi Melalui Kanal Warga” which was published in December 2021, LaporCovid-19 also works with independent scientists, epidemiologists, medical doctors, health workers, sociologists, teachers, journalists, activists, independent media, data scientists, psychologists, students, information technology experts, and COVID-19 survivors. In addition, this initiative has also collaborated with many more parties. The aim is to advocate for transparency and accountability in the handling of COVID-19 in Indonesia (Hidayana & Arif, 2021).

The “LaporCovid-19” platform, as quoted from the LaporCovid-19.org page, is used as a place to share information regarding incidents related to COVID-19 found by residents, but these events have so far escaped government monitoring. Still quoted from the same site, “LaporCovid-19” is a forum to help the government and other citizens find out the spread and magnitude of COVID-19 in Indonesia. In addition, it is also used as input for the government in formulating policies and handling COVID-19 based on field data. No less than 15 institutions support the “LaporCovid-19” platform. They are the Transparency International, Indonesia Corruption Watch, Jurnal Bencana dan Krisis Indonesia, Rujak Center for Urban Studies, U-Inspire, hakasasi.id, Yayasan Lembaga Bantuan Hukum Indonesia, Visi Integritas, Aliansi Jurnalis Independen, Pusat Studi Hukum dan Kebijakan Indonesia, Kios Ojo Keos, Lokataru, UKaid, Kurawal Foundation, dan Jabar Digital Service.

In addition, “LaporCovid-19” also collaborates with a number of other institutions. Especially those related to the issue of protection for health workers. As quoted from the document “Records of the Indonesian Pandemic 2020-2021, LaporCovid-19: Demanding Transparency of the Pandemic Through Citizen Channels” which was published in December 2021, these institutions are the Ikatan Dokter Indonesia (IDI), Ikatan Bidan Indonesia (IBI), Persatuan Perawat nasional Indonesia (PPNI), dan Persatuan Ahli Teknologi Laboratorium Medik Indonesia (PALTEKI), serta Eijkman-Oxford Clinical Research Unit (EOCRU).

“LaporCovid-19” is managed by a number of volunteers. As of June 2022, there are around 30 volunteers. The number of volunteers tends to fluctuate. This follows the dynamic of joining at one time and falling back at another. They are divided into the Citizens Report Advocacy Division, Social Media Division, Pusara Digital Division (a page in memory of

health workers who died), Information Technology and Development (IT/Developer) Division, Long COVID Advocacy Division, Virtual People's Health Home Division or Team (service telehealth which is the main program as of June 2020).

Table 2. Identification of citizen initiative organizations in during the COVID-19 pandemic

Citizen Initiative	Website	Social Media	Apps	Citizen participation	National Outreach	Information output	Funding	Duration/ range
KawalCovid19	v https://kawalcovid19.id	v Instagram, Twitter, Facebook, Facebook Messenger	v	v Residents, healthcare practitioners, academics, and IT professionals.	v	v Data on the number of COVID-19 cases in Indonesia, factual information from reliable and trusted sources, educational information on things that need to be done to deal with COVID-19	Independent	Medium
LaporCovid-19	v https://laporcovid19.org/	v WhatsApp, Telegram, Facebook, Twitter, Instagram, YouTube	x	v Civil society organization leaders, journalists, public health practitioners, and information technology experts, research institutions, professional organizations	v	v	Independent, international organization fund	Long

Source: Processed by Researcher (2022)

Based on “Catatan Pandemi Indonesia 2020-2021, LaporCovid-19: Menuntut Transparansi Pandemi Melalui Kanal Warga” which was published in December 2021, the flow of citizen report handling services starts with submitting reports via WhatsApp or Telegram chatbots and social media accounts. Then, the report is verified to determine whether it is accepted or rejected. If accepted, then the database is recorded. Next, the report is followed up by disseminating the report to the public via social media, forwarding the report to the reported local government, and intensive communication with the complainant. In this regard, communication on the status of the report was also carried out with the residents who reported it.

From the description above, it can be seen that the initiatives and efforts to organize citizens are highly carried out by each platform. Initiatives are carried out by a limited number of individuals who are then disseminated through digital platforms in the form of the web and social media. Both platforms aim to help citizens and the government regarding efforts to

prevent and spread the COVID-19 pandemic. Motivation based on humanity and social bonds is often an encouragement for the participation of fellow citizens to help each other. Norris (2017) states that digital humanitarian practices have developed in Europe and South America. Digital humanity is a form of response involving several elements of citizens towards crises and disasters that are intended to help fellow citizens deal with crises and disasters (Phillips, 2015). Following are the results of the mapping of the two KawalCOVID19 and LaporCovid-19 platforms during the pandemic.

Organization. The formation and management of both KawalCOVID19 and LaporCovid-19 organizations were carried out spontaneously as a response to the health crisis. These two initiatives are open sourced. It involves a network of volunteers with various backgrounds, such as information technology experts, researchers, doctors, activists, journalists, students, and the general public (see Table 2). The organization is managed independently, decentralized, and self-organized, by individual capacities and competencies.

The motive behind the initiative of the KawalCOVID19 and LaporCovid-19 platforms stems from the confusion of data and information related to the pandemic. Meanwhile, official data and information from public agencies are very limited, difficult to access, and contain a spatial bias, especially in cities on the island of Java. This is inversely proportional to the speed and rate of transmission of the COVID-19 virus, which is so high that it reaches many areas. Some of the individuals also represent the institutions in which they work. Both KawalCOVID19 and LaporCovid-19 organize reports and information from residents through their respective platforms. The platforms collect citizen reports, then check those reports, update data and disseminate the information to other citizen using social media and digital applications (see Table 2). The sources of fund for the initiatives of each platform generally rely on the participation of residents and volunteers. Unlike KawalCOVID19, the LaporCovid-19 volunteer team also involves donor parties and agencies to support operational financing (see Table 2).

Information production. Both platforms collect data and information involving citizen participation. At this stage, citizens contribute as information providers (Domingo et al., 2008), and citizen witnesses (Allan, 2013). However, during KawalCOVID19, management volunteers relied more on open sources belonging to public bodies, such as the Ministry of Health, the Disaster Mitigation and Management Agency (BNPB), as well as information and news from the mass media.

Whereas in LaporCovid-19, the volunteer team referred to reports from residents from the field that were sent via applications and social media. In terms of information sources, the LaporCovid-19 volunteer team verifies the contents of information and facts reported by residents. Reporters or informants are kept confidential and protected. Besides that, LaporCovid-19 also captures information from residents through survey activities related to COVID-19 handling policies carried out by the government by applying scientific methods. The survey results become new information which is then published to the media and public bodies at the national and regional levels.

Information curation. Not all citizen information and reports can be uploaded on each platform, both KawalCOVID19 and LaporCovid-19. However, the two platforms curate the information that appears on each website. Information regarding case data, new case findings, and death rates is continuously displayed on both websites.

The KawalCOVID19 platform curate information from the media, MAFINDO, and public institutions. At LaporCovid-19, curate information related to the results of citizen reports, research, and government policies, including economic assistance.

Information dissemination. Both platforms use websites and digital applications to distribute information about the COVID-19 pandemic. Social media platforms that are widely used by residents are the second choice of platforms so that residents can easily and quickly get the latest information. The KawalCOVID19 application, installed on an Android-based device, provides the latest information about COVID-19. The LaporCovid-19 platform, in particular, disseminates survey results involving some experts with various backgrounds. Citizen participation in the survey is a form of involvement in advocating policies and measures to deal with the pandemic by the government.

Based on the four points above, the digital humanitarian practice and participatory journalism initiated by KawalCOVID19 and LaporCovid-19 are a form of response and involvement of citizens to share information about handling COVID-19. Moreover, efforts to facilitate citizens' rights to participate in the process of producing news and information are often political in nature (Wall, 2017, p. 137). During the COVID-19 pandemic in Indonesia, professional media and journalists often rely on official information sources, such as the government.

However, as the government imposed lockdown or local quarantine across the region, the media and journalists were restricted from accessing information. Local journalists face digital and legal threats due to reporting and news publication during the COVID-19 pandemic (Mawel et al., 2021, p. 7). Meanwhile, the two citizen humanitarian platforms play significant role by encouraging ordinary citizens to identify and openly share the realities of their lives shaped by inequality and injustice regarding health services (Nurita, 2022), including access to health facilities and vaccination.

This research found motivation on the basis of humanity and social ties encourages citizen participation in digital humanitarian carried out as a spontaneous response to the COVID-19 pandemic. The initiative and organization management of both KawalCOVID19 and LaporCovid-19 organizations involve a number of volunteers with various backgrounds, such as information technology experts, researchers, doctors, activists, journalists, students and the general public. They work in different location, city and region. The initiative organized and managed by the individual network of citizen who are committedly engaged. They work independently, decentralized and self-organized, in accordance with their respective areas of expertise and capacity.

In addition, the two platforms collect data and information involving citizen participation. For LaporCovid-19, the volunteer team referred to reports of complaints from residents from the field that were sent via applications and social media. In terms of information sources, the LaporCovid-19 volunteer team verifies the contents of information and facts reported by residents. Reporters or informants are kept confidential and protected. Besides that, LaporCovid-19 also captures information from residents through surveys to the public by applying the scientific method. The results of the survey become new information which is then published on the website and reported by a number of media to get the attention of stakeholders at the national and regional levels regarding policies for handling the non-natural disaster of the COVID-19 pandemic. Both platforms highly utilize social media apps as second option of the platforms. Thus, citizen can easily and quickly get the latest information. The LaporCovid-19 platform, in particular, disseminates survey results involving a number of experts with various backgrounds. Citizen participation in the survey is a form of involvement in advocating policies and measures to deal with the non-natural disaster like the COVID-19 pandemic by the government.

Participatory journalism where citizens highly engaged during a pandemic through digital

platforms has had a positive impact (Ugbo et al., 2022, p. 196), supporting the government and public agencies to make policies that are more targeted (Sheen et al., 2021, p. 11). When the press freedom during pandemic are restricted and limited, the citizen reporting practice complements the roles and functions of professional journalism. However, as the government imposed lockdown or local quarantine across the region, the media and journalists were restricted from accessing information. Local journalists face digital and legal threats due to reporting and news publication during the COVID-19 pandemic (Mawel et al., 2021, p. 7). Meanwhile, the two citizen humanitarian platforms play a significant role by encouraging ordinary citizens to identify and openly share the realities of their lives shaped by inequality and injustice.

CONCLUSION

Limited access to information and availability of accurate data hampers the disaster management during the COVID-19 pandemic in Indonesia. To make matters worst, as the government impose local lockdown, media and journalists are facing threats and restrictions to access information on the pandemic. However, both KawalCOVID19 and LaporCovid-19 organize citizen through their respective platforms. The motivation on the basis of humanity and social ties encourages citizen participation in digital humanitarian carried out as a spontaneous response to the COVID-19 pandemic. The initiative and organization management of both KawalCOVID19 and LaporCovid-19 organizations involve a number of volunteers with various backgrounds, such as information technology experts, researchers, doctors, activists, journalists, students and the general public. The volunteers are distributed in different locations. But they are self-organized and managed to contribute in accordance with their respective areas of expertise and capacity. The efforts offer a model to develop citizen participation in the non-natural disaster by utilizing digital technology and citizen resources. When the media and professional journalist works are under attack and threat, the model intertwines the participatory journalism and digital humanitarian practices that engage citizens during the pandemic on both digital platforms contribute to other citizens' efforts to prevent following crises and help stopping the pandemic.

This research, however, has a limited in the case of study. It purposively examines on the digital platforms regarding the public participatory and digital humanitarian on the non-natural disaster, exclusively relies on the KawalCOVID19 and LaporCovid-19 platforms. As Indonesia people is prone to both natural and non-natural disaster, good practices of public participatory through digital platforms at local level is need to capture in the further research. In addition, future study is also required to examine the interrelation between government policies with the citizen initiatives at provincial level and local regions in handling the disasters.

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