

Mental well-being among COVID-19 patients in isolation house

Rini Mustikasari Kurnia Pratama¹, Diane Marlin², Silvia Mariana¹

¹Midwifery Study Program, Keluarga Bunda Jambi Health and Sciences Institution, Jambi, Indonesia

²Midwifery Study Program, Faculty of Health Sciences, Adiwangsa Jambi University, Jambi, Indonesia

Article Info

Article history:

Received Nov 20, 2021

Revised Oct 28, 2022

Accepted Nov 16, 2022

Keywords:

COVID-19 patient

Emotional mental

Isolation

Subjective well-being

ABSTRACT

Psychosocial effects of COVID-19 patients have a long-term impact. Isolation is carried out to prevent transmission of the virus for several months causing anxiety, saturation, and even patients experiencing insomnia. Well-being is very subjective, differing from one individual to another, and where well-being can be used as an indicator of a person's happiness or not. The sample this study was amounted to 50 people who were COVID-19 patients. They were undergoing self-isolation in the isolation house of Jambi Province, Indonesia. The study was conducted using self report questionarre 29 (SRQ 29) and subjective well-being scale. In this study, most of the respondents experienced mental emotionaldisorders, negative emotions, and felt satisfied in living their lives. They experienced insomnia or sleep disorders.

This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



Corresponding Author:

Rini Mustikasari Kurnia Pratama

Midwifery Study Program, Keluarga Bunda Jambi Institute of Health Sciences

Paal Merah District, Jambi, Indonesia

Email: rini.mazin@gmail.com

1. INTRODUCTION

The discovery of the COVID-19 virus in 2019, the global community around the world must be faced with various policies in dealing with the COVID-19 pandemic and even related to making political decisions which include travel restrictions, control measures, and mitigation strategies [1]. The COVID-19 pandemic is a disaster. Non-natural environment that has an impact on the wider community. This condition has a physical and psychological impact on every individual, especially people who have to undergo isolation or quarantine due to COVID-19. One of the impacts of the psychological impact is mental emotional disorders and the well-being of COVID-19 patients [2]. Well-being is very subjective, differing from one individual to another, where well-being can be used as an indicator of a person's happiness or not. Someone who has a high subjective well-being when experiencing happiness and life satisfaction and rarely experiences unpleasant emotions such as anger and sadness. Subjective well-being is defined more broadly as a person's affective side according to moods, emotions, and cognitive evaluations around an individual's life [3]–[5].

The problem of emotional disturbance experienced by patients does not only come from individuals but from the surrounding environment where the condition can get worse if it is not handled properly and immediately [6]. People must stay in isolation/quarantine houses because they have the potential to spread COVID-19 to their families and people. around. This can cause emotional mental disorders such as the

response of the surrounding community, isolation, and separation from family members at home. Signs of symptoms that will appear when individuals have mental emotional disorders are headaches, loss of appetite, sleeplessness, and feeling anxious and worried [5]. Excessive anxiety during quarantine can increase the risk of anxiety, depression, and symptoms of post-traumatic stress [7]. Handling of COVID-19 patients still tends to be physically handled and less attention is paid to mental-emotional and subjective well-being in COVID-19 patients. Based on this background, researchers are interested in studying mental emotional disorders and subjective well-being in COVID-19 patients who live in isolation homes. The purpose of this study was to obtain an overview of mental emotional disorders and subjective well-being in COVID-19 patients in isolation homes. Psychosocial effects tend to last longer than the COVID-19 pandemic itself [8]. Isolation is carried out to prevent transmission of the virus for several months causing anxiety, saturation and even patients experiencing insomnia. Some cases progress to respiratory failure which progresses to death. These bad conditions are often found in elderly patients and have previous comorbidities such as diabetes mellitus, hypertension, and heart disease [9]–[11]. COVID-19 patients who are in isolation will feel neglected which affects mental and emotional so as to get a high level of subjective well-being through the process and stages of evaluating their life or emotional experiences [8], [12].

2. RESEARCH METHOD

This was a descriptive study with a cross sectional approach. The research site was at the Jambi Province Health Training Center in Pijoan, Muaro Jambi Regency. The research was conducted in July-August 2021. The sampling technique used total sampling for the variables of mental emotional disorders and subjective well-being. The inclusion criteria in this study sample were COVID-19 patients (who had been confirmed positive), lived in the isolation house of the Jambi Province, were not suffering from high-risk diseases, could read and write, and had a mobile phone that could access the internet and were willing to be respondents. Sample exclusion criteria if the respondent is being treated intensively, cannot communicate well, general conditions do not allow as a research sample, and emergency responders. The description of emotional mental disorders in COVID-19 patients uses the self report questionnaire 29 (SRQ 29) adopted from WHO [13], while the description of subjective well-being uses the subjective well-being scale the satisfaction with life scale (SWLS) adopted from Diener et al. [1] and scale positive and negative experience (SPAN) adopted from Diener and Biswas-Diener [14]. The questionnaire was distributed using Google form. Hence, data were analyzed using descriptive statistics. The research results are presented in the form of tables and narratives.

3. RESULTS AND DISCUSSION

This research had gone through an ethical review procedure at the University of Jambi and was declared feasible to be carried out with a certificate of passing the ethics review number: 793/UN21.8/PT.01.04/2021. This research was conducted from June to September 2021 with the research location in the isolation house of Jambi Province. The sample used in this study amounted to 50 people who were COVID-19 patients who were undergoing self-isolation in the isolation house of Jambi Province, Indonesia. The study was conducted using an instrument to see the description of emotional mental disorders and subjective well-being in 50 COVID-19 patients in isolation homes. The results of research on the characteristics of respondents are presented at Table 1. Based on the Table 1, it is found that the age characteristics of some respondents are 26-45 years old (46%). Hence, the most recent educational characteristics are Diploma IV or Bachelor's education by 16 respondents (32%). Furthermore, gender characteristics are mostly male by 27 respondents (54%), the characteristics of the length of quarantine for most of the 1-7 days were 31 respondents (62%), the characteristics of the history of disease were most of the respondents with asthma, and namely 22 respondents (44%)

3.1. Emotional mentality of COVID-19 patient

The emotional mentality of COVID-19 patients is one of the effects. It is necessary to carry out mental emotional measurements to assess the mental health of COVID-19 patients. In the variable of emotional mental disorders experienced by COVID-19 patients using the self reporting questionnaire-29 (SRQ-29) instrument about frequency distribution of mental emotional disorder symptoms to 50 respondents as shown in Table 2.

Table 1. Characteristics of respondents (n=50)

Characteristics		f	%
Age			
Teenager	12-25 years	18	36
Mature	26-45 years old	23	46
Elderly	46-65 years old	9	18
Last education			
	Primary school	2	4
	Junior high school	1	2
	Senior high school	14	28
	Senior high school	6	12
	Diploma 4/bachelor	16	32
	Master	0	0
	Other	11	22
Gender			
	Man	27	54
	Woman	23	46
Day quarantine			
	1-7	31	62
	7-14	19	38
Illness history			
	There is not any	20	40
	Asthma	22	44
	Hypertension	4	8
	Hypertension and asthma	1	2
	Diabetes	1	2
	Stomach acid	1	2
	Malaria	1	2

Table 2. Frequency distribution of mental emotional disorder symptoms with SRQ 29 (n=50)

Number SRQ	Questions	f	%
1	Often have headaches	35	70
2	Feel loss of appetite	33	66
3	Not sleeping well	35	70
4	Get scared easily	29	58
5	Feeling easily anxious, worried and tense	34	68
6	Feel hands shaking	20	40
7	Having indigestion	20	40
8	Hard to think clearly	23	46
9	Feeling unhappy	23	46
10	Cry more	15	30
11	Difficult to carry out daily activities	31	62
12	Having difficulty making decisions	24	48
13	Your daily tasks are neglected	34	68
14	Feel no role in this life	20	40
15	Lose interest in many things	21	42
16	Feel worthless	13	26
17	Have the intention or thought to end one's life	13	26
18	Feeling tired all the time	28	56
19	Feeling bad in the stomach	27	57
20	Tired easily	39	78
21	Drinking more alcohol than usual or using drugs	5	10
22	feel sure that someone is trying to harm you in some way	10	20
23	Feel something is bothering your mind	18	36
24	Never heard a sound without knowing the sources or other people can't hear the sound	15	30
25	Having a disturbing dream about a disaster or calamity, or have you experienced such a disaster	17	34
26	Feel very disturbed if you are in a state that reminds you of a disaster or if you think about the disaster	22	44
27	Feel that your interest is reduced in friends and usual activities	28	56
28	Feel very disturbed when you are in a situation that reminds you of a disaster or you think about that disaster	24	48
29	Find it difficult to understand or express feelings	26	52

Table 2 shows that the most complaints are complaints of feeling tired easily as many as 39 respondents (78%), followed by complaints of frequent headaches as many as 35 respondents (70%) and not sleeping well by 35 respondents (70%). In this study, mental emotional disorders were enforced based on the data obtained where if the respondent had 6 complaints or more from questions number 1 to 20, or experienced one complaint from questions number 21 to 29 [1], [4]. The results of the study showed that 44

respondents (88%) had mental emotional disorders, consisting of 24 male respondents (55%), and 20 female respondents (45%).

3.2. Subjective well-being of COVID-19 Patient

Subjective well-being is measured to see the satisfaction of COVID-19 patients living their lives. The subjective well-being variable uses the satisfaction with life scale (SWLS) and the scale of positive and negative experience (SPANE). The instrument used is a questionnaire where the SWLS measuring instrument has 5 question items while the SPANE measuring instrument has 12 question items that must be filled out by 50 respondents.

3.2.1. Satisfaction with life scale (SWLS)

The scoring technique for the Subjective well-being variable on the SWLS instrument uses a likert scale with seven answer options use SWLS instrument scoring techniques as shown in the Table 3. The total score of the three answer options from each respondent is then interpreted by the score to determine the scale of life satisfaction with category simplification. In one respondent the minimum total score that can be generated is 5 which means the respondent is very dissatisfied with his life, while the maximum score that can be generated is 35 which means the respondent is very satisfied with his life. The interpretation of the total SWLS score can be seen in Table 4. From the results of the subjective well-being study based on the SWLS scale or life satisfaction from the cognitive component with reliability=0.73 [15]. Most of the COVID-19 patients in the isolation house were in the "Satisfied" category as many as 18 respondents (36%) so it can be concluded that the COVID-19 patients in the isolation house as respondents in this study mostly had the category of being satisfied in living their lives seen from the cognitive component, use interpretation of total SWLS score as in Table 5.

Table 3. SWLS instrument scoring techniques Table 4. Interpretation of total SWLS score [1]

Answer category	Score
Agree	3
Neutral	2
Do not agree	1

Answer category	Total score
Satisfied	21-35
Neutral	20
Not satisfied	5-19

Table 5. Interpretation of total SWLS score

Category	f	%
Satisfied	3	70
Neutral	2	4
Not satisfied	1	26
Total	5	100

3.2.2. Scale of positive and negative experience (SPANE)

For the subjective well-being variable on the SPANE instrument or life satisfaction from the affective component, the scoring technique of the SPANE uses scores at the Table 6. The scoring method for the SPANE instrument is divided into Positive SPANE, namely items numbered 1, 3, 5, 7, 10, and 12 are added up and in negative SPANE, namely items numbered 2, 4, 6, 8, 9, and 11 must also be added. The total score of the SPANE variable is obtained from the subtraction of the total score of the positive SPANE item minus the total score of the negative SPANE item. In one respondent the minimum total score that can be generated is 24 which means the respondent is the least happy, while the maximum score that can be generated is 24 which means the respondent is the happiest. Subjective well-being is based on the categorization of the SPANE or the scale of positive and negative experiences using the mean, namely; low, if $X < \text{mean}$ and high, if $X \text{ mean}$, at Table 7.

Table 6. Scoring technique of the SPANE

Answer category	Score	
	Positive SPANE	Negative SPANE
Very rarely or never	1	5
Seldom	2	4
Sometimes	3	3
Often	4	2
Very often or always	5	1

Table 7. Categorization of SPANE instruments

Categorization	Score	Frequency	Percentage (%)
Low	$X < 2.14$	28	56
High	$X \geq 2.14$	22	44

Based on this study, it was found that the positive and negative emotional experiences of COVID-19 patients in isolation homes were mostly in the low category as many as 28 respondents (56%). This shows that as many as 28 respondents are at scores below the mean, which means that respondents experience more negative emotions, while 22 other respondents are at scores above the mean, and which means that respondents experience positive emotions. Based on the data studied, the results descriptive data subjective well-being can be seen in the Table 8.

Table 8. Descriptive data subjective well-being

No	Measurement	Score	
		SWLS	SPANE
1	Mean	3.28	2.14
2	Median	3.00	1.00
3	Mode	2	1
4	Standard deviation	1.578	6.174
5	Variance	2.491	38.123
6	Range	6	25
7	Minimum value	1	-12
8	Maximum value	7	13
9	Sum	164	107

Based on Table 8, it can be seen that the subjective well-being variable which consists of two components consisting of a cognitive component/SWLS or life satisfaction has a mean or mean of 3.28 from a sum value of 164. For the median value or the median value is 3, the mode is 2, the standard deviation is 1.578, while the variance value is 2.491, the range value is 6, the minimum value is 11 and the maximum value is 7. While the data for the subjective well-being variable which consists of affective/The SPANE or the scale of positive and negative experiences or the process of providing reflection on basic experiences in events that occur in their lives has a mean or average value of 2.14 from a sum value of 107. The median or mean value is 1.00, the mode is 1, the standard deviation is 6.174, while the variance is 38.123, the range value is 25, the minimum value is -12 and the maximum value is 13.

The results of filling out the questionnaire from 50 respondents illustrate that feeling tired is one of the conditions or conditions that are often experienced while suffering from COVID-19 and in isolation homes. Fatigue is generally harmless and patients can cope with it by consuming an adequate and balanced diet, avoiding excessive stress and having enough time to rest (6-8 hours per day). Fatigue can be exacerbated if the patient has anemia, hypotension, dyspepsia, anxiety disorders, psychotic disorders, migraines, and other medical disorders. Feeling tired is one of the common symptoms in patients infected with COVID-19 [3], [5], [6].

Other symptoms that can appear besides fatigue are pain or headache in patients infected with COVID-19 and are usually accompanied by fever, dry cough, shortness of breath, sore throat, and muscle aches [11]. The COVID-19 virus infects the body causing several neurological symptoms such as central and peripheral nervous system disorders. Symptoms caused by disorders of the central nervous system is what causes headaches. Proinflammatory cytokines and chemokines are proteins secreted by the body that are one of the markers of triggering headaches in COVID-19 patients. Other mechanisms are pyrogenic substances in fever and the activation of several inflammatory mediators such as cytokines. Headache with cytokine storm syndrome is a mechanism of tissue damage [16], [17].

Headache is also associated with infection through nerve cells and delivered to the brain and pathological disorders outside the nervous system that cause blood vessel disorders in the brain [18]. Headaches caused by cytokine storms in COVID-19 patients begin to be felt on the 7th to 10th day. In general, headaches are accompanied by photophobia, nausea, stiffness in the neck, and can get worse with changes in position [16], [19], [20]. Headaches that are increasingly felt by COVID-19 patients are getting worse and are accompanied by tenderness in the muscles around the neck. This can occur due to anxiety or anxiety felt by the patient and sleep disturbances or insomnia. In addition, headaches can also be triggered by shortness of breath experienced and electrolyte imbalance [19], [20]. Headaches are felt by around 21.62% of COVID-19 patients accompanied by gastrointestinal disorders [18].

Headache manifestations can be used as an indicator of someone being infected with COVID-19 even though headache is not the main symptom of COVID-19. Headaches can develop to be more severe and more painful; this can be seen in terms of the intensity, duration, and scale of pain felt by COVID-19 patients. Headache management can be an option to reduce the incidence of other comorbidities related to the central nervous system caused by COVID-19 infection [10], [11], [16].

The COVID-19 pandemic has an impact on mental health, one of which is insomnia or sleep disorders [8]. Sleep disturbances can be caused by the anxious condition of COVID-19 patients who are undergoing self-isolation in isolation homes. The patient is worried about his health condition and the time that must be passed in the isolation house until the patient is declared negative and can return home [21]. Psychological stress in patients isolated due to COVID-19 found that the level of depression, anxiety and symptoms of post traumatic syndrome disorder (PTSD) was higher than non-COVID-19 patients. Fear, helplessness, as well as stigma and uncertainty about the development of the disease are the main concerns of COVID-19 patients [7], [21].

Anxiety is the most common response during the COVID-19 pandemic, so it becomes a severe stressor and causes fear or discomfort. This situation will affect the sleep quality of COVID-19 patients. Social and emotional support is needed such as a sense of empathy when facing a problem so that patients feel cared for and feel more comfortable and better able to deal with problems better [22]. Multivariate logistic regression showed that age <35 years and time spent focusing on illness due to COVID-19 for three hours per day were associated with the presence of generalized anxiety disorder (GAD) and poor sleep quality [9], [18], [23].

Subjective well-being is also discussed in this study. Subjective well-being influenced by factors including gender, age, education, marriage, religion, job satisfaction, free time, health competence, social support, gratitude, forgiveness, self-esteem, and spirituality [24], [25]. Satisfaction with life which is also part of subjective well-being is influenced by the moderate levels of mattering (the sense that we matter to others) which is controlled by psychological well-being (PWB) that perceived social support (PSS) is a predictor factor [26]. Individuals who have a high level of subjective well-being have the ability to control emotions and solve problems well. Often feels happy and rarely feels unpleasant emotions such as anger and sadness. Conversely, if individuals have low levels of subjective well-being, they tend to feel that their lives are less or unhappy, and think negative things that can lead to anger, fear, anxiety, and depression because they feel dissatisfied with their lives [7], [27], [28].

Based on research, isolation house has a negative impact on person's mental or psychological health such as depression, anger, lack of or loss of appetite. In addition, economic factors also influence by imagining the future when patients will stay longer in isolation house [29]. There is a need to develop targeted programs for better mental health resilience while in isolation house. Emotional well-being can be suppressed through training and human resource development strategies to prepare and empower individual mentality in maintaining emotional mental health and subjective well-being [30], [31].

4. CONCLUSION

The COVID-19 pandemic has an impact on mental health, one of which is insomnia or sleep disorders. Sleep disturbances can be caused by the anxious condition of COVID-19 patients who are undergoing self-isolation in isolation homes. Anxiety becomes a severe stressor and causes fear or feelings of discomfort. Most have the category of being satisfied in living life seen from the cognitive component. On the other hand, respondents with low subjective well-being levels will think negative things that can lead to anger, fear, anxiety, and depression because they are not satisfied with their lives. Social and emotional support is needed such as empathy when experiencing positive COVID-19 so that patients feel cared for and feel more comfortable and better able to face their lives better.

ACKNOWLEDGEMENTS





Thank to the Ministry of Research and Technology/National Research and Innovation Agency (Kemenristek/BRIN) as a source of funding for research implementation, the Jambi Provincial Health Office for providing recommendations for research locations, and the Health Research Ethics Commission of the Faculty of Medicine and Health Sciences, Jambi University.

REFERENCES





- [1] E. Diener, R. A. Emmons, R. J. Larsen, and S. Griffin, "The satisfaction with life scale," *Journal of Personal Assessment*, vol. 49, no. 1, pp. 70–75, 1985, doi: 10.1207/s15327752jpa4901.
- [2] K. Usher, D. Jackson, J. Durkin, N. Gyamfi, and N. Bhullar, "Pandemic-related behaviours and psychological outcomes; A rapid

- literature review to explain COVID-19 behaviours,” *International Journal of Mental Health Nursing*, vol. 29, no. 6, pp. 1018–1034, Dec. 2020, doi: 10.1111/inm.12790.
- [3] M. Iqbal and L. Rizqulloh, “Early detection of mental health due to the COVID-19 pandemic in the Unnes sex care community through the self-repo (In Indonesia: *Deteksi dini kesehatan mental akibat pandemi COVID-19 pada unnes sex care community melalui metode self reporting questionnaire*),” *Praxis*, vol. 3, no. 1, p. 20, Sep. 2020, doi: 10.24167/praxis.v3i1.2730.
 - [4] E. Diener and L. Tay, “Subjective well-being and human welfare around the world as reflected in the gallup world poll,” *International Journal of Psychology*, vol. 50, no. 2, pp. 135–149, Mar. 2015, doi: 10.1002/ijop.12136.
 - [5] Ministry of Home Affairs Working Team, “General guidelines for facing the COVID-19 pandemic for local government (In Indonesia: *Pedoman Umum Menghadapi Pandemi COVID-19 Bagi Pemerintah Daerah*)”, 2020. doi: 10.1017/CBO9781107415324.004.
 - [6] Ministry of Health, “Directorate general of disease prevention and control of the Indonesian Ministry of Health in 2020 (In Indonesia: *Direktorat Jenderal pencegahan dan pengendalian penyakit kementerian kesehatan RI Tahun 2020*),” *Germas*, pp. 1–64, 2020.
 - [7] Q. Guo *et al.*, “Immediate psychological distress in quarantined patients with COVID-19 and its association with peripheral inflammation: A mixed-method study,” *Brain, Behavior, and Immunity*, vol. 88, pp. 17–27, Aug. 2020, doi: 10.1016/j.bbi.2020.05.038.
 - [8] J. Torales, M. O’Higgins, J. M. Castaldelli-Maia, and A. Ventriglio, “The outbreak of COVID-19 coronavirus and its impact on global mental health,” *International Journal of Social Psychiatry*, vol. 66, no. 4, pp. 317–320, Jun. 2020, doi: 10.1177/0020764020915212.
 - [9] Y. Huang and N. Zhao, “Generalized anxiety disorder, depressive symptoms and sleep quality during COVID-19 outbreak in China: a web-based cross-sectional survey,” *Psychiatry Research*, vol. 288, p. 112954, Jun. 2020, doi: 10.1016/j.psychres.2020.112954.
 - [10] G. Lippi, C. Mattiuzzi, C. Bovo, and B. M. Henry, “Headache is an important symptom in patients with coronavirus disease 2019 (COVID-19),” *Diagnosis*, vol. 7, no. 4, pp. 409–411, Nov. 2020, doi: 10.1515/dx-2020-0048.
 - [11] L. Mao *et al.*, “Neurologic manifestations of Hospitalized patients with Coronavirus disease 2019 in Wuhan, China,” *JAMA Neurology*, vol. 77, no. 6, pp. 683–690, Jun. 2020, doi: 10.1001/jamaneurol.2020.1127.
 - [12] S. Sherchan, R. Samuel, K. Marahatta, N. Anwar, M. H. Van Ommeren, and R. Ofrin, “Post-disaster mental health and psychosocial support: Experience from the 2015 Nepal earthquake,” *WHO South-East Asia journal of public health*, vol. 6, no. 1, pp. 22–29, 2017, doi: 10.4103/2224-3151.206160.
 - [13] World Health Organization, “A user’s guide to the self reporting questionnaire (SRQ).” 1994. [Online]. Available: <https://apps.who.int/iris/handle/10665/61113>.
 - [14] E. Diener and R. Biswas-Diener, “Scale positive and negative experience (SPANES),” 2009. [Online]. Available: <https://novopsych.com.au/assessments/well-being/scale-of-positive-and-negative-experience-spanes/>.
 - [15] Y. Natanael and Y. Novanto, “Testing of congeneric, tau-equivalent and parallel measurement models on the satisfaction with life scale (SWLS) (In Indonesia: *Pengujian model pengukuran congeneric, tau-equivalent dan parallel pada satisfaction with life scale (SWLS)*),” *Jurnal Ilmiah Psikologi*, vol. 7, no. 2, pp. 285–298, Jan. 2021, doi: 10.15575/psy.v7i2.6405.
 - [16] A. H. Halim and I. A. S. Wijayanti, “Manifestations of headache in coronavirus disease 2019 Patients (In Indonesia: *Manifestasi Nyeri Kepala Pada Pasien Coronavirus Disease 2019*),” *Callosum Neurology Journal*, vol. 4, no. 1, pp. 27–33, 2021.
 - [17] S. M. Bobker and M. S. Robbins, “COVID-19 and headache: a primer for trainees,” *Headache*, vol. 60, no. 8, pp. 1806–1811, Sep. 2020, doi: 10.1111/head.13884.
 - [18] X. Jin *et al.*, “Epidemiological, clinical and virological characteristics of 74 cases of coronavirus-infected disease 2019 (COVID-19) with gastrointestinal symptoms,” *Gut*, vol. 69, no. 6, pp. 1002–1009, Jun. 2020, doi: 10.1136/gutjnl-2020-320926.
 - [19] R. Belvis, “Headache During COVID-19: My clinical case and review of the literature,” *Headache*, pp. 1–5, 2020, doi: 10.1111/head.13841.
 - [20] H. Bolay, A. Gül, and B. Baykan, “COVID-19 is a real headache!,” *Headache*, vol. 60, no. 7, pp. 1415–1421, Jul. 2020, doi: 10.1111/head.13856.
 - [21] S. Nurjanah, “Emotional mental disorders in client-COVID-19 pandemic in quarantine homes (In Indonesia: *Gangguan mental emosional pada klien-pandemi COVID-19 di rumah karantina*),” *Journal Ilmu Keperawatan Jiwa*, vol. 3, no. 3, pp. 329–334, 2020.
 - [22] D. Sunjaya, B. Sumintono, E. Gunawan, and D. Herawati, “Online mental health survey for addressing psychosocial conditions during the COVID-19 pandemic in Indonesia: instrument evaluation,” *Research Square*, pp. 1–18, 2020.
 - [23] A. K. Amirullah and Kartinah, “Anxiety management of COVID-19 survivor patients intensive care unit: literature review (In: Indonesia: *Penanganan kecemasan pasien survivor COVID-19 intensive care unit: literature review*),” in *Seminar Nasional Keperawatan Universitas Muhammadiyah Surakarta (SEMNASKEP)*, 2020, p. 2020.
 - [24] L. Dewi and N. Nasywa, “Factors affecting subjective well-being (In Indonesia: *Faktor-faktor yang mempengaruhi subjective well-being*),” *Jurnal Psikologi Terapan dan Pendidikan*, vol. 1, no. 1, p. 54, May 2019, doi: 10.26555/jptp.v1i1.15129.
 - [25] Y. Hairina, Imadduddin, and S. Saniah, “The meaning of happiness in COVID-19 patients living In quarantine Centers (In Indonesia: *Makna kebahagiaan pada pasien COVID-19 yang tinggal di pusat karantina*),” *Prosiding Seminar Nasional dan Call Paper, “Psikologi Positif menuju Mental Wellness*,” pp. 288–299, 2020.
 - [26] J. K. Tan, K. D. Prihadi, and P. Satrio, “Perceived social support and psychological wellbeing among socially distanced urbanites during the COVID-19 pandemic: the role of mattering and satisfaction with life,” *International Journal of Public Health Science (IJPHS)*, vol. 11, no. 2, pp. 640–645, 2022, doi: 10.11591/ijphs.v11i2.21417.
 - [27] C. Wang *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,” *International Journal of Environmental Research and Public Health*, vol. 17, pp. 1–25, 2020, doi: 10.1093/QJMED/HCAA110.
 - [28] C. Wang *et al.*, “The impact of 2019 coronavirus disease (COVID-19) pandemic on physical and mental health: a comparison between China and Spain,” *JMIR formative research*, 2021, doi: 10.2196/27818.
 - [29] S. M. M. Kamal *et al.*, “Impact of home quarantine due to COVID-19 among Bangladeshi population,” *International Journal of Public Health Science (IJPHS)*, vol. 10, no. 1, p. 1–7, Mar. 2021, doi: 10.11591/ijphs.v10i1.20628.
 - [30] T. Respati, S. N. Irasanti, D. Sartika, I. B. Akbar, and R. R. Marzo, “A nationwide survey of psychological distress among Indonesian residents during the COVID-19 pandemic,” *International Journal of Public Health Science (IJPHS)*, vol. 10, no. 1, pp. 119–126, Mar. 2021, doi: 10.11591/ijphs.v10i1.20609.
 - [31] Z. K. M. Makhbul and Z. A. Rawshdeh, “Mental stress post-COVID-19,” *International Journal of Public Health Science (IJPHS)*, vol. 10, no. 1, pp. 194–201, Mar. 2021, doi: 10.11591/ijphs.v10i1.20497.





BIOGRAPHIES OF AUTHORS

Rini Mustikasari Kurnia Pratama     Is a lecturer in the midwifery, who serves as vice chairman of academics at the Keluarga Bunda Jambi Health and Sciences Institution. She is interested in research and is still learning to fulfill his dream as a researcher. She has received research grants three times in a row starting from 2020 to 2022. Of the two researches in the novice lecturer research scheme funded by The Ministry of Research and Higher Education Technology (Kemristek/BRIN), and one research with collaborative research scheme between universities, in collaboration with Sebelas Maret University, which is funded by The Ministry of Education and Culture, Indonesia (Kemdikbud). She is currently preparing a research proposal for a future research grant. In this study, he was the lead researcher. She can be contacted at email: rini.mazin@gmail.com.



Diane Marlin     is a lecturer of Midwifery and cognate health. She is head of the Midwifery Program at Adiwangsa Jambi University. The publication of scientific papers on two continuous topics,. She is discussing complications of pregnancy; hyperemesis gravidarum, and the development of infants and toddlers. She has received research grants twice in 2018 and 2020 in a novice lecturer research scheme funded by the Ministry of Research and Technology of Higher Education (Kemristek/BRIN). She is developing research on developmental and psychomotor anthropometry of toddlers in rural areas of Jambi. She can be contacted at email: dy.dian90@gmail.com.



Silvia Mariana     is a she is a lecturer in the field of public health sciences. Served as the Head of the Keluarga Bunda Jambi Health and Sciences Institution. She is interested in going directly to the community to see the epidemiology of developing cases. In this study, he became a research member. She can be contacted at email: silviamariana130383@gmail.com.