The Community Role in the Implementation of Coronavirus Disease-19 Control Policies in Indonesia

Mujiati[1], Mimi Sumiarsih[2], Aryani Pujianti[3]

[1]Center for Health Services Policy, Health Policy Agency, Ministry of Health Indonesia
[2]Center for Health Resilience and Resource Policy, Health Policy Agency, Ministry of Health Indonesia
[3]Institute for Vector and Reservoir Control Research and Development, National Institute of Health Research and Development, Ministry of Health Indonesia

ABSTRACT

Background: *The success of COVID-19 control in Indonesia comes to place with active community participation. Community's role in supporting the successful implementation of COVID-19 policy is critical to investigate. This study, therefore, aimed to determine community's role in supporting the successful implementation of COVID-19 control policies.*

Method: *This study is exploratory research with a cross-sectional approach. Seven Indonesian regencies as research locations were selected purposively. Quantitative data were collected from 2,010 positive-COVID-19 patients and their close contacts through a standardized self-administered questionnaire. In-depth interviews were employed with 79 health center officers. Content analysis was used to analyze the qualitative data, and descriptive analysis was for the quantitative data.*

Results: *This study had a relatively balanced gender distribution. There were 26.9% at age of 6-19 years, and 80.9% were in close contact with COVID-19 patients. Most respondents were from primary health care centers, had a bachelor's degree, and had worked for less than five years. Their adherence to health protocols was lower than the group that was not exposed to COVID-19. Most respondents followed health protocols such as hygiene (92.9 %) and cough etiquette (91.5 %). However, COVID-19 quarantine compliance was still low (38.2%), and 90.8% of respondents mostly practiced self-isolation at home. COVID-19 control strategies in each region quite varied. A lack of public awareness and education, flexibility in policy implementation, and a poor reward and punishment system were barriers to COVID-19 control. The community's role in supporting COVID-19 control policies includes helping to communicate COVID-19 risks, assisting healthcare centers in monitoring COVID-19 self-isolation, providing and operating integrated isolation shelters for confirmed cases, and participating as a case tracer.*

INTRODUCTION

Coronavirus Disease 2019 (COVID-19) has become a pandemic in the world including Indonesia. The spread of COVID-19 has an impact on increasing the number of victims and socio-economic losses. The Indonesian Government designated COVID-19 as a national disaster through Presidential Decree Number 12 in 2020. Almost two years after the report of the first COVID-19 case in Indonesia, the number of COVID-19 cases was quite volatile. Data on February 4, 2022, showed 4,414,483 positive confirmed cases in Indonesia, 2.6% of which were active cases, 94.1% of recovering cases, and 3.3% of deaths.[1]

The COVID-19 pandemic has significantly impacted all aspects of life, including the quality of human life. A study in Italy showed statistically significant differences in the quality of life depending on several variables, including gender, area of residence, and diagnosis with medical/psychiatric conditions during the pandemic, and lockdown.[2] The COVID-19 pandemic also had socioeconomic implications in three sectors in India. In the primary sector, changes occurred in agriculture and the food supply chain, in the medical industry, and in

gasoline and oil. In the secondary sector, changes were apparent in information technology, financial, and manufacturing industries. Meanwhile, in the tertiary sector, there were changes in education, tourism, and aviation.[3] In Indonesia, COVID-19 declined socioeconomic activities and people's income. Aw strong relationship was found between positive COVID-19 cases and mortality rates with socioeconomic conditions.[4]

The Indonesian Government has made various efforts to prevent and control the spread of COVID-19. They issued various regulations ranging from circulars, decrees, joint decrees, ministerial instructions, ministerial regulations, presidential decrees, presidential regulations to government regulations.[5]

Technical efforts that have been carried out include the implementation of the Large-Scale Social Restrictions (*Pembatasan Sosial Berskala Besar/PSBB*) policy which was later changed to the Enforcement of Community Activity Restrictions (*Pemberlakukan Pembatasan Kegiatan Masyarakat/PPKM*). Besides, others are the implementation of new normal adaptations, reinforcing health protocols from three measures (wearing masks, maintaining distance and washing hands with soap) to five measures (wearing masks, maintaining distance, washing hands with soap, avoiding crowds, and reducing mobility), practicing 3T (testing, tracing, and treatment), as well as COVID-19 vaccination. In their implementation, these policies require the support of all stakeholders i.e., the government, private sector, and the community. At the forefront of preventing the spread of COVID-19, community should be empowered to prevent COVID-19 at the family/community/village level according to the Director of Health Promotion and Community Empowerment of the Indonesian Ministry of Health. Community empowerment can be done by exploring the potentials to participate in preventing its transmission.[6]

Community empowerment refers to the process of transferring some of community's or individual's power, strength, or competence for purpose. Empowerment also refers to the process of stimulating, encouraging, and motivating people to be able to make their own decisions about their lives.[7] Community empowerment is more than just involvement or participation, but it implies community ownership and action that is explicitly aimed at social and political change. Community empowerment is a process of renegotiating power to gain greater control. It recognizes that if some people are empowered, others will share the existing power and give up some. Community empowerment must address the social, cultural, political, and economic determinants of health and allow partnerships with other sectors to find solutions.[8]

Based on a study in Antasan Kecil Timur, Banjarmasin City, the lack of COVID-19 public awareness, lack of community discipline to practice health protocols, and one's reluctance to get a diagnosis from primary healthcare centers are common obstacles to COVID-19 control. [9] Meanwhile, a study on Mandailing Natal showed that social distrust causes the community not to comply with the government's regulations or policies, for example, rules for health protocols. [10] The entire community components, including religious leaders, community leaders, and other community institutions, had an important role in supporting the implementation of government policies to deal with COVID-19.[11] Best practices of community's roles from several regions can be adopted in other areas. Therefore, this study sought to determine the community's role in supporting the implementation of COVID-19 control policies.

METHOD

This article is part of the Evaluation Monitoring Research: Effects of Vaccination on COVID-19 Transmission in 2021. It is exploratory research with a cross-sectional approach conducted in three provinces in Indonesia that were selected through purposive sampling. The regional selection was based on provinces that represent high, medium, and low percentages of COVID-19 cases from the cumulative provincial data on February 24, 2021. In Central Java and Aceh, one district and one city were selected as study sites, while, in Maluku, two cities and one district were chosen. Overall, data were collected from Semarang City and Magelang Regency (Central Java Province), Banda Aceh City and Aceh Besar Regency (Aceh Province), Tidore Islands City, Ternate City, and South Halmahera Regency (Maluku Province).

Data collection was carried out from March to November 2021 using a mixed-method approach. Qualitative data were collected through in-depth interviews based on interview guidelines. The guidelines contain several questions about the implementation of COVID-19 control policies on the study sites. In-depth interviews with key informants in the central and local governments were performed to acquire qualitative data. Informants are policymakers and technical officers from district/city health offices and primary healthcare centers (PHC). In-depth interviews were conducted online to comply with health protocols during the pandemic. The trustworthiness of qualitative data is established by triangulating the sources through data comparison from the informants, the online questionnaire, and documents (secondary data).

Respondents filled out a structured self-administered questionnaire which generate quantitative data. The online questionnaire contains questions about the frequency of respondent compliance with health protocols,

perceived obstacles in the policy implementation and isolation/quarantine measures, and close contacts with COVID-19 patients. To obtain quantitative data, this study invited individuals who were confirmed positive and were in close contacts with COVID -19 patients according to reports from the Health Office in March-November 2021. The sample was selected from the New All Record (NAR) data or case records from the Health Office at each research location. Cases confirmed within a maximum of 10 days from the first day of data collection were prioritized for inclusion. Qualitative data were analyzed using the content analysis method, while quantitative data were analyzed descriptively. In addition to collecting primary data, this study involved secondary data related to COVID-19 transmission control policies, including government regulations, guidelines, technical instructions, standard operating procedures, research results, and COVID-19 exposure indicators.

This study has received ethical approval from the National Institute of Health Research and Development Ethics Committee (Number: LB.02.01/2/KE.606/2021). Participation was voluntary, and the respondents filled informed consent letters before the data collection process.

RESULTS AND DISCUSSION

The number of respondents who filled out the online questionnaire was 2,010 people, and the number of informants for interview was 79. Table 1 shows the respondents' characteristics from the online questionnaire, and Table 2 shows the respondent distribution by institutions. According to Table 1, results showed a relatively balanced proportion of respondents by gender. According to age, the highest proportion was respondents aged 6-19 years. Most of the respondents had jobs, were married, and were in close contacts with COVID-19 patients. Table 2 explains that the largest number of informants participating in the interview was from the primary healthcare centers.

Table 1. Respondents' characteristics

Characteristics	COVID-19				Total	
	Yes		No			
	n	%	n	%	n	%
Sex						
Male	220	49.7	776	49.5	996	49.6
Female	223	50.3	791	50.5	1,014	50.4
Age						
<=5 years old	6	1.4	27	1.7	33	1.6
6-19 years old	75	16.9	465	29.7	540	26.9
20-29 years old	90	20.3	289	18.4	379	18.9
30-39 years old	85	19.2	227	14.5	312	15.5
40-49 years old	62	14.0	231	14.7	293	14.6
50-59 years old	66	14.9	187	11.9	253	12.6
>=60 years old	59	13.3	141	9.0	200	10.0
Job						
Employed	246	66.8	823	52.5	1,119	55.7
Unemployed	160	33.2	744	47.5	891	44.3
Marital status						
Married	246	55.5	767	48.9	1,013	50.4
Unmarried	160	36.1	735	46.9	895	44.5
Divorced	37	8.4	65	4.1	102	5.1
Tracing status						
COVID-19 confirmed	384	86.7	0	0.0	384	19.1
Close contact	59	13.3	1,567	100.0	1,625	80.9

Table 3 describes some applicable policies to control COVID-19 cases on the study sites. From the in-depth interviews, each region implemented various policies. From Table 3, it can be seen that the COVID-19 control strategy in each region quite varied. The South Halmahera Regency, for example, combined four types of policies directly, namely PSBB, macro PPKM, micro PPKM, and the reinforcement of health protocols. On the other hand, Aceh Besar and Magelang Regency only relied on micro PPKM and practice of health protocols through three and five measures only. Two policies implemented in all research locations include the implementation of micro PPKM and the practice of health protocols (three and five measures). The COVID-19 transmission prevention policy mostly implemented in seven local governments i.e., Banda Aceh City, Aceh Besar Regency, Magelang Regency, Semarang City, South Halmahera Regency, Tidore Islands City, and Ternate City include the practice of health protocols (three and five measures) and micro PPKM.

Table 3 explains the practice of health protocols follows the Decree of the Minister of Health Number 382 of 2020 concerning Public Health Protocols in Public Places and Facilities for COVID-19 Prevention and Control which is then internalized into all national and regional regulations.[12] In addition, President of Indonesia stated that micro PPKM was the most appropriate policy to stop the COVID-19 transmission to villages or the community.[13] This policy was later realized in the Instruction of the Minister of Home Affairs Number 3 of 2021 concerning the Enforcement of Restrictions on Micro-Based Community Activities and the Establishment of COVID-19 Control Command Posts at the Village and Sub-District Levels to Control the Spread of COVID-19 in February 2021. This rule was extended and revised according to the conditions of each region until July 2021. From July 2021 until now, the policy has been implemented based on transmission rate, response capacity, and vaccination coverage.

Table 2. Distribution of informants for interview

Characteristics	n	%
Institution		
Ministry/National Board	8	10.13
Provincial Health Office	3	3.80
District/City Health Office	7	8.86
Laboratory	7	8.86
Health centers	54	68.35
Education		
Diploma	16	22.5
Bachelor	38	53.5
Magister	17	23.9
Tenure		
Less than five years	54	76.0
Five years and more	15	21.1
No data	2	2.8

Table 3. COVID-19 preventive policies on the research sites

Districts/cities	PSBB	Macro PPKM	Micro PPKM	Implementation	Other mechanisms
Banda Aceh City	-	√	√	√	-
Aceh Besar Regency	-	-	√	√	-
Magelang Regency	-	-	√	√	-
Semarang City	-	√	√	√	-
South Halmahera Regency	√	√	√	√	-
Tidore Islands City	-	-	√	√	√
Ternate City	-	√	√	√	-

PSBB: Large-Scale Social Restrictions, PPKM: Enforcement of Community Activity Restrictions, Implementation: Implementation of health protocols (3 measures, 5 measures)

Table 4. Distribution of respondents' compliance with health protocols according to online questionnaire results

Behavior	Exposed to COVID-19		Not exposed to COVID-19		Total	
	n	%	n	%	n	%
Wearing a medical mask	276	70.8	1,165	78.8	1,441	77.1
Wearing a cloth mask	190	48.7	906	61.3	1,096	58.6
Washing hands with soap	328	84.1	1,375	93.0	1,703	91.1
Keep the physical distance	312	80.0	1,194	80.7	1,506	80.6
Maintaining cleanliness	352	90.3	1,385	93.6	1,737	92.9
Covering mouth when coughing	343	87.9	1,368	92.5	1,711	91.5

Table 4 describes the distribution of respondents' compliance with health protocols. Adherence to health protocols in the exposed group was lower than the group not exposed to COVID-19, except for physical distancing. In general, most of the respondents implemented health protocols by maintaining cleanliness and covering mouth when coughing. On the other hand, the health protocol that was applied the least was the use of masks (Table 4).

These findings are consistent with the results from in-depth interviews from the Health Office and Health Centers. COVID-19 patients mostly did not wear masks.

"...sometimes they take a break and ignore the protocols. They like to eat in the room...there are many not wearing a mask in the hospital or outside. Those who are confirmed positive will eventually infect others." (R1, District Health Office*)*

From the results of in-depth interviews, it was also found that several obstacles varied considerably in the implementation of COVID-19 control policies between research locations, as shown in Table 5.

Based on Table 5, Healthcare Centers in Aceh found a lack of public awareness and public knowledge as the most common challenge in implementing control measures. Similarly, in Central Java, a lack of public awareness, absence of reward and punishment system, technical differences, and leeway in policy implementation were obstacles they faced. The barriers faced by health center officers in North Maluku were a lack of public awareness, low public knowledge, and leeway in policies implementation. Overall, these provinces faced similar constraints in implementing COVID-19 policies.

Results found obstacles in Banda Aceh, Aceh Besar, Magelang, Semarang, Ternate, Tidore Islands, and South Halmahera. Agustino (2020) stated that many policies are failed to control COVID-19 cases in Indonesia, especially in the early days of the pandemic, because of the weak bureaucratic structure and process, as well as the non-adaptive priority disposition. In addition, weak coordination between stakeholders at the central and regional levels is a cliche in Indonesia. On the one hand, the claim of authority over affairs becomes an obstacle to control. At the same time, the central government often gives instructions slowly at critical times.[14]

Table 5. Obstacles faced by Healthcare Center Officers in implementing COVID-19 control policies

Obstacles	Aceh		Central Java		North Maluku		Total	
	n	%	n	%	n	%	n	%
Low public awareness/discipline	30	100.0	61	96.8	21	100	112	98.2
Low public knowledge	29	96.7	47	74.6	19	90.5	95	83.3
Low policy socialization	22	73.3	31	49.2	15	71.4	68	59.6
Technical differences in policy implementation	21	70.0	44	69.8	17	81.0	82	71.9
Leeway in policies implementation	26	86.7	49	77.8	19	90.5	94	82.5
No reward and punishment	21	70.0	46	73.0	17	81.0	84	73.7
Inconsistently reward and punishment implementation	22	73.3	55	87.3	17	81.0	94	82.5
Lack of leaders' and community leaders' roles	14	46.7	36	58.1	12	57.1	62	54.4

Table 6. Isolation/quarantine measures for confirmed cases and those in close contacts with COVID-19 patients

Activities	Confirmed COVID-19 cases		Close contacts		Total	
	n	%	n	%	n	%
Doing isolation or quarantine						
Yes	251	75.8	463	30.1	714	38.2
No	80	24.2	1,075	69.9	1,155	61.8
Location of isolation or quarantine or treatment						
Home-self isolation	199	79.3	449	97.0	648	90.8
Hospital	36	14.3	11	2.4	47	6.6
Hotel/motel	5	2.0	0	0.0	5	0.7
Sport center/sport building	0	0.0	0	0.0	0	0.0
Other public places	11	4.4	3	0.6	14	2.0
Some suggest isolation						
Yes	217	86.5	417	90.1	634	88.8
No	34	13.5	46	9.9	80	11.2
The advisor						
Healthcare centers	168	77.4	361	86.4	529	83.3
Family	38	17.5	45	10.8	83	13.1
Friends	2	0.9	3	0.7	5	0.8
Local officials	9	4.1	9	2.2	18	2.8
Others	7	2.8	45	9.7	52	7.3
The main reason for not doing isolation/quarantine						
Feel healthy	45	56.3	499	46.4	544	47.1
Working	5	6.3	241	22.4	246	21.3
No isolation recommendation	9	11.3	177	16.5	186	16.1
Negative test results	0	0.0	0	0.0	0	0.0
Stress/afraid	21	26.3	158	14.7	179	15.5

The results also showed the main obstacles in the implementation of COVID-19 control policies are low public awareness and public knowledge. Public awareness and knowledge issues might be associated with lacking policy socialization. In Jember, research (2020) found a robust correlation (p = 0.0001) between attitudes and practices after receiving COVID-19 socialization. Most people previously did not have a proper understanding of COVID-19 tests (PCR and rapid test), self-isolation, community support and other facts about COVID-19. After socialization, they developed knowledge, positive attitudes, and good preventive practices.[15] In line with this study, previous research in Karawang (2020) shows respondents' compliance with health protocols is mostly done through mask use outside the house and handwashing by returning home from outdoor activities. Measurement of their compliance was done after the respondents received socialization about the practice of health protocols.[16] This situation clearly indicates that continuous encouragement through health education and promotion of COVID-19 could create positive practice of COVID-19 control policy. According to Chavarría et al., knowledge is the most important determinant of preventive health behaviour.[17] Similarly, the research from Sulistyowati et al. also found that knowledge, attitudes, practices, data needs, and information-seeking behavior are all important in creating effective disease-control interventions.[18]

From in-depth interview results, cross-sectoral and community support is needed to succeed COVID-19 control policies. Health officers in collaboration with health cadres, volunteers, community organizations, the army soldiers Village Development Officer (*Bintara Pembina Desa TNI-AD/Babinsa*) and the Community Security and Order Trustees Bhayangkara (*Bhayangkara Pembina Keamanan dan Ketertiban Masyarakat/ Babinkamtibmas*) have to get involved in communicating the risks of COVID-19 with the community. According to Pohan et al., the number of health protocol violations is still generally significant. *Babinkhamtibmas* and *Babinsa* support the enforcement of community discipline, stay alert and responsive to community needs during self-isolation and health protocol. *Bhabinkamtibmas* perform visits, socialization, education, mask raids, and banner installations to educate the dangers of Covid-19 and campaign health protocols actively.[19]

The village-level COVID-19 control units were established to prevent, control, guide, and support COVID-19 control. Not only for risk communication, village officials also assist healthcare centers to monitor COVID-19 confirmed cases in need of home quarantine. The village units also provided and managed integrated isolation places or shelters for COVID-19 confirmed patients. It turned out reducing the needs of isolation or quarantine facilities.

"...for example, when the community complained, they did not comply during isolation, or their close contact tracing was still lacking, then we would inform it to cross-sector stakeholders. Starting from the village head to monitor the self-isolation patients." (R2, Primary Healthcare Center)

"In every village, there is an integrated isolation place, called a halfway house... which is managed by the village, but we still monitor it too." (R3, Primary Healthcare Center).

A systematic review illustrates community involved in COVID-19 preventive measures consisted of six groups: community leaders (traditional, religious and/or government leaders), community-based and religion-based organizations, community groups or networks or committees, health management committees, individuals, and key stakeholders such as students, survivors, women representatives, elderly and the youth.[20] Other important control measures include designing and planning interventions, community entry and trust-building, social and behavioral change communication, risk communication, surveillance and contract tracing, and broader logistics and administration activities, such as procuring and setting up handwashing stations, facility development or record keeping.[16]

The Guidelines for Community Empowerment in COVID-19 Prevention in RT/RW/Village mentions that the importance of community empowerment in preventing COVID-19. The community such as head of family unit, head of community unit, head of village, community leaders, and health cadres had carried out their duties as listed in the guidebook, for example, conveying information on COVID-19 and its prevention, encouraging the practice of health protocols, collaborating with local healthcare centers, and providing logistics for people in home quarantine. Besides, the guidelines implicitly reinforce the need for the community to also participate in the efforts. However, the public were not open to reveal confirmed cases or those in close contact with suspects, thereby making it difficult for health workers to trace.[6]

Table 6 shows that compliance with COVID-19 isolation/quarantine was generally low in all regions (38.2%). In particular, respondents in contact with patients had poor awareness to conduct isolation/quarantine because they felt no symptoms at all. The majority of respondents (90.8%) performed self-isolation at home. Family becomes the first agent who advised them after primary healthcare centers. As many as 88.8% of respondents acknowledged suggestions from other people. A study in China (2020) shows that positive attitude towards social distancing is associated with high social support from family. In addition, family support is also influential in maintaining positive mental health during the COVID-19 pandemic.[21]

In case tracing, interviewed informants declared that health cadres, the army soldiers Village Development Officer and the Community Security and Order Trustees Bhayangkara also participated as tracers. Case tracing is indeed important because it is one of the indicators in determining the PPKM policy. A tracer has to carry difficult tasks because she/he need to deal with resistance or rejection from the community.

"The obstacle in the tracing process is that patients were not willing to be visited, so we did tracing via phone .... they did not confirm if they had swab and even when they were positive. They eventually could not be contacted." (R4, Primary Healthcare Center)

Community's role can be a strength in dealing with various problems during the COVID-19 pandemic. As Aristotle mentions, humans are *zoon politicon* or social creatures who interact with other humans. The community plays an important role to cut off COVID-19 transmission and overcome impacts of regional quarantine policies and social restrictions. They can participate by distributing masks and sanitizers, providing handwashing equipment, campaigning health protocols, giving staples to residents affected, and others. According to Sari (2020), this pandemic has awakened humans as social beings who depend on each other. This pandemic has also raised collective awareness to solve various problems.[22] The existence of community mobility as response to government policies is considered less effective to control the COVID-19 pandemic. However, this does not mean to undermine the community's participation. It should not be neglected in COVID-19 control measures.[23]

A study in Garut Regency shows that knowledge is the basis for certain actions or behaviors. People acknowledge that the COVID-19 virus can quickly spread and pose devastating impacts, but some might not take actions to take precautions and overcome the pandemic. Community leaders also have to be examples in practicing health protocols and alleviate socioeconomic situations after the pandemic has stricken. Role modelling will

contribute to community independence in responding to the pandemic.[24] That accords to the Health Belief Model theory which mentions that people will be motivated to take any actions as they are cautious about risk of contracting a disease.[25]

The community acts as a volunteer who helps the government implement the policies. Research conducted in China shows that the number of COVID-19 volunteers grew along with the increased number of confirmed cases. They came from various occupational backgrounds such as from private companies, entrepreneurs, freelancers, unemployed, public institutions.[26] The *Kampung Siaga Candi Hebat* innovation in Semarang City was part of the commitment of the *Jogo Tonggo* movement in the Central Java region. These efforts are intended to encourage community's participation in addition to the government's in controlling COVID-19. One of the program's agenda is establishing a food barn that provides food supplies to some neighborhoods affected by the pandemic. The initiative involved team to control health, socioeconomic, security, logistics and communication at a village level.[27] Although community empowerment initiatives have been carried out massively in a number of districts/cities, their success of implementation varies between regions. Some constraints were found in planning, implementation, to supervision phases in *Jogo Tonggo* program. Budgeting was the common obstacle in the planning phase, and difficulties occurred in the collaborative process between sectors. Task force and local officials have a greater responsibility to raise the community's awareness. They also have to develop adequate reporting and monitoring skills to empower others.[28] Some empowerment efforts have also been in Balinese society by using local wisdom or traditional insights and by inviting traditional institutions and *pecalang* (customary police) to enforce health protocols and treatment.[29]

CONCLUSION

The COVID-19 control policies implemented in Banda Aceh, Aceh Besar, Magelang, Semarang, Ternate, Tidore Islands, and South Halmahera quite varied and posed obstacles in implementation. The community could be a helpful agent by communicating risk, assisting case and contact tracing, monitoring self-isolated patients, providing self-isolation facilities, and contributing to decisions on types of isolations for confirmed COVID-19 patients.

Conflicts of Interest

The authors certify that they have no conflict of interest. The founding sponsors have no role in the research design, collection, analyses, or interpretation, writing, and decision on manuscript publication.

REFERENCES

1. Kementerian Kesehatan RI. Dashboard analisis situasi COVID-19 [Internet]. 2022. Available from: https://covid19.go.id/

2. Epifanio MS, Andrei F, Mancini G, Agostini F, Piombo MA, Spicuzza V, et al. The impact of COVID-19 pandemic and lockdown measures on quality of life among Italian general population. J Clin Med. 2021;10(2):1–19.

3. Sandeep Kumar M, Maheshwari V, Prabhu J, Prasanna M, Jayalakshmi P, Suganya P, et al. Social economic impact of COVID-19 outbreak in India. Int J Pervasive Comput Commun. 2020;16(4):309–19.

4. Nano Prawoto, Eko Priyo Purnomo, Abitassha Az Zahra. The Impacts of Covid-19 Pandemic on Socio-Economic Mobility in Indonesia. Int J Econ Bus Adm. 2020;Volume VII(Issue 3):57–71.

5. Kementerian Kesehatan RI. Regulasi COVID-19 [Internet]. 2022. Available from: https://covid19.go.id/p/regulasi

6. Kementerian Kesehatan RI. Pedoman Pemberdayaan Masyarakat dalam Pencegahan COVID-19 di RT/RW/Desa. Jakarya: Kementerian Kesehatan Republik Indonesia; 2020.

7. Utama MS, Gunartha IDKA. Community Empowerment Strategy in Poverty Treatment. Am J Humanit Soc Sci Res. 2020;4(9):332–44.

8. Labonté R, Laverack G, Baum. FE. Health Promotion in Action: From Local to Global Empowerment. Int J Health Care Qual Assur. 2009;22(1).

9. Fitri N. Implementasi Kebijakan Pemerintah Mengenai Partisipasi Masyarakat dalam Penanggulangan COVID-19 di Kelurahan Antasan Kecil Timur Kota Banjarmasin (Disertasi) [Internet]. Universitas Islam Kalimantan; 2021. Available from: http://eprints.uniska-bjm.ac.id/8519

10. Asrin A. Social Distrust , Faktor Penghambat Penanganan Covid di Kabupaten Mandailing Natal (Studi kritis terhadap persepsi masyarakat dan kebijakan publik). J Maqasiduna. 2021;1(1).

11. Mulyadi M. Partisipasi Masyarakat Dalam

Penanganan Penyebaran Covid-19. Pus Penelit Badan Keahlian DPR RI. 2020;XII(8):13–8.

12. Kementerian Kesehatan RI. Protokol Kesehatan bagi Masyarakat di Tempat dan Fasilitas Umum dalam Rangka Pencegahan dan Pengendalian Corona Virus Disease 2019 (COVID-19). Indonesia; 2020.

13. Kemenkominfo. Presiden: PPKM Mikro Kebijakan Paling Tepat untuk Saat Ini [Internet] [Internet]. 2021 [cited 2021 Jun 24]. Available from: https://www.menpan.go.id/site/berita-terkini/dari-istana/presiden-ppkm-mikro-kebijakan-paling-tepat-untuk-saat-ini

14. Agustino L. Analisis Kebijakan Penanganan Wabah Covid-19: Pengalaman Indonesia. J Borneo Adm. 2020;16(2):253–70.

15. Khaerunnisa S, Syafa'ah I, Wungu CDK, Prabowo GI, Handajani R, Safitri I, et al. The Improvement of Community Knowledge, Attitudes and Practices After Covid-19 Socialization. Folia Medica Indones. 2021;57(2):95.

16. Hakim L. Survei Tingkat Kepatuhan Masyarakat Melaksanakan Protokol Kesehatan Covid-19 Pasca Penyuluhan. J Masy Mandiri [Internet]. 2021;5(4):1329–45. Available from: https://doi.org/10.31764/jmm.v5i4.4829%0Ahttp://journal.ummat.ac.id/index.php/jmm

17. Chavarría E, Diba F, Marcus ME, Marthoenis, Reuter A, Rogge L, et al. Knowing Versus Doing: Protective Health Behaviour Against COVID-19 in Aceh, Indonesia. J Dev Stud. 2021;57(8):1245–66.

18. Sulistyawati S, Rokhmayanti R, Aji B, Wijayanti SPM, Hastuti SKW, Sukesi TW, et al. Knowledge, attitudes, practices and information needs during the covid-19 pandemic in indonesia. Risk Manag Healthc Policy. 2021;14:163–75.

19. Pohan I, Sriono, Kumalasari M I. The role of Bhabinkamtibmas in efforts to press the spread of the virus COVID-19. Budapest Int Res Critics Institute-Journal Humanit Soc Sci [Internet]. 2021;4(3):3945–53.

20. Gilmore B, Ndejjo R, Tchetchia A, De Claro V, Mago E, Diallo AA, et al. Community engagement for COVID-19 prevention and control: A rapid evidence synthesis. BMJ Glob Heal. 2020;5(10):1–11.

21. Li S, Xu Q. Family support as a protective factor for attitudes toward social distancing and in preserving positive mental health during the COVID-19 pandemic. J Health Psychol. 2022;27(4):858–67.

22. Sari YI. Sisi Terang Pandemi Covid-19. J Ilm Hub Int. 2020;0(0):89–94.

23. Wan KM, Ka-ki Ho L, Wong NWM, Chiu A. Fighting COVID-19 in Hong Kong: The effects of community and social mobilization. World Dev. 2020;134:105055.

24. Rosidin U, Rahayuwati L, Herawati E. Perilaku dan Peran Tokoh Masyarakat dalam Pencegahan dan Penanggulangan Pandemi Covid -19 di Desa Jayaraga, Kabupaten Garut. Umbara. 2020;5(1):42.

25. Costa MF. Health belief model for coronavirus infection risk determinants. Rev Saude Publica. 2020;54:1–11.

26. Miao Q, Schwarz S, Schwarz G. Responding to COVID-19: Community volunteerism and coproduction in China. World Dev. 2021;137:105128.

27. Wahyuning S, Supriyanto. Implementasi pembentukan Kampung Siaga Candi Hebat dalam menghadapi pandemi Covid 19 di RT 01 RW 04 Kelurahan Krapyak Kota Semarang. J Kreat Pengabdi Kpd Masy. 2022;5(April):1273–80.

28. Ariani EY, Budiyanti RT, Kusumastuti W. Implementasi Program Jogo Tongo Dalam Menanggulangi Covid-19 : Studi Kasus Di Kelurahan Siswodipuran Kabupaten Boyolali. J Kesehat Masy. 2021;9(6):793–801.

29. Bappenas. Studi Pembelajaran Penanganan COVID-19 Indonesia. Jakarta: Bappenas; 2021. 1–275 p.