

# Covid 19 Pandemic Disaster Management in Indonesia

Mona Inayah Pratiwi<sup>1\*</sup>, Meida Rachmawati<sup>2</sup>, Bayu Kurniawan<sup>3</sup>, Dwi Novita Sari<sup>4</sup>, Fibry Jati Nugroho<sup>5</sup>

<sup>1</sup>Universitas Ngudi Waluyo  
Indonesia

<sup>2</sup>Universitas Ngudi Waluyo  
Indonesia

<sup>3</sup>Universitas Ngudi Waluyo  
Indonesia

<sup>4</sup>Sekolah Tinggi Teologi Sangkakala  
Indonesia

<sup>5</sup>Sekolah Tinggi Teologi Sangkakala  
Indonesia

Corresponding author: [monainayahpratiwi@unw.ac.id](mailto:monainayahpratiwi@unw.ac.id)

**ABSTRACT.** The Corona-19 virus that has hit countries in various parts of the world has become a disaster for most of humanity in various parts of the world. Various sectors in government, social sphere, religious sphere, economy, education and several other parts are affected. If this is not taken seriously, the human population will decrease. The purpose of this study is to describe the efforts made in overcoming the Covid-19 pandemic in Indonesia. The results showed that efforts in managing the Covid-19 pandemic disaster were carried out gradually and maximized by involving all levels of society. These efforts include the adaptation of new habits, the Large-Scale Social Restriction Policy (PSBB) and the Enforcement of Restrictions on Community Activities (PPKM), Health facilities for sufferers of Covid-19, collaborating with academics to be able to optimize the independence of the Indonesian nation in dealing with national disasters, in the education sector, the implementation of Distance Learning Activities (PJJ), followed by Worship from Home and Vaccines are also pursued for the welfare of the existing community. This research is expected to provide a view for readers to play a role in handling covid-19.

**Keywords:** Covid-19, Pandemic, Disaster, Management.

## 1. INTRODUCTION

It has been more than one year since Indonesia has been working to deal with the Covid-19 pandemic disaster. The impact caused by the Covid-19 pandemic has hit all aspects of the life of the Indonesian people. Starting from the social, economic, health, education, religious services and so on. In the social realm, the implementation of 3M, namely wearing masks, maintaining distance and washing hands, is an adaptation of new habits that must be socialized and implemented by the existing community. The existence of these new habits seems to indirectly limit themselves from socializing with other people. The mask that is used makes a person unable to clearly see facial expressions so that they interpret and sometimes

even misperceive them. The assumption that when someone is coughing also makes people move away because they think that person has the corona virus. Over time this makes a person become egocentric.

Another impact is in the economic sector. On a national scale, Covid-19 has an impact on increasing the unemployment rate, namely 1.73 million people in 2020. This is due to layoffs by companies. Not to mention that the effort to find a job nowadays is very difficult so that it also has an impact on increasing the poverty rate. This reality shows that disasters always have a serious impact on the country's economy, including pandemic disasters.<sup>11</sup>

Pandemics are non-natural disasters. The Covid-19 pandemic is something new in the context of disaster

management in Indonesia. There is something unique about this disaster, namely that it cannot be predicted when the Covid-19 pandemic will end. Since the beginning of the emergence of the first case of a positive Covid-19 patient in February 2020 in Depok, the transmission of this virus has been very fast and difficult to control. In the end, the President set Covid-19 as a national disaster event. The order was followed up by the National Disaster Management Agency (BNPB) as the agency in charge of handling disaster events by issuing a COVID-19 emergency response status from February 29 to May 29, 2020. This regulation is contained in the Decree of the Head of the National Disaster Management Agency Number 13.A 2020. From the impact-impact reality that appears, very detrimental and even threatens the life of the Indonesian people. Because the government is taking serious handling in this matter to control the Covid-19 pandemic disaster. This paper describes the efforts made in managing the Covid-19 pandemic in Indonesia.

## **2. METHOD**

This paper describes covid-19 disaster management from a disaster management perspective using a descriptive method. This type of descriptive research is used in order to obtain a comprehensive understanding of a phenomenon or event. The author reviews literature related to the handling of the Covid-19 disaster then analyzes and describes the efforts that have been made by the government to date in dealing with the covid-19 disaster. Then a conclusion is drawn to get an overview and solution efforts that can be raised to help deal with the impact of post-Covid-19.

## **3. RESULT**

### **3.1 Foundations of Disaster Management Theory**

Disasters can be interpreted from various perceptions because of the complexity of their occurrence. According to McEntire, disaster is a negative effect between the interaction of the main agent/actor, the natural environment, human activities or a combination of both with vulnerability. Meanwhile, the UNDP definition of disaster is a combination of hazards from human action or natural phenomena with conditions of vulnerability. The

natural disaster element of these opinions emphasizes that the occurrence of natural disasters does not stand alone but there is a link between human behavior, conditions of vulnerability so that the potential phase changes to an active phase.<sup>2</sup>The combination of several aspects of a disaster can have a devastating impact on vulnerable populations and cause casualties and disturbances. Disaster components in this case are:<sup>3</sup>

1. Occurrence / hazard. Danger is a condition of human behavior and natural events that threaten or have the potential to cause injury, damage to property or the environment.
2. Vulnerability, namely the level of community, structure, service or geographic area damaged or disturbed by certain disaster events based on conditions of indigenous nature and proximity to disaster-prone areas.
  - a. Physical vulnerability, which includes who and what is possible to be damaged by natural disasters, including people, infrastructure, proximity to the source of the disaster. and others.
  - b. Socio-economic vulnerability, namely the degree of population that is physically and economically affected by a disaster which is determined by the intensity of its impact.
3. Capacity is the resource and strength that is owned for preparedness, prevention, mitigation and rehabilitation quickly.
4. Risk is a measure of damage or loss during a disaster in a specific area and time.

### **3.2 Covid-19 Disaster Management**

Disaster management has strong links at every stage. Disaster management aims to reduce risks or avoid potential losses from disasters, the accuracy and speed of aid to minimize casualties.<sup>4</sup>The cycle in disaster management is a process of government, private and community activities to reduce the impact of disasters, reactions during disasters and recovery steps after disasters. Speed and accuracy in taking action leads to greater preparedness, better early warning, reduced vulnerability or prevention at later stages of the cycle. The cycle in disaster management according to the National Disaster Management Agency (BNPB) is as follows:<sup>5</sup>

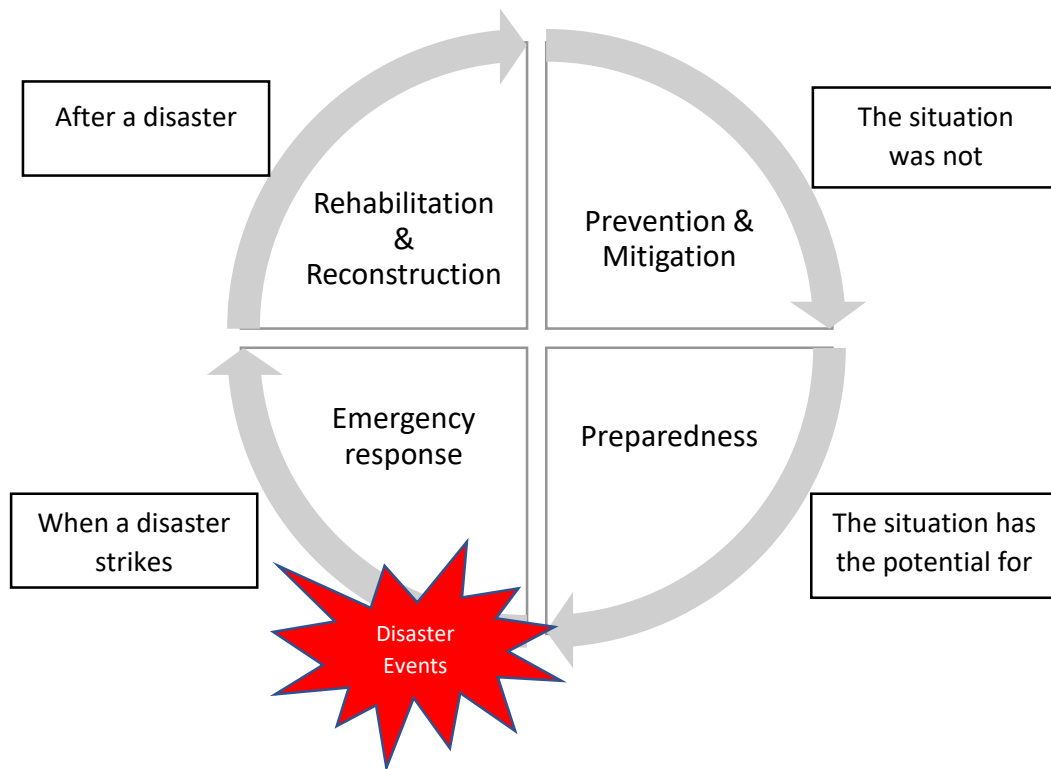


Fig 1. Disaster Management Cycle

Mitigation efforts aim at avoiding hazards or reducing the impact of a disaster event from the initial development to the occurrence of the disaster as a whole, both structurally and non-structurally.<sup>6</sup>This phase includes measuring the prevention or reduction of the impact of disasters with a long-term focus where this phase is clearly different from other phases. The actors involved in this phase are the personal level, community level, community institutions, government and various other actors. On a personal level, knowledge of the risk of loss, family health and property is prioritized. The preparedness phase is planning to act which includes training, early warning systems, education that cannot be separated from mitigation. The difference between mitigation and preparedness occurs in the time period where mitigation is long-term while preparedness is short-term.<sup>7</sup> Preparedness in general can be measured through:

- a. Communication with attention to the chain of command.
- b. Practice and development of multi-agency coordination and command during incidents.

- c. Prepare maintenance and training services from the emergency response phase
  - d. Development and training of emergency population warning methods with emergency tents and removal plans.
  - e. Deviation, recording and maintenance of disaster supplies and equipment
- The emergency response phase is an effort to reduce the danger of a disaster including rescue and search, emergency maps which are carried out immediately.

From this empirical condition, the covid-19 disaster management stage, which is a national disaster event, is currently still in the emergency response phase, indicated by the high number of confirmed cases nationally and an extension of the emergency response period in several areas. Several efforts to regulate and suppress the spread of covid-19 were carried out by implementing several policies:

1) *Adapt New Habits*

New normal comes from the idea of the World Health Organization (WHO) as a form of transition to return to normal life after the pandemic. The government, through the President, in June 2020 stated that the idea was implemented in Indonesia to

encourage economic and social activities again by imposing health protocols. After the new normal took place, it turned out to confuse the public so that the government replaced it with the slogan of adapting to new habits. The replacement of the slogan is substantively the same because it uses health protocols in individual and organizational activities.<sup>8</sup> Adaptation to this new habit, namely using a mask, maintaining distance and diligently washing hands with soap.

2) *Large-Scale Social Restriction Policy (PSBB) and Enforcement of Restrictions on Community Activities (PPKM)*

The rapid spread of Covid-19 requires the government to limit the mobility of the community with a Large-Scale Social Restriction (PSSB) policy, one of which is through controlling transportation passengers. In the Regulation of the Minister of Transportation Number 18 of 2020 concerning Transportation Control in the Context of Preventing the Spread of Covid-19, it contains transportation operating permits in the PSBB area. The mode of transportation that is allowed to operate is two-wheeled online transportation services (motorbikes) provided that strict health protocols are applied. This regulation of the Minister of Transportation is deemed to contradict the Regulation of the Minister of Health Number 9 of 2020 concerning PSBB guidelines where goods expedition services including application-based two-wheeled transportation are only limited to transporting goods and not transporting passengers. In the end, it depends on the application service policy concerned because the prohibition on operating transportation services will have a huge impact on the worsening of the community's economy. This is because transportation services via online applications absorb a large workforce.

Until the beginning of 2021 the Covid-19 pandemic had not shown a decline, making the Ministry of Home Affairs issue the Minister of Home Affairs Instruction Number 3 of 2021 concerning Enforcement of Micro-Based Community Activity Restrictions (PPKM) and the Establishment of Covid-19 Handling Posts at Village and Sub-District Levels. The PPKM replaced the PSBB policy which was deemed incapable of reducing the spread of Covid-19 where there was a relaxation of community activities in the economic

sector by up to 50 percent and increased employees working in offices by 50 percent of office space capacity.<sup>9</sup>

3) *Health facilities for sufferers of Covid-19*

Covid-19 is a disaster that threatens public health. In the emergency phase of the Covid-19 disaster, more flexible hospital facilities are needed. So far, the Ministry of Health has appointed 20 hospitals as a referral for Covid-19 patients, which are directly under the Ministry of Health. On the other hand, this vertical hospital has always been used as a reference by hospitals from various regions to handle non-Covid-19 patients who are also urgent. The mixing of Covid and non-Covid patients in vertical hospitals exacerbates the work of medical personnel and delays services for non-Covid patients who need immediate action.<sup>10</sup>

To respond to this, in the future we need better treatment by classifying existing hospitals so that there is no susceptibility to transmitting the covid-19 virus to non-covid patients. In this case, it is important to map and manage hospital patterns in disaster situations using information technology systems to reach geographically difficult areas. This can be done by cooperating with universities (medical faculties) where the disaster area is located, which is a strong asset for the implementation of a health emergency system.

4) *Collaborating with Academics*

The ability to collaborate with academics to accelerate the handling of a pandemic is needed because universities have the flexibility to provide health facilities and qualified human resources. By optimizing the work of the nation's children, the stretching of the domestic economy during the pandemic can be lifted. Health facilities and infrastructure provided by the country itself are more economical than importing them. It doesn't just stop there, collaboration with academics in Indonesia also needs to be permanent after Covid-19 by protecting it so that the products produced can continue from production to use. The lesson from this pandemic is the formation of national independence by producing its own facilities and infrastructure when handling Covid-19 and for long-term interests.<sup>11</sup>

5) *Enforcement of Distance Learning Activities (PJJ)*

The vulnerability of Covid-19 to be transmitted to the younger generation has shifted the education sector

to distance learning. This is to protect both students and teachers from this global pandemic. The technology failure experienced by most educational actors in educational institutions, both formal and non-formal, is due to their unpreparedness in facing technological sophistication. Some of the obstacles experienced arose not only on the part of the students but also on the part of the teacher. From the students' side, most of them are the digital generation who are not too difficult to keep up with technological developments but are constrained by a lack of facilities. The condition of the families of students who are in a middle to lower economic position often has difficulty in providing study quotas. Families must manage their finances in such a way as to be able to meet the children's learning needs. Not to mention for students who are in geographic conditions that are difficult to reach the internet network in their area. So distance learning is not maximally done.

Another problem arose from the teacher's side. Some teachers who do not master technology must learn quickly so that they can organize their teaching and learning activities. In this case the school and the teachers themselves need to take part in trainings regarding how to manage online classes. The boredom that hit students due to the large number of assignments also explores the question, is it maximal when assigning assignments is done as a condition for filling student learning activities? It seems necessary to ponder because often so many assignments only add to the burden and depression of students towards online classes. The teacher's pattern in delivering material through lectures and the timing of student questions or discussions also needs to be regulated. It is also necessary to arrange the times for the teacher to provide consultation space for students who have learning difficulties. Thus it can be understood that in the educational aspect there needs to be an adaptation effort not only from the teacher but also on the part of students and their families. Learning from this, schools must be better prepared to include technology in their learning media.

#### 6) *Worship from home*

Just as learning is done remotely, so also calls for worship from home are enforced. Worship from home is raised considering that places of worship have direct contact access which is vulnerable to being made between people. Through a press conference at the

Bogor Palace on March 16, 2020, President of Indonesia Joko Widodo revealed that policies for studying from home, working from home, and worshipping from home need to be intensified to reduce the spread of covid-19. Local policy makers are collaborating with religious leaders to be able to work together to participate in overcoming this national disaster.

Seeing the current development, in some areas of worship places have been allowed to worship in places with certain notes. Some of the rules are the number R0 (R-naught) which indicates that the house of worship is in a safe environment from Covid-19. This proof of safety is shown through a certificate issued by the task force for the province, regency / city, or sub-district according to the level of the house of worship. In order to obtain a certificate, administrators of places of worship must submit a request to the task force according to their level. For example, for a mosque, church, or temple in a village environment, the application is submitted to the sub-district task force. A house of worship that usually serves people from across the district / city or outside its location environment, submission to the task force at the district / city level. Besides, even though they have been granted permission to open joint worship services, there are a number of protocols that must be implemented. Both by administrators of houses of worship and people who want to worship. Among other things, placing a health protocol supervisor, cleaning houses of worship regularly, and ensuring that people are in a healthy condition when going to worship.<sup>12</sup>

#### 7) *Vaccine delivery*

The design of the vaccination program carried out by the government will be implemented in 15 months, from January 2021 to March 2022. Covid-19 vaccination is carried out in 4 stages taking into account the availability, arrival time, and safety of the vaccine. The priority group for vaccine recipients is residents domiciled in Indonesia who are over 18 years of age. The target population to be vaccinated is 181.5 million people or about 70% of the total population of Indonesia to achieve herd immunity. The stages of implementing the covid-19 vaccination are:<sup>13</sup>

Stage 1: Target health workers, assistant health workers, support staff, and students who are undergoing medical professional education and

working in health service facilities. The timing of the vaccine administration is January-April 2021

Stage 2: The targets for vaccination are public service officers including TNI-Polri, legal officers, and other public service officers including airport / port / station / terminal officers, banks, state electricity companies, and drinking water companies as well as other officers involved in providing services to the public. The timing of the vaccine is January-April 2021.

Stage 3: the target of vaccination is vulnerable people from geospatial, social and economic aspects. The timing of vaccine administration starts April 2021-March 2022.

Stage 4: the target is the community and other economic actors using a cluster approach according to the availability of vaccines. The timing of the vaccine is April 2021-March 2022.

In the process of giving vaccines to users, there are also several steps that must be passed, namely: First, the person who will be injected vaccine must pass registration verification through the 'Peduli Protect' application. Then to post two for screening and anamnesis. At this post, prospective vaccine recipients will be examined in detail, including the presence or absence of comorbid diseases. "Post two will be asked as many as 16 items including whether or not there is a congenital disease. If there is one item that does not meet the requirements, then it cannot receive the vaccine. If it passes at post two, then the next step is giving the corona vaccine at post three. After the injection, the vaccine recipient will undergo an observation period of 30 minutes at post 4. This observation is to see the clinical symptoms that appear after the administration of the vaccine or AEFI (Kejadin Ikutan Post Immunization). Because it has to go through four procedures, the implementation is vaccine. This will take 45 to 50 minutes per person. So that later it is estimated that in a day each puskesmas can only inject 10 to 15 people.

#### 4. CONCLUSION

In reality, the Covid-19 disaster management in Indonesia is still at the emergency response stage. This is indicated by the increasing number of positive cases and the imposition of restrictions on community activities through PSBB / PPKM. The adoption of new habit adaptations has become a slogan that is continuously echoed, socialized and carried out by the entire community. From this a new culture is created

in the community. There needs to be continuous coordination and communication between the authorities, from policy makers, supervisors, to implementers. This is to minimize the existence of policy bias with one another and cause confusion in the community, for example, whether or not two-wheeled transportation services can operate to accept passengers, use of hospital access for non-covid patients and so on.

BNPB as the main command holder during a disaster emergency needs to have a role so that policies from the ministries do not dominate more so that they do not result in conflicting policies between the health and economic sectors. Evidence-based policy formulation in times of crisis by involving scientific experts in a comprehensive manner and supported by the community who pursue certain areas of expertise is very important as a consideration in realizing policy synergy. The lesson from this pandemic is the formation of national independence by producing its own facilities and infrastructure when handling Covid-19 and for long-term interests.

#### REFERENCES

- [1] A Khan, H. & Vasilescu, L., G. & Khan, "Disaster Management CYCLE - a Theoretical Approach," *Management and Marketing Journal*, University of Craiova, Faculty of Economics and Business Administration 6, no. 1 (2008): 43-50.
- [2] Aldalbahi, F., *Actors In Disaster Cycle, Analysis of Six Recovery Plans, and Financial Sources For Post-Disaster Community Recovery*. (Texas: Department of Landscape Architecture & Urban Planning at Texas A&M University., 2014).
- [3] "PPKM Micro Regulations Apply February 9-22, 2021,," *CNN Indonesia*, 2021.
- [4] Burhanudin Mukhamad Faturahman, "Discourse on Disaster Management in the Covid-19 Era,," *MADANI Journal of Politics and Social Affairs* 13, no. 1 (2021): 68-85.
- [5] BM Faturahman, "CONCEPTUALIZATION OF DISASTER MITIGATION THROUGH PUBLIC POLICY PERSPECTIVE," *PUBLISIA: Journal of Public Administration* 3, no. 2 (2018): 122-134.
- [6] C. Warfield, "The Disaster Management Cycle." (2008).
- [7] Ilham Safutra, "Opening a House of Worship Requires Task Force Permit," *Jawa Pos*, 2021, <https://www.jawapos.com/nasional/31/05/2020/buk-a-rumah-ibadah-butuh-izin-gugus-tugas/> .
- [8] *Public Lecture with the Minister of Research and Technology / National Agency for Research and Innovation: The Power of Cooperation and Innovation in Overcoming the Covid-19 Pandemic. 70 Years Anniversary of FEB UI.*, 2020,

- [https://www.feb.ui.ac.id/blog/2020 / 11/13 / dies-natalis-feb-ui-70- years-lecture-general-together-menristek-brin-strength-cooperation -and-innovation-in dealing-pandemic-covid-19 /](https://www.feb.ui.ac.id/blog/2020/11/13/dies-natalis-feb-ui-70-years-lecture-general-together-menristek-brin-strength-cooperation-and-innovation-in-dealing-pandemic-covid-19) on February 19, 2020.
- [9] M. Samekto, C., B., D. & Nuh, "Evaluation of Community-Based Settlement Reconstruction Program: Case Study in Post-Disaster Recovery of 2010 Merapi Volcano Eruption in Cangkringan District, Sleman Regency, Yogyakarta Province.," *JPAS* 1, no. 3 (2017): 64–70.
- [10] Sugeng Triutomo B. Wisnu Widjaja R. Sugiharto Siswanto BP Yohannes Kristanto, *Guide to Disaster Contingency Planning (Second Edition)* (Jakarta: BNPB, 2011).
- [11] S. Mas'udi, W., Winanti, P., *New Normal: Socio-Economic and Political Changes Due to Covid-19* (Yogyakarta: Gadjah Mada University Press, 2020).
- [12] "Priority Stages for Vaccine Recipients," *Koran Tempo*, 2021, [https://koran.tempo.co/read/ragam/461613/satgas-covid-pandemi-vaksin?#:~:text= Priority Stages for Vaccine Recipients for the vaccination program](https://koran.tempo.co/read/ragam/461613/satgas-covid-pandemi-vaksin?#:~:text=Priority%20Stages%20for%20Vaccine%20Recipients%20for%20the%20vaccination%20program).
- [13] Y Sumarni, "The Covid-19 Pandemic: Economic and Business Challenges.," *Al-Intaj* 6, no. 2 (2020): 46–58.