

The COVID-19 pandemic and its impacts on sub-urban society in Yogyakarta, Indonesia: A qualitative study

Bayu Fandhi Achmad,* Shalmanuany Nisya Allquarismy, Siska Pratiwi, Yohannes Aruna Kertiyasa, Dewanggani Kirana, Dhyanti Mutiasari, Vineshankar Ravichandar, Yosafat Budiharjo Santoso Simanungkalit, Dionisia Setya, Farah Nabila Firry, Syaiful Ghozali, Wahida Yuyun Suciati

Department of Basic and Emergency Nursing, Faculty of Medicine, Public Health and Nursing; Universitas Gadjah Mada, Yogyakarta, Indonesia

SUBMITTED: 01 October 2020 **REVISED:** 03 November 2020 **ACCEPTED:** 04 November 2020

KEYWORDS

COVID-19
Lock-down
Pandemic
Sub-urban impacts
Travel restrictions

ABSTRACT Indonesia is the country which has the most COVID-19 cases in South East Asia. The COVID-19 pandemic is causing serious psychological, social, and economic impacts particularly on the sub-urban society. This study aimed to explore the impacts of the COVID-19 pandemic on sub-urban society in Yogyakarta, Indonesia. This study used a hermeneutics phenomenological approach. that enrolled seven participants who reside in the sub-urban area of Yogyakarta province in June 2020. Semi-structured interviews were conducted with participants through Whatsapp mobile application and analyzed using interpretive phenomenological methods. Results showed that the impact of the COVID-19 pandemic can be summarized into three themes. First, the impacts include negative emotions that arise due to psychosomatic symptoms, fear of losing loved ones, stereotypes and anxiety concerning contracting COVID-19 infection; Second, limited social interaction in the community and strict travel restrictions; and third, job and income losses including layoffs from work and fear of not being able to meet family basic needs. The COVID-19 pandemic is causing several serious impacts involving psychological, social, and economic concerns that are disrupting the sub-urban society. Individual coping and family support are needed in the current situation.

© The Journal 2021. This article is distributed under a [Creative Commons Attribution-ShareAlike 4.0 International license](https://creativecommons.org/licenses/by-sa/4.0/).

1. Introduction

The current Coronavirus Disease-2019 (COVID-19) was first reported in Wuhan, China, in December 2019 and shortly afterward, it was transmitted widely around the whole world. In 2020, the World Health Organization (WHO) declared the status of COVID-19 as an international pandemic.¹ The relative ease of the transmission of the virus combined with the absence of previous immunity and vaccination against COVID-19 have made this current viral outbreak as one of the most severe pandemics and fatal diseases in all of human history.²

Since it was first reported, almost 70 million COVID-19 cases have been confirmed and it has

caused over 1.5 million casualties around the world. Indonesia is the country which has the most cases in the South East Asia (ASEAN) region and is ranked 24th worldwide having almost 600 thousand positive cases and more than 18 thousand casualties.³ This very dire circumstance has driven a worldwide public health campaign in order to slow the transmission of the virus, which recommends several suggestions for public health safety: including to increase hand washing, to reduce face touching, to wear masks in public areas and to maintain physical distancing. It is also highly recommended to restrict or prohibit activities involved in the functioning of educational institutions, such as schools and universities, places for communal objectives, public transportation, in addition to other places where many people may gather, including sports and music events.⁴ Patients infected with COVID-19 often complain of respiratory and gastrointestinal disorders with

*Correspondence: bayu.fandhi.a@ugm.ac.id

Department of Basic and Emergency Nursing, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada, Yogyakarta, Indonesia, Jl. Farmako, Sekip Utara, Yogyakarta 55281, Indonesia.

symptoms ranging from a mild self-limiting disease to severe illness requiring intensive care, such as pneumonia, acute respiratory distress syndrome, septic shock, and even systemic multiple organ failure syndrome. The source of transmission of the virus comes from patients who have been previously infected. In addition, asymptomatic infected patients can increase the transmission, since they consider themselves as healthy individuals, and can have limitless contact with others.⁵

Moreover, the COVID-19 pandemic has caused several psychological, social, and economic impacts on the society. In an early study investigating the immediate psychological response during COVID-19 epidemic among the general population in China, 53.8% of participants rated the psychological impact of the outbreak as moderate or severe.⁶ The psychological impact can be influenced by age, gender, marital status, having children, and the composition of the household.⁷

In general, psychological disorder symptoms experienced by the society of Indonesia are anxiety, sadness, anger, fear, boredom, and despair.⁸

Social distancing applied by the government has its function to limit the viral transmission, even though this strictly enforced program has caused an even more stressful situation, especially for the societies which have high social interaction history and culture such as Indonesians. Generally, the social distancing can increase the negative psychological effects, including confusion, anger, and post-traumatic distress. Further duration of social distancing, infection fears, boredom, frustration, lack of information, and fear of financial loss have emerged and continues to increase the risk of negative psychological outcomes.⁹

Subsequently, other impacts which are experienced by the society are related to financial instability due to unemployment and closed opportunities, because the supply side has been damaged, while economic growth, and tourism levels with the badly needed ticket and commodity sales of the traveling sector have been reduced.¹⁰ In particular, within these populations, which are the most economically vulnerable groups, there is a high rate of stress which raises the need for

special attention among health professionals.¹¹ Therefore, our study aimed to understand impacts of the COVID-19 pandemic on sub-urban society in Yogyakarta, Indonesia through semi-structured interviews and to analyze the data using interpretative phenomenological methods. We hope our study can provide a better understanding of the society's psychological, social and financial needs for government officials, researchers and health professionals to better target their actions during this pandemic and expand the research in the area of appropriate interventions for Indonesian society.

2. Method

2.1 Research design

The research design used in this study was the hermeneutics phenomenological approach. Interpretative Phenomenology Analysis methods were used to qualitatively analyze the impacts of the COVID-19 pandemic on sub-urban society in Yogyakarta, Indonesia.

2.2 Study subjects

We determined the participants in this study by applying purposive sampling. Inclusion criteria in this study were: those respondents who were (1) residing in the sub-urban area of Yogyakarta province, (2) family members who are the main support or breadwinner, (3) married and have other family members in the house, and (4) over 18 years old. Exclusion criterion was the ones who were working as civil servants. We involved a total of seven participants who fit the criteria.

2.3 Interview outline

We determined the interview outline by consulting relevant literature and seeking experts' opinions. The main interview questions posed to the participants were the following: (1) How do you feel about COVID-19?; (2) What has changed in your social life?; and (3) What are the impacts of COVID-19 pandemic on your financial burden and your family?.

2.4 Data collection

The data collection was conducted through semi-structured interviews with the participants. First,

we communicated the purpose and significance of the study to the participants in advance and then scheduled for the interview time at their convenience. The study subjects were allowed to withdraw consent at any time. Moreover, the researchers guaranteed the participants that the data recorded were kept strictly confidential and considered private. The researchers remained neutral in collecting the data and established a good relationship with the participants. The researchers implemented several techniques, namely unconditional acceptance, active listening, and clarification to promote the authenticity of the data and to avoid bias.

The data collection was conducted in June 2020 through communicating with the participants via private message through WhatsApp. This method was applied with the consideration when the data collection was conducted, since Indonesia was implementing Large-Scale Social Restriction (lockdown), hence it was impossible to meet in person. Additionally, the implementation of the WhatsApp application was chosen since this application is considerably the most popular mobile application in the society in the research location. Furthermore, WhatsApp can maintain confidentiality so that participants are free to express their opinions. Besides these considerations, WhatsApp has encrypted data so that data security is more guaranteed.

2.5 Data analysis

Within 24 hours of each interview, the WhatsApp chat was copied and analyzed by Interpretative Phenomenology Analysis methods. The researchers (1) read the materials repeatedly and thoroughly, (2) implemented taking notes initially upon content of words, sentences, and languages which were used by the participant, (3) developed the emerging theme, (4) anticipated the relation between the emerging themes, (5) moved on to the next participant, and (6) found the pattern raised among the cases/participants.

In order to ensure the process was rigorous and trustworthy, this study proposed four criteria. These include credibility, transferability, dependability, and confirmability. Strategies to address credibility included prolonged engagement with the

participant and member check. As an application of transferability, the results of this study are general, and they can be used as a reference for other studies with the characteristics of the population living in suburban areas. To ensure dependability, the researchers wrote all of the research activities in a detailed audit trail. Confirmability was done by analyzing the findings and comparing them with other quantitative and qualitative research.

2.6 Ethical review

This study was reviewed and approved by the Medical and Health Research Ethics Committee of the Faculty of Medicine, Public Health and Nursing Universitas Gadjah Mada in Yogyakarta, Indonesia with the ethics code KE/FK/0432/EC/2020. The authors can assure that there is no academic misconduct such as plagiarism, data fabrication, falsification, nor repeated publication.

3. Result

In this study, the researchers enrolled 7 participants consisting of 5 males and 2 females between the ages of 36 and 55 with an average age of $44.29 + 6.73$ having the range of educational background of junior high school to associate's degree. All of the participants are married and have families. The participants have various occupations, from entrepreneurs, private employees, security staffs, to laborers who earn less than Rp 4,000,000.00 per month. Table 1 outlines the baseline characteristics of the participants.

We explored the psychological, social and financial experiences of participants by applying the hermeneutic phenomenological approach. The researchers found three main themes which are summarized below. Exemplar quotes for each theme are displayed in Table 2.

3.1 Theme 1: Negative Emotion

Most participants ($n = 5$) experienced anxiety and fear of the COVID-19 pandemic. This anxiety was based on the fact that participants have occupations requiring them to meet with many people thereby increasing the risk of exposure to the virus, in addition to the stereotype that neighbors who had tested positive for COVID-19 will be a threat

Table 1. Baseline characteristics of participants (n = 7)

Characteristics	N(%)
Gender	
Male	5 (71.42%)
Female	2 (28.58%)
Age	44.29 (6.73; 43 (36-55))
Education	
SMP (junior high school)	1 (14.29%)
SMA (senior high school)	5 (71.42%)
Diploma III (associate's degree)	1 (14.29%)
Occupation	
Entrepreneur	1 (14.29%)
Privat employee	2 (28.58%)
Security staff	1 (14.29%)
Labor	3 (42.84%)
Marriage and offspring	
Married with children	7 (100%)

Result is presented in mean (SD); median (range) for age

to the whole community. Moreover, the social and electronics media in Indonesia continuously reported the negative news about the expanding COVID-19 pandemic, thus it also caused further sources of fear in the society. Psychosomatic symptoms suffered by one of the participants were clinical manifestations of an acute anxiety disorder due to the COVID-19 pandemic.

3.2 Theme 2: Social Interactions

The participants (n=2) experienced limitations in establishing social interactions where socializing regularly in groups is a common pastime, which they usually do on a daily basis. The participants realized that to prevent transmission of the COVID-19 virus, they were expected to stay at home and avoid traveling and socializing without urgent matters.

3.3 Theme 3: Financial Burden

Several participants (n=3) dealt with the burden in their occupations and loss of income due to the COVID-19 pandemic. Their roles as heads of the family and the breadwinners provided a massive psychological impact. They complained that they were laid off from work, causing financial problems to the family. Furthermore, the Indonesian economic crisis due to the pandemic resulted in an increase in inflation and higher prices of many household items and consumable goods.

4. Discussion

The COVID-19 pandemic brings serious impacts on the society in Indonesia. Based on the results of the study, it was found that there were three main issues which were experienced by the participants in dealing with the pandemic, namely negative emotions, limited social interactions, and difficult financial burdens. Negative emotions in this study were divided into two issues, which were anxiety due to COVID-19 exposure and fear of contracting COVID-19. Negative emotions of the society were seen from the occurrence of anxiety disorders such as GERD. Based on a recent survey regarding emotional reactions during COVID-19 isolation in Indonesia, it was found that anxiety was the most commonly occurring impact which was experienced by the society in Indonesia.⁸ Research has shown that negative emotions will develop keener perceptions towards COVID-19 which eventually increase family protective behavior.²

Furthermore, in Indonesia, a kind of stereotype was also formed that a neighbor who was proven to be a COVID-19 positive was a source of threat on the society, hence this neighbor must be avoided, and eventually they would build up a significant fear to not go outside their house. Negative stereotypes have been proven to cause harmful impacts, such as avoiding behavior, hostility, social isolation, and the loss of humanity in the society.¹² An educational effort is needed from the healthcare centers which can reach out to families and the society to avoid social prejudice and discrimination.¹³ The implemented education may be in the form of public and private discussion regarding incidence, prevention, management, and vaccination as an effort to eliminate stigmatization in the community.¹²

Moreover, the stereotype of patients with COVID-19 is caused by excessive reporting by the mass media coverage in Indonesia. This will not only cause burnout but also lead to more anxiety. In developing countries, mass media and social media are the main sources of information, which greatly influence the perceptions and behavior patterns of public health.¹⁴ Furthermore, the characteristics of secondary education possessed by most rural societies have caused failure in comparing fake news

Table 2. Themes identified through interviews with participant (n=7)

No	Theme	Subtheme	Quotations*
1	Negative emotions	Anxiety caused by COVID-19 exposure	<ul style="list-style-type: none"> • "I experience a little feeling of psychosomatic reactions because of the large number of news regarding COVID; my GERD and anxiety disorder are often relapsed." (R1) • "As a durian fruit seller, every day I interact with many people. I'm actually also worried of getting exposed to this virus." (R2) • "Nowadays, social media and television continuously share news regarding COVID pandemic, so that it makes me and my family more worried." (R3)
		Fear of exposed to COVID-19 infection	<ul style="list-style-type: none"> • "Actually, I'm afraid if my wife gets exposed to COVID virus, because she suffers from diabetes mellitus which makes her very vulnerable." (R4) • "My neighbor who lives only 500 meters from my house is a COVID-19 positive, so it makes me and my family feel afraid to go outside of our house." (R5)
2	Social Interaction	Limitation in social interaction.	<ul style="list-style-type: none"> • "Now, we cannot be free anymore in social interaction. All social activities must be limited and be very careful" (R3) • "What we experience is the limitation to do activity outside and have to refrain from going outside if it's not important" (R1)
3	Financial Burden	Occupation and income loss	<ul style="list-style-type: none"> • "What I experience as the head of the family is from the financial side. I got laid off because of this COVID pandemic, so I cannot meet the needs of my family." (R5) • "During the COVID-19 pandemic, I have not been working for 3 months..." (R6) • "The one causing stress is economic situation. We used to have a job, now we have nothing to do, and everything becomes pricey, whereas we have to meet our needs..." (R7)

* Translated from Bahasa Indonesia

on social media with factual news, thus they assume that factual news is news that is exposed on social media.¹⁵

Several participants in this study have occupations which require them to interact with others. This situation creates a dilemma for them, since on the one hand, they are afraid of being exposed to the virus and spreading it to their family, yet on the other hand, they must also work to meet their family's needs. Recommendations for working online are not always successful in rural areas of Indonesia. Limited network access and lack of ability to operate online systems are obstacles among the middle class. Additionally, the occupational

resistance to work from home might be a result of traditionalism, lack of trust, type of occupation, and the level of common knowledge as well.¹⁶

The COVID-19 virus is transmitted through person-to-person interactions, thus social distancing is an effort to prevent the spread of COVID-19 domestically and globally.¹⁷ Social distancing has been proven to significantly decrease the numbers of daily confirmed-cases and daily casualties due to COVID-19 in 10 highly infected countries.¹⁸ It is also highly recommended to restrict or prohibit the activities involved in the functioning of educational institutions, such as schools and universities, places for communal objectives, public transportation, in

addition to other places where many people may gather, such as sports and music events. At the same time, restriction upon social interactions is not always an easy issue, especially in the societies which have a highly interactive social culture. This situation can trigger further stress which ultimately affects the people's immune response to viruses such as COVID-19. This issue requires more support from government officials, health agents, and researchers. Accordingly, they can take these facts into their consideration for public-policy making and better direct their actions during the pandemic, as well as encourage studies to better understand these characteristics.¹¹

The COVID-19 pandemic and the implementation of lockdowns in various countries have been proven to cause public economic shock waves. This makes many members of a society, especially the lower middle class, become a group that is vulnerable to bankruptcy. It is further explained that education, family income, government positions, and location of residence are factors which influence one's financial disturbances.¹⁹ Individual coping and family support are needed in the current situation where many people are still losing their jobs and income. The workers need economic innovations through more creative work methods; thus, their business enterprises can continue to run and earn appropriate income.²⁰

5. Conclusion

This study provides a comprehensive and in-depth understanding of the psychological, social, and financial impacts of the COVID-19 pandemic on suburban society in Indonesia through a hermeneutics phenomenological approach. The societies' perceived emotions were mostly anxiety and fear of being exposed to COVID-19 infection. The most substantive problem to deal with is the financial burden where the economic crisis is still causing a wave of lay-offs and loss of income. This problem causes extreme financial vulnerability for many members of the society. This study provides fundamental data for government officials, health professionals, and researchers to better target their actions during the COVID-19 pandemic and expand the focus of future

research in the area of appropriate interventions for Indonesian society.

Conflict of interests

There is no potential conflict of interest with respect to the research, authorship, and/or publication of this article.

Acknowledgements

The authors express their gratitude to the Community and Family Health Care with Interprofessional Education (CFHC-IPE) Faculty of Medicine, Public Health and Nursing Universitas Gadjah Mada, who gave the authors a chance to conduct the study, and to the head of Tlogoadi village, Sleman regency who gave permission and access to data collection concerning suburban society.

References

1. Kye B, Hwang S. Social trust in the midst of pandemic crisis: implications from COVID-19 of South Korea. *Res Soc Stratif Mobil* [Internet]. 2020;68(June):100523.
2. Jose R, Narendran M, Bindu A, Beevi N, Manju L, Benny PV. Public perception and preparedness for the pandemic COVID 19: a Health Belief Model approach. *Clin Epidemiol Glob Heal* [Internet]. 2020;(June):1–6. Available from: <https://doi.org/10.1016/j.cegh.2020.06.009>
3. World Health Organization. Coronavirus (COVID-19) Situation Report. Available from: <https://reliefweb.int/sites/reliefweb.int/files/resources/20200801-covid-19-sitrep-194.pdf>
4. Garcia LP, Duarte E. Nonpharmaceutical interventions for tackling the COVID-19 epidemic in Brazil. *Epidemiologia e servicos de saude: revista do Sistema Unico de Saude do Brasil*. 2020; 29 (2), e2020222.
5. Sun T, Wei L, Shi S, Jiao D, Song R, Ma L, et al. A qualitative study on the psychological experience of caregivers of COVID-19 patients. *AJIC - Am J Infect Control* [Internet]. 2020;48(6):592–8. Available from: <https://doi.org/10.1016/j.ajic.2020.03.018>
6. Wang C, Pan R, Wan X, Tan Y, Xu L, Ho CS, et al. Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic

- among the general population in China. *Int. J. Environ. Res. Public Health*. 2020; 17 (5), 1729.
7. Elbay RY, Kurtulmus A, Arpacioğlu S, Karadere E. Depression, anxiety, stress levels of physicians and associated factors in COVID-19 pandemics. *Psychiatry Res*. 2020;290(May):1–5.
 8. Ramadhana MR. A dataset for emotional reactions and family resilience during COVID-19 isolation period among Indonesian families. *Data Br [Internet]*. 2020;31:105946. Available from: <https://doi.org/10.1016/j.dib.2020.105946>
 9. Loades ME, Chatburn E, Higson-sweeney N, Reynolds S, Shafran R, Brigden A, et al. Rapid systematic review: the impact of social isolation and loneliness on the mental health of children and adolescents in the context of COVID-19. *J Am Acad Child Adolesc Psychiatry*; 2020.
 10. Shehzad K, Xiaoxing L, Kazouz H. COVID-19's disasters are perilous than global financial crisis: a rumor or fact? *Financ Res Lett*. 2020;(April):101669.
 11. Mattos R. Social stress, low socioeconomic status and its relationship to immune response in COVID-19 pandemic context. *Brain, Behav Immun - Heal*. 2020;7(June):100103.
 12. Chopra KK, Arora VK. ScienceDirect Covid-19 and social stigma: role of the scientific community. *Indian J Tuberc*. 2020;(xxxx):7–8.
 13. Tanoue Y, Nomura S, Yoneoka D, Kawashima T. Mental health of family, friends, and co-workers of COVID-19 patients in Japan. *Psychiatry Res*. 2020;291(May):113067.
 14. Olapegba PO, Iorfa SK, Kolawole SO, Oguntayo R, Gandi JC, Ottu IFA, et al. Survey data of COVID-19-related knowledge, risk perceptions and precautionary behavior among Nigerians. *Data Br [Internet]*. 2020;30:105685. Available from: <https://doi.org/10.1016/j.dib.2020.105685>
 15. Oberiri DA, Omar B. Fake news and COVID-19: modelling the predictors of fake news sharing among social media users. *Telematics and Informatics*. [Internet] 2020, Available from: <https://doi.org/10.1016/j.tele.2020.101475>
 16. Kramer A, Kramer KZ. The potential impact of the COVID-19 pandemic on occupational status, work from home, and occupational mobility. *J. Vocat. Behav*. 2020;119(May):103442.
 17. Hoon T, Wang K. Socially optimal lockdown and travel restrictions for fighting communicable virus including COVID-19. *Transp Policy*. 2020;96(July):94–100.
 18. Phuoc T, Thu B, Nguyen P, Ngoc H, Minh N, Anh L. Science of the total environment effect of the social distancing measures on the spread of COVID-19 in 10 highly infected countries. *Sci Total Environ*. 2020;742:140430.
 19. Qian Y, Fan W. Research in social stratification and mobility: who loses income during the COVID-19 outbreak? Evidence from China. *Res Soc Stratif Mobil*. 2020;68(June):100522.
 20. Venkatesh V. Impacts of COVID-19: a research agenda to support people in their fight. *Int J Inf Manage*. 2020;(xxxx):102197.