

## Disaster communication as mitigation of COVID-19 in higher education (Study in Pekalongan University)

Yuniarti<sup>1\*</sup>, Ristiawati<sup>1</sup>, Nur Susanti<sup>2</sup>

<sup>1</sup>Departement of Public Health, Pekalongan University

<sup>2</sup>Department of Physiotherapy, Pekalongan University

### \*Corresponding author :

Yuniarti  
Sriwijaya Street 3<sup>rd</sup>, Pekalongan City, Indonesia  
Phone numbers: +6281548006360  
Facsimile numbers: +6285 411429  
E-mail address :yuniartiunikal@gmail.com

### Abstract

**Background** Indonesian Government announced the COVID-19 epidemic as a non-natural national disaster due to the adverse impacts and causing public panic due to confusing information and ineffective communication about COVID-19. **Aim** Research aimed to implement disaster communication to mitigate COVID-19 in higher education. **Settings and Design** This was qualitative-descriptive research, conducted in UniversitasPekalongan during June to August 2020. **Method and Material** Research variables consist of information, communication strategy, and communication media. The leading information has come from rector and vice-rector. Triangulation information has come from head of research department, director of quality assurance department, and deans. Data collection using in-depth interview techniques. **Data analysis** It was used reduction technique, triangulation, and conclusion. **Result** Revealed there was a controllable info-demic situation on a small scale as discussions about COVID-19 has a focus on scientific and spiritual approaches. At beginning of the COVID 19 outbreak, disaster communication has not been implemented optimally yet as communication spread randomly without a central source of information. Information was circulated in social media and websites as their in a wide range. **Conclusions** Implementation of disaster communication strategy in UniversitasPekalongan most effectively using scientific and spiritual approach. Communication delivery mostly using social media and live streaming discussion about COVID-19.

**Keywords:** communication disaster, COVID-19, mitigation

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## Introduction

The new type of coronavirus (SARS-CoV-2) has spread throughout the world. WHO has raised the status of the COVID-19 infection from *Public Health Emergency of International Concern* to a *pandemic*. A pandemic is an epidemic condition that has spread widely across countries and continents and infected many sufferers. The Indonesian government officially announced the first case of COVID-19 on March 2nd, 2020<sup>1</sup>. The Indonesian government has designated the COVID-19 pandemic as a non-natural national disaster through Presidential Decree No.1 of 2020 concerning the Determination of Non-Natural Disaster for the Spread of Corona Virus Disease 2019 (COVID-19). This pandemic globally has the potential for a large enough risk and takes many casualties. The spread of Corona Virus Disease 2019 (COVID-19) had an impact on increasing the number of victims and property losses, expanding the coverage of areas affected by the disaster and having implications for broad socio-economic aspects in Indonesia<sup>2</sup>.

Information about COVID-19 is also widespread uncontrollably, massively, and has generated various public responses. The occurrence of an uncertain situation and general confusion in dealing with the COVID-19 outbreak was caused by confusing information (infodemic). This condition tends to mislead and cause people to panic in facing this pandemic. If this situation is left unhandled, it will destroy public confidence in efforts to deal with the COVID-19 outbreak. Managing public communication during the COVID-19 pandemic becomes uneasy; it must be done to provide understanding to the public. Hence, they know better how to deal with the situations<sup>3</sup>.

Public communication during the pandemic is a crucial aspect to build so that the public knows better and understands the exact situation to prevent that mass panic<sup>4</sup>. For universities, the COVID-19 pandemic is a severe threat due to the high risk of transmission in the education environment that can become a separate cluster of infection. Pekalongan University is an educational institution that has experienced the direct impact of COVID-19 and faces the risk of transmission in the educational environment. Pekalongan University pursues a responsive policy to prevent the spread of COVID-19 within the campus. The main goal is to keep the academic community safe and healthy; to prevent the campus from becoming a COVID-19 transmission cluster. Disaster communication is needed as part of disaster mitigation efforts; to reduce the uncertainty of the situation so that the community can act effectively.

This research was conducted to determine how to implement COVID-19 mitigation based on disaster communication through the information approach, communication strategy, and information media at Pekalongan University. This study explores how disaster communication is built in line with the development and situation of disasters that occur so that the Pekalongan University academic community can find out the real problem. Information conveyed in the form of disaster communication effectively increases early alertness and preparedness for campuses to face the threat of COVID-19.

## Subjects and Methods

The subjects in this study were informants who had sources of data and information on disaster communication management at Pekalongan University. The subjects consisted of two groups, namely the primary informant consisting: the Rector, Deputy Rector 1, Vice-Rector 2, and Vice-Rector 3. The

secondary research subject was a triangulation informant, consisting: Chairman of Quality Assurance Department, Chairman of Research and Community Service Department, Dean of Teacher Training and Educational Faculty, Dean of Health Sciences Faculty, Dean of Agriculture Faculty, Dean of Law Faculty, Head of General Bureau and Head of Household. This research was qualitative-descriptive research and conducted in Universitas Pekalongan during June to August 2020. Research variables consist of *information*, *communication strategy*, and *communication media*. Data collection using in-depth interview techniques as primary data sources. It was used reduction technique, triangulation, and conclusion. This study has received *ethical clearance* approval from the Ethical Commission of Health Research of Pekalongan University. In this study, the instrument was the researcher's self as an active key instrument in collecting data by interview and observation.

## Results

### Information related to COVID-19

The results on infodemics show that there was no infodemic (excessive and confusing information) regarding COVID-19. Pekalongan University manages information related to COVID-19 through a *scientific approach* and *religious approach*. Circulating information about COVID-19 among the academic community includes the type of coronavirus that causes COVID-19, transmission media, modes of transmission, risk of mortality and morbidity, economic impacts that lead to panic buying, social stigma to information on COVID-19 conspiracy theories. The information circulating among students is related to the need for internet quota and internet access difficulties that interfere with the online learning process.

Information related to education on health protocols and preventive behavior was uploaded on June 14th, 2020. From the observation in the campus environment, the researcher found out educational banners and COVID-19 prevention health protocols at several strategic points. Attached information media containing instructions for maintaining a safe distance, wearing a mask, limiting contact with surfaces that are often handled, motorbike parking zoning with a distance of 1 (one) meter, and other instructions.

### Communication Strategy regarding COVID-19

Pekalongan University implements three strategies in conveying information about COVID-19 and transmission prevention policies in the campus environment. First, the *strategy of determining policies* in standard legal form by issuing Circular Letters of the Rector and Vice-Rector. The second strategy is to *build direct interactive communication* through the leadership forum to disseminate leadership policies and build mutual commitment. The third strategy is to use *online information and communication media and social media* to educate the public about the COVID-19 prevention of and maintain the trust of the academic community in safety and health assurance.

### Information and Communication Media regarding COVID-19

Pekalongan University uses its official website, [www.unikal.ac.id](http://www.unikal.ac.id), to convey information about COVID-19 and every social media platforms like Youtube, Facebook, Instagram, Whatsapp group,

Telegram group, and other portals belonging to the campus. Information containing education on clean living habits to prevent COVID-19 is also conveyed through banners, posters, and leaflets posted in the campus environment. Information on the university's policy in handling COVID-19 was also published in print and online media news. The internet has a broad reach of users, capable of presenting dynamic information packaging into a useful information medium to reach audiences. This theory was proven in the talkshow entitled *COVID-19 Pandemic: The Impact and Solution*, which was broadcast on the University's Youtube channel on May 5<sup>th</sup>, 2020, watched 745 times. Information and education about COVID-19 are also provided through scientific forums held online seminars (webinars) through paid versions of video conference applications such as Zoom meetings and Google Meet.

## Discussion

Information is an important aspect of disaster management because well-managed disaster and crisis information can control chaos when the public is faced with a disaster. Infodemic is a challenge to break the chain of transmission, which will have an impact on handling, which can worsen the situation<sup>4</sup>. Pekalongan University puts COVID-19 information through two approaches: a scientific approach and a religious approach. The views from these two perspectives aim to place the COVID-19 issue proportionally and comprehensively. The examples of the impact caused by an infodemic include the excessive fear experienced by some employees and the emergence of stigma against Person Under Supervision (ODP; *Orang Dalam Pengawasan*)

Since mobility restrictions applied (social distancing and physical distancing) in the public space, the intensity of the use of devices is getting higher as a substitute for face-to-face activities. This situation increases the risk of exposure to infodemics higher so that public consumption of the COVID-19 issue is getting higher. Individuals who have the same preferences will increasingly interact in cyberspace. Confirmation bias occurs when recipients of information directly forward messages without confirming the truth first<sup>5</sup>. Interestingly, among Pekalongan University lecturers have developed information and discussions on the anti-science understanding that believe that the coronavirus is the result of a conspiracy to destroy the world order<sup>6</sup>.

In the context of disaster communication, information about COVID-19 is not only limited to the content of the events but also contains educational value and guidance in dealing with disasters. Messages in information include mitigation, response, preparedness, and response efforts. Mitigation information contains the identification of risk reduction-based disaster capabilities. Information regarding readiness and response is related to the early alert system developed before a disaster occurs<sup>7</sup>. Information on non-natural disasters such as COVID-19 means raising awareness to the public to increase preparedness to face the impact of COVID-19. Disaster information that contains education is called *disaster information literacy*, divided into four elements: information sources, information evaluation, information organization, and information utilization; to improve disaster preparedness<sup>8</sup>.

Based on researchers' observations of the content of information regarding COVID-19, Pekalongan University has provided comprehensive information. It includes illustrations of the coronavirus, transmission media, campaigns for clean and healthy living habits, treatment measures

for those who have the risk of being infected or have been infected, and health protocol directives. 3M health protocol information: *memakai masker* (wearing masks), *mencucitangan* (washing hands), and *menjauhkerumunan* (staying away from crowds); installed in most strategic locations in the campus environment. Researchers do not know specifically about the extent to which information literacy is adequate at Pekalongan University. Nevertheless, when examined from the aspect of behavior, Pekalongan University is sufficient to comply with health protocols in the campus environment. Information is an essential aspect of disaster management since the well-managed disaster and crisis information can control chaos when faced with a disaster.

Disaster communication management requires a strategic approach, commonly known as *strategic communication*. Its main objective is to convey the best message effectively to achieve specific goals by utilizing the appropriate media, and its effectiveness and success can be measured<sup>9</sup>. The principle of communication is changing the behavior of others through delivering messages, building trust, attitudes, and behaviour<sup>10</sup>. Disaster communication is built within the framework of a communication strategy to create smooth communication. Communication strategy is a planned action to achieve specific goals using communication methods, techniques, and approaches<sup>11</sup>.

Information is an important aspect of disaster management because well-managed disaster and crisis information can control chaos when faced with a disaster. Strategically, Pekalongan University has not yet built a planned and patterned strategic communication that refers to the strategic agenda and vision and mission. Strategic communication activities include promotional activities, in this case, health promotion, as well as efforts to influence others to support a certain decision or policy<sup>9</sup>. Information management is a key factor in the successful handling of COVID-19 for both the community and the government. The public needs credible information and can be accounted for the truth so that the public understands how to handle COVID-19<sup>3</sup>.

The communication strategy has four objectives: ensuring communication is understood by all involving parties, maintaining understanding in communication, encouraging communication to continue, and ensuring communication goals can be achieved<sup>12</sup>. Disaster communication is part of disaster mitigation to reduce the uncertain situation; hence effective action can be taken. Disaster communication contains accurate information and updates from stakeholders<sup>10</sup>. Communication strategies are divided into active, passive, and interactive; interactive strategies are the most recommended<sup>11</sup>.

In dealing with non-natural disasters COVID-19, disaster communication carried out by Pekalongan University uses more passive and interactive strategies. The passive strategy can be indicated from a large amount of information about COVID-19 conveyed on various platforms, both offline and online. An *interactive approach* is carried out through an online scientific discussion forum about COVID-19, which is presented in a webinar or other online meeting forum. The discussion raised the COVID-19 issue from various perspectives (health, economy, education, science, and religion). Online web-based seminars/discussions can reach a broad audience and are interactively designed. Therefore, the information related to COVID-19 flows both ways.

Information about COVID-19 delivered with an interactive communication strategy requires information media; therefore, the contents of communication messages can be conveyed. Pekalongan

University utilizes internet technology as a media for COVID-19 information in disaster communication. The information technology owned includes the university's official website, [www.unikal.ac.id](http://www.unikal.ac.id), Youtube channel, social media platforms like Facebook, Instagram, Telegram, Whatsapp groups, and other portals. The internet has a broad reach of users, presenting dynamic information into a useful information medium to reach audiences. This strategy was proven in the talkshow entitled *COVID-19 Pandemic: The Impact and Solution*, which was broadcast on the university's Youtube channel on May 5<sup>th</sup>, 2020, watched 745 times.

Researchers' search on the website [www.unikal.ac.id](http://www.unikal.ac.id) found that the first upload regarding COVID-19 was on March 27<sup>th</sup>, 2020, regarding donation activities. The subsequent upload is still dominated by donation activities and the mission of COVID-19 volunteer students. The upload of information related to education on health protocols and preventive behaviors was only uploaded on June 14<sup>th</sup>, 2020. The results of observations in the campus environment contained educational banners and COVID-19 prevention health protocols at several strategic points that were feasible to see and reach. There is information containing instructions for maintaining distance, wearing a mask, limiting contact with surfaces that are often handled, zoning for motorbike parking with one-meter distance, and other instructions.

Social media is currently a handy medium in conveying important messages to society and creating new ways of communicating interactively. Numerous users of social media in Indonesia certainly creates an opportunity to optimize the presence of social media as a medium of communication. Social media has the power in *user-generated content (UGC)* where users generate the content, not editors, as in mass media agencies<sup>13</sup>. Pekalongan University uses the WhatsApp group social media as an information medium to convey policies related to the prevention of COVID-19 within the campus environment. With a broad reach and targeting various age groups, social media is beneficial as a medium of education. Students are among the most active age groups and use social media the most. According to Nasrullah (2015), social media is a media that represents the personal characteristics of its users in interacting, collaborating, sharing information with other users virtually<sup>13</sup>.

Pekalongan University has adequate information technology support to use it to manage and convey information about COVID-19 to the academic community and the public. The material specifically regarding education about COVID-19 prevention is uploaded at [www.covid19.unikal.ac.id](http://www.covid19.unikal.ac.id). Website contains health protocols in the campus environment uploaded for the first time on June 14<sup>th</sup>, 2020. According to RahmatHidayat (2010), a website consists of a set of pages that display information in the form of written text, static and dynamic images, animation, and sound, as well as a combination of all of them that make up a series of interrelated content and information<sup>14</sup>.

This research was conducted in June - August 2020, at which time, the COVID-19 cases in Indonesia began to increase significantly. In this condition, health protocols to maintain distance and limit interactions are still strictly enforced at Pekalongan University. This situation has quite influenced research process, especially in data collection, which was carried out through in-depth interviews because of limitation on duration of the interview. This research is strong enough because it was carried out when the COVID-19 pandemic was still ongoing. The number of cases was getting higher;

therefore, researchers could directly observe the implementation of disaster communication at Pekalongan University as research data support. The results presented in this research are expected to provide an overview of disaster communication model at Pekalongan University as a COVID-19 mitigation effort applied to other universities. This research can be developed in further research regarding the COVID-19 early alert system based on disaster information literacy.

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