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Survival Covid-19 Experiences

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ABSTRACT

The widespread of Covid-19 has many impacts on society, especially for someone exposed to Covid-19. Covid-19 survivors have many responses starting from the beginning of being infected until they can pass the covid 19 journey phase. The purpose of this study is to explore the experiences of patients in going through the journey phase of covid 19. The research method is qualitative research with a descriptive phenomenological approach. The number of participants was 10 people determined by the Convenience Sampling method. The results showed that the initial chronology varied such as being infected from the crowd, closest family, and not knowing where the infection came from. Symptoms experienced ranging from fever, cough, anosmia, loss of sense of smell and taste, all body aches. Actions taken by participants by self-isolation, isolation in places provided by the government and some being treated in hospital. The psychological impact experienced by almost all participants felt anxiety, worry, and fear. Community responses varied starting to provide support and attention. But not all people can accept their condition, there are people who are afraid so that participants feel shunned by the community. Education about covid 19 and education on the application of health protocols, must continue to be carried out so that the incidence of covid 19 can be controlled. In addition, local government support is needed so that COVID-19 sufferers get positive support from their environment.

Keywords: Covid-19; Experience; Health protocol

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INTRODUCTION

The world's health problem that is currently of concern is the coronavirus. Coronavirus disease-19 as a public health emergency was declared a pandemic on March 11, 2020^{1.} The widespread of Covid-19 has had many impacts on society, especially for someone exposed to Covid-19 itself. Impacts that can occur such as a declining economy, constraints in education, work, and social life². The coronavirus pandemic has infected millions of people, and most of those infected with the coronavirus have recovered. However, patients who have just recovered from the corona must remain vigilant. The recovery time required for Covid-19 patients varies. This depends on the immune system and the accompanying comorbidities. Based on the results of a preliminary study conducted by researchers through observations and interviews with several people who have been infected with Covid-19, they said that after recovering from Covid-19, they still felt signs of symptoms such as shortness of breath, fatigue.

The global prevalence of Covid-19 is 113,695,296 cases with mortality due to Covid-19 is 2,526,007 people³. Data shows the national prevalence of COVID-19 at February 14th, 2021, about 159,012 or 13.06% active cases with the addition of 6,765 new cases, 1,025,273 or 84.21% of recovered cases, 33,183 or 2.73% of cases died¹⁷. The total number of cases in East Java was 129,800 cases of confirmed positive and 8,305 suspected people with the percentage of positive patients who recovered 90.27%, treated 2.68%, and died 7.05%. The total number of cases in Surabaya is 21,508 confirmed cases, 225 confirmed in treatment, 19,955 cases recovered, 1,328 cases died⁴.

CoV 2 has mild to moderate respiratory symptoms that can recover. It is said to be cured, that is when it is confirmed that the patient has no symptoms, mild symptoms, moderate symptoms, and severe or critical symptoms and is declared cured if he meets the criteria for completing isolation, and a statement is issued after monitoring and based on the assessment of the doctor at the health facility. Groups of people who have other health problems such as cardiovascular disease, chronic respiratory disease, diabetes, and cancer, experiencing inflammation of COVID-19 can experience problems with pneumonia, acute respiratory syndrome, kidney failure, and even death⁹.

The role of nurses is very important in educating COVID-19 survivors to continue carrying out preventive measures that must be taken after recovery, namely implementing health protocols, conducting rehabilitation after recovering from Covid-19, maintaining body immunity¹⁰. Based on the background description above, this research is focused on COVID-19 survivors in revealing the experiences of COVID-19 survivors in the city of Surabaya which includes the chronological experience of being infected, the symptoms felt, the actions taken during confirmed COVID-19, the impact of psychological, social and environmental changes. economy problem during exposure COVID-19 until recovered.

METHODS

This study uses a qualitative research method with a descriptive phenomenological approach. This type of research emphasizes the experience of Covid-19 survivors about things from their point of view. In this study, the researcher followed the stages of a descriptive phenomenological approach which consisted of bracketing, intuitive, analyzing, and describing stages. The number of samples is 10 participants. Participants are Covid-19 survivors obtained from data from Puskesmas in Surabaya. Researchers prepared interview equipment such as recorders and writing instruments. At the time of the interview, the strategy used was an open-ended interview.

Researchers analyzed and represented data in phenomenological research regarding the experiences of Covid-19 survivors using data collection, data reduction, data presentation, and data verification. The process starts from the stage of conducting verbatim transcripts obtained from interviews and field notes, then the researcher reads the verbatim transcripts and categorizes the word, then the categories are grouped into sub-themes and will produce the main theme.

RESULT

Characteristics of the results showed that the age range of the participants varied from the youngest age of 25 years and the oldest age of 58 years. The educational level of participants was 4 high school graduates, 1 diploma graduate participant, and 5 undergraduate graduate participants. Participants came from Javanese ethnicity and all participants were Muslim. A total of 4 participants were not married, and 6 participants were married. Participants' occupations varied, 6 participants worked as private employees, 3 participants worked as entrepreneurs, and 1 participant did not work because of old age.

The results of the study after the thematic analysis process were carried out on the same five themes in patients, namely: (1) Initial chronology of exposure to Covid-19, (2) Symptoms of Covid-19 that appeared, (3) Actions after being confirmed positive for Covid-19, (4) Psychological impact, and (4) Social impact.

1. Chronology of Exposure to Covid-19

Several themes emerged related to the initial chronology by participants. These themes include infected from the crowd, the closest family, and some claiming they don't know where, as stated by the participants as follows:

One of the initial chronologies experienced by participants is being infected from the crowd, as stated by the following participants: "At that time, I came to a friend's wedding outside the city at the beginning of the massive PSBB..." (P2)

" After serving as a KPPS committee..." (P9)

Some participants were infected from their closest family, as stated by the following participants:

"Infected from husband ..." (P3)

"Seems to be infected from my aunt.." (P5)

"...infected from my cousin.." (P4)

However, some participants did not know where they were initially affected, as stated by the participants as follows:

"Since November I have been sick, Ma'am.. but how come it's not getting better. There was a PCR test at the office, the results came out positive for Covid-19." (P1) "I don't know it's safe, my body started to have a high fever around 37.5 - 38 degrees and I had diarrhea, I tried to take paracetamol but the heat went up and down for 3 days, then after a week, I started coughing which was initially non-phlegm 2 days later I had a cough. the phlegm. Finally, 2 days later I went to the hospital and was given a rapid test and the chest x-ray was reactive and had bilateral pneumonia." (P6)

2. Symptoms of Covid-19

All participants experienced very varied symptoms, as expressed by participants as follows:

"Fever, runny nose, tiredness, had diarrhea, and lost the taste of eating and drinking nothing tasted and couldn't smell anything." (P1) "Joint pain, dry cough, fever, runny nose, headache, body aches all..." (P2) "Every night my body shivers, has a fever, is tired and has a sore throat, I feel sick all over the body" (P3)

3. Actions taken after confirmed Covid-19

The actions ware taken by participants after being confirmed by Covid-19 varied, five participants were quarantined, five participants were hospitalized. Here is one of the participants' expressions:

"After the results came out, I was immediately taken to the Indrapura Field Hospital ..." (P1)

"I immediately isolated in the Hajj Dormitory Hotel." (P2)

"After knowing the results were positive, I immediately self-isolated at home..." (P3)

In addition to taking measures to prevent transmission, seven participants said that they also took symptomatic drugs, antivirals, and vitamins. Here is one of the expressions:

"I take medication according to the symptoms I feel plus antiviral drugs and vitamins." (P8)

Three participants said that apart from taking symptomatic drugs, antivirals, vitamins, they also rinsed their mouths with an antiseptic mouthwash. Here is one of the participants' expressions:

"I take medicine from the doctor, antivirals, and vitamins as well as gargle using the betadine mouthwash..." (P3)

Participants in this study also revealed that they also increase their immune system by eating nutritious foods, consuming honey, consuming herbal drinks, exercising, basking in the sun, and thinking positively. As participants expressed as follows:

"Because I want to get well soon I eat anything, every morning I drink red ginger mixed with honey.. I also regularly sunbathe every morning.." (P5) "Besides taking medicine, I also consume honey, Ma'am." (P7) "When my body condition is getting better, I can get rid of the oxygen hose, I am diligent in sunbathing in the morning..." (P9)

4. Psychological impact experienced by survivors

The results show psychological impact experienced by participants were psychological changes experienced by male and female participants, almost all with the same complaints, namely anxiety, worry, and fear. As participants expressed as follows:

"Wow, I can't tell you... I'm afraid, worried that everything is piling up into one." (P7) "Yes, worried, worried, afraid because I have diabetes." (P9) "Crying, confused about what to do...,"(P4)

5. Social impacts experienced by survivors

a. Family Response

All participants revealed that their families responded well when they received news that participants were infected with Covid-19. They said that at first, the family felt distrustful and worried about the condition of the participants. But besides that, the family also supports participants so that they are excited to fight the Covid-19 virus. Here is one of the expressions:

"At first the family response was like they didn't believe it but they were also worried about getting infected and worried that I wouldn't be able to recover..." (P4)

"The response of the family helps meet our daily needs .. " (P3)

"Alhamdulillah, every day they call me to ask about my condition and always encourage me to fight this virus." (P9)

"They are sad and worried. My mother looks very worried and depressed but tries to be strong in front of me.." (P7)

b. Community Response

Two out of ten participants said that the community around them was fine because they and their families did not report that they were positive for Covid-19, as stated by the following participants:

"The attitude of people around is normal because my family and I have never reported that I am positive for Covid-19." (P2)

"I happen to live in a quiet housing estate, so it's normal." (P1)

Three out of ten participants revealed that not all people can accept their condition, some people are afraid so that participants feel shunned by society. Here is one of the participants' expressions:

"When I returned to my neighbor's house there was a lack of response, away from fear ..." (P10)

Five out of ten participants revealed that the community still responded well and helped the participant's family during the quarantine process until they recovered and returned home. Here is one of the expressions:

"If the residents and we are still fine, they still want to accept us, help my children give food while I'm in the hospital..." (P6)

"Alhamdulillah, after I recovered, most of the people were not too afraid, and I was not isolated from the community, so I didn't feel like I wanted to withdraw from the social environment..." (P9)

DISCUSSION

1. Chronological when Covid-19 survivors are exposed

Research data show that there are participants who contracted it from their families. Human-tohuman transmission of Sars-CoV-2 occurs primarily between family members, including relatives and friends in close contact with patients or incubation carriers. Researchers assume that Sars-CoV-2 transmission can occur through direct contact with droplets that come out when people are infected. Based on the Covid-19 prevention and control guidelines, the average incubation period for Covid-19 is 5-6 days. Infected persons can be directly infectious up to 48 hours before symptom onset (presymptomatic) and up to 14 days after symptom onset. The Covid-19 virus is transmitted droplets. Droplet transmission occurs when a person is at close range (within 1 meter) with someone who has respiratory symptoms (coughing or sneezing) so that droplets are at risk the mucosa (mouth and nose) or conjunctiva (eyes). Transmission can also occur through objects and surfaces contaminated with droplets around an infected person.

Based on research data, survivors have been in close contact or direct contact with someone who has respiratory symptoms. Other research says direct contact or being in the same room or environment with a positive person for Covid-19, indirect contact, a healthy person accidentally touches a surface infected with the SARS-CoV-2 virus. SARS-Cov-2 virus from Covid-19 patients can remain stable for a certain period. Researchers assume that these events can support the entry of the SARS-CoV-2 virus into the body of healthy people¹².

The transmission of the SARS-Cov-2 virus is through the air, where the virus is in particles and spreads in the air. This process is possible because maybe after a Covid-19 positive patient expels droplets when sneezing or coughing, the liquid content in the droplets will evaporate and form small particles so that air transportation is easier and from the force of gravity. These small particles are easy to spread, such as in one room, or within a radius of tens of meters from a Covid-19 positive person who is sneezing or coughing¹³. Researchers should review Roy's adaptation theory, then the beginning of becoming a participant in Covid-19 is through direct contact with the focal stimulus for participants. This condition is the reason the participants have to adapt to deal with conditions suffering from Covid-19.

Participants in this study also revealed that they had a history of diseases, such as diabetes mellitus. This is supported by the results of research which states that people who are suffering from chronic diseases have a higher risk of being infected with the SARS-CoV-2¹⁴. Researchers assume that in people with diabetes, high blood sugar levels can damage a person's immune system. The weaker the immune system, the lower the ability to fight infections, such as Covid-19.

2. Symptoms of Covid-19

All participants in this study stated that as long as they were confirmed to have Covid-19, they experienced various physical symptoms. Symptoms experienced by Covid-19 patients have a wide range, can include fever, fatigue, dyspnea, cough (with or without sputum), anorexia, muscle aches, malaise, sore throat, nasal congestion, or headache. In some cases, patients also complain of diarrhea and vomiting. Covid-19 patients with severe pneumonia by fever, plus one of the following symptoms:

respiratory rate >30 breaths/minute, severe respiratory distress, or oxygen saturation of 93% without oxygen assistance. In geriatric patients can appear atypical symptoms. Most patients infected with SARS-CoV-2 show symptoms of the respiratory system such as fever, coughing, sneezing, and shortness of breath. Data show about 55,924 cases most common symptoms were fever, dry cough, and fatigue. Other symptoms are productive cough, shortness of breath, sore throat, headache, myalgia/arthralgia, chills, nausea/vomiting, nasal congestion, diarrhea, abdominal pain, hemoptysis, and conjunctival congestion. More than 40% of fevers in COVID-19 patients have peak temperatures between $38.1-39^{\circ}$ C, while 34% have fevers over 39° C ¹⁵

The Covid-19 survivors in the study revealed that the symptoms they experienced included fever, fatigue, myalgia, chills, shortness of breath, sore throat, dizziness, diarrhea, nausea, anosmia, flu, cough, body weakness, joint pain, unable to sleep. Studies show that 98% of patients in their study had a fever, 78% had a temperature over 38°C, 76% of patients had a cough, 44% had fatigue and muscle aches, and 55% of patients had dyspnea. A small number of patients also had expectoration (28%), headache (8%), hemoptysis (5%), and diarrhea (3%). The results also showed that anosmia and ageusia occur in patients with minimal symptoms, young age, and female gender¹⁶. According to Roy's adaptation theory, the condition of participants experiencing Covid-19 symptoms is an effector that occurs after the individual performs the control mechanisms of the regulator and cognate systems. So the researchers assumed that symptoms of the Covid-19 virus that appeared in participants varied depending on each person's immune system.

3. Actions taken after confirmed Covid-19

a. Preventing the Transmission of Covid 19

Covid-19 is a newly discovered disease, therefore knowledge regarding its prevention is still limited. The key to prevention includes breaking the chain of transmission by doing isolation or quarantine. This study showed that participants took action after being confirmed by Covid-19, namely isolation or quarantine and hospitalization in a hospital.

Research states that if someone is confirmed to have Covid-19, one of the actions patients to isolate themselves from family or other people¹⁸. Researchers assume that isolation or quarantine is carried out to prevent transmission of Covid-19 to people who are around sufferers and break the chain of transmission by being obliged to wear masks, maintain a distance of more than 1 meter, avoid sharing eating utensils, toiletries and linens.

Some of the participants in this study were hospitalized because they felt the symptom they were experiencing were unbearable, so they decided to go to the hospital and be hospitalized to get maximum treatment. This is supported by the results of the study, namely that Covid-19 patients who experience

more severe symptoms are recommended to be treated in a hospital so that they can be monitored intensively, including the provision of supportive therapy and other therapies¹⁸.

b. Covid 19 treatment

The results show that ten participants took treatment to speed up the healing process from Covid-19. The type of treatment they do is giving symptomatic drugs, antivirals, vitamins, and gargling with an antiseptic mouthwash. Symptomatic treatment carried out by participants included giving paracetamol for fever, giving cold medicine, ranitidine for nausea, oxygen therapy for shortness of breath, and acetylcysteine to reduce coughing. Antiviral drugs used by the participants included oseltamivir, azithromycin, alluvia, and hydroxychloroquine which were obtained on the advice of a doctor.

Another potential therapy is the administration of vitamin C to boost the immune system and as an antioxidant²⁰. The results of other studies have shown that vitamin C can increase neutrophil chemotaxis and phagocytosis, thereby increasing microbial clearance22. Vitamin C can increase differentiation, proliferation, and modulate the function of T cells, B cells, and natural killer cells and can induce antibody production in humans²³.

The Other treatment the participants took was gargling using an antiseptic containing 1 percent povidone-iodine. This action is considered effective against germs in the mouth. This is following the results of the 1.0% PVP-I in vitro study with a viral kill time test against Vero-E6 cells which are the culture of the Covid-19 virus with a viral kill time of 99.99% which indicates virucidal activity against Covid-19 within 30 seconds²³. The researcher assumes that all the treatment taken by all the participants can support their healing.

c. Increase imunnity

In the results of this study, what participants did to increase their endurance was very diverse, including eating nutritious foods, consuming honey, consuming herbal drinks, exercising, basking in the sun, and thinking positively.

Eating foods that contain antioxidants such as vegetables and fruit can help the body fight free radicals. To maintain the body's immunity, it is also necessary to have adequate nutrition. This is in line with research results that food is a key factor in a strong immune system and reduces the risk of infection²⁵. The results of this study also revealed the fact that during illness there were participants who consumed honey to increase their immune system.

Exercise is one of the ways participants choose to increase their endurance. People who are confirmed to have COVID-19 with mild symptoms can still exercise to increase their immune system. This is supported by the results of research which state that people with mild symptoms of upper respiratory tract disorders can do light exercise, stretching, balance, aerobics, and mental exercise²⁶.

Individuals suspected of having COVID-19 symptoms such as fever, severe sore throat, body aches, shortness of breath, general fatigue, chest cough, and 93% oxygen saturation at rest should avoid exercising.

Participants bask in the sun to increase the production of vitamin D which functions to increase immunity against Covid-19. This is in accordance with the results of research showing the fact that sunbathing with only the face and the backs of the hands exposed to the sun for 6-7 minutes, the body will produce 10 g of vitamin²⁷. From the explanation above, the researcher assumes that in addition to taking action to prevent the spread of the Covid-19 virus and consuming drugs to get healthy quickly, it must also be interspersed with various ways to increase the body's resistance to get healthy quickly.

4. Psychological impact experienced by survivors

In this study, it was found that there were psychological changes in the participants. Psychological changes were very evident in these participants such as anxiety, sadness, fear, worry, and confusion. The findings are consistent that people tend to feel anxious and insecure when their environment changes. In the case of a plague communicable disease, when the cause or progression of the disease and the outcome are not clear, rumors develop, and a closed attitude occurs²⁸.

According to the researcher's assumption, distress and anxiety are normal reactions to threatening and unexpected situations such as the coronavirus pandemic. Possible stress-related reactions in response to the coronavirus pandemic could include changes in concentration, irritability, anxiety, insomnia, reduced productivity, and interpersonal conflict, but are particularly true for groups directly affected. Apart from the threat posed by the virus itself, there is no doubt that quarantine measures, which are being implemented in many countries, have a negative psychological effect, further increasing the symptoms of stress²⁹.

5. Psychological impact experienced by survivors

This theme explains how families respond when they find out that their family members have been diagnosed with Covid-19. In this case, the response felt was the same as the participants, feeling anxious, sad, confused, and of course, worried about the health and safety of their family members. It's the same thing that research says that individuals, families, and communities experience feelings of hopelessness, sadness, loss of purpose because of the pandemic³⁰.

In addition to the family's response, the environmental response also needs to be considered because the environmental support is very influential on the patient's condition²⁸. Researchers assume that psychologically when the environment changes, people feel insecure, restless, and anxious. When the cause of an epidemic is unclear, closed-mindedness and rumors often develop. So fear and stigma

go hand in hand when people are afraid, they tend to stigmatize some compound. However, in this study, participants' experience of environmental responses was quite good, seven of ten participants said that the surrounding environment was quite good and there was no discrimination.

CONCLUSION

Based on this study, it can be concluded that the experience of participants when they were confirmed positive for Covid-19 according to most participants was extraordinary as long as they lived. Because all of these participants experienced various Covid-19 symptoms, ranging from mild, moderate, and severe symptoms.

The impact of Covid-19 on the psychology of participants is that participants experience anxiety, worry, and fear so that they need motivational support from their family and fellow patients.

The impact of Covid-19 on participants socially is in the form of changes in the public's view of participants and the existence of community stigma against participants, so that some participants have difficulty carrying out social activities.

REFERENCES

- Keliat, B. A., Marliana, T., Windarwati, H. D., Mubin, M. F., Sodikin, M. A., Kristaningsih, T., Prawiro, A., Trihadi, D., & Kembaren, L. (2020). Dukungan Kesehatan Jiwa dan Psikososial. *Fakultas Ilmu Keperawatan Universitas Indonesia, Jakarta*, 15.
- Aslamiyah, S. (2021). Dampak Covid-19 terhadap Perubahan Psikologis, Sosial dan Ekonomi Pasien Covid-19 di Kelurahan Dendang, Langkat, Sumatera Utara. *Jurnal Riset Dan Pengabdian Masyarakat*, 1, 56–69.
- 3. WHO. (2021). Coronavirus (COVID-19) dashboard. https://covid19.who.int/
- 4. *Surabaya Tanggap COVID-19*. (n.d.). Retrieved March 3, 2021, from <u>https://lawancovid-19.surabaya.go.id/visualisasi/graph</u>
- 5. Han, Y., & Yang, H. (2020). Journal of Medical Virology. *J Med Virol*. https://doi.org/10.1002/jmv.25749
- Susilo, et al. (2020). Coronavirus Disease 2019: Tinjauan Literatur Terkini. *Jurnal Penyakit Dalam Indonesia*, 7(1), 45. <u>https://doi.org/10.7454/jpdi.v7i1.415</u>
- Anggreni, D., & Safitri, C. A. (2020). Hubungan Pengetahuan Remaja tentang COVID-19 dengan Kepatuhan dalam Menerapkan Protokol Kesehatan di Masa New Normal. *Hospital Majapahit*, 12(2), 134–142.
- Hidayani, W. R. (2020). Faktor-Faktor Risiko Yang Berhubungan Dengan COVID 19: Literature Review. Jurnal Untuk Masyarakat Sehat, 4, 125–130.

- 9. WHO. (2019). *Coronavirus* (*Covid-19*) *outbreak*. https://www.who.int/emergencies/diseases/novel-coronavirus-2019
- 10. Kedokteran, F., & Airlangga, U. (2021). Buku saku pasca sembuh covid. *Universitas Airlangga, Surabaya*.
- Wang, Y., Qiao, F., Zhou, F., & Yuan, Y. (2020). Surface distribution of severe acute respiratory syndrome coronavirus 2 in Leishenshan Hospital in China. *Indoor and Built Environment*, 26(7). https://doi.org/10.1177/1420326X20942938
- 12. Zou L, et al. (2020). SARS-CoV-2 Viral Load in Upper Respiratory Specimens of Infected Patients. *New England Journal of Medicine*, *382*(12), 1177–1179. <u>https://doi.org/10.1056/nejmc2001737</u>
- Morawska, L., & Cao, J. (2020). Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID- 19. The COVID-19 resource centre is hosted on Elsevier Connect, the company 's public news and information. *Elsevier*, 139(105730), 1–3.
- Verity, R, et al. (2020). Estimates of the severity of coronavirus disease 2019: a model-based analysis. *The Lancet Infectious Diseases*, 20(6), 669–677. <u>https://doi.org/10.1016/S1473-3099(20)30243-7</u>
- Susilo, A., Martin Rumende, C., Pitoyo, C. W., Djoko Santoso, W., Yulianti, M., Sinto, R., Singh, G., Nainggolan, L., Nelwan, E. J., Khie Chen, L., Widhani, A., Wijaya, E., Wicaksana, B., Maksum, M., Annisa, F., Jasirwan, C. O., & Yunihastuti, E. (2020). TINJAUAN PUSTAKA. In *Jurnal Penyakit Dalam Indonesia /* (Vol. 7, Issue 1). <u>https://www.ncbi.nlm.nih.gov/nuccore/</u>
- Lee, Y., Min, P., Lee, S., & Kim, S. W. (2020). Prevalence and duration of acute loss of smell or taste in COVID-19 patients. *Journal of Korean Medical Science*, 35(18), 1–6. <u>https://doi.org/10.3346/JKMS.2020.35.E174</u>
- 17. KEMENTERIAN RI (2021). Analisis Data COVID-19 Indonesia (Update Per 14 Februari 2021)
 Berita Terkini / Covid19.go.id. <u>https://covid19.go.id/p/berita/analisis-data-covid-19-indonesia-update-14-februari-2021</u>
- Mangalla, L. K., & Simatupang, M. (2020). Penerapan Inovasi Tirai Isolasi Mandiri Pasien Covid-19. Jurnal Pengabdian Masyarakat Ilmu Terapan, 2(2), 139–144. <u>http://ojs.uho.ac.id/index.php/JPMIT/article/view/15174</u>
- Iswanti, B. I. dan M. S. (2021). Pengalaman Perawat Saat Terkonfirmasi COVID-19 Di Rumah Sakit Dokter H. Mochammad Ansari Saleh Banjarmasin. *Angewandte Chemie International Edition*, 6(11), 951–952., 3(2), 321–337.
- 20. PDPI, PERKI, PAPDI, PERDATIN, & IDAI. (2020). Pedoman tatalaksana COVID-19 Edisi 3 Desember 2020. In *Pedoman Tatalaksana COVID-19*. <u>https://www.papdi.or.id/download/983-</u>

pedoman-tatalaksana-covid-19-edisi-3-desember-2020

- 21. Hafeez, A., Ahmad, S., Siddqui, S. A., & Ahmad, M. (2020). *Treatments and Prevention*. 4(2), 116–125. https://doi.org/10.14744/ejmo.2020.90853
- 22. Carr, A. C., & Maggini, S. (2017). Vitamin C and immune function. *Nutrients*, 9(11), 1–25. https://doi.org/10.3390/nu9111211
- 23. Van Gorkom, et al. (2018). Influence of Vitamin C on lymphocytes: An overview. *Antioxidants*, 7(3), 1–14. <u>https://doi.org/10.3390/ANTIOX7030041</u>
- Anderson, D. E., Sivalingam, V., Kang, A. E. Z., Ananthanarayanan, A., Arumugam, H., Jenkins, T. M., Hadjiat, Y., & Eggers, M. (2020). Povidone-Iodine Demonstrates Rapid In Vitro Virucidal Activity Against SARS-CoV-2, The Virus Causing COVID-19 Disease. *Infectious Diseases and Therapy*, 9(3), 669–675. <u>https://doi.org/10.1007/s40121-020-00316-3</u>
- Iddir, M., Brito, A., Dingeo, G., Del Campo, S. S. F., Samouda, H., La Frano, M. R., & Bohn, T. (2020). Strengthening the immune system and reducing inflammation and oxidative stress through diet and nutrition: Considerations during the covid-19 crisis. *Nutrients*, *12*(6), 1–39. https://doi.org/10.3390/nu12061562
- Kohut, M. L., Sim, Y. J., Yu, S., Yoon, K. J., & Loiacono, C. M. (2009). Chronic exercise reduces illness severity, decreases viral load, and results in greater anti-inflammatory effects than acute exercise during influenza infection. *Journal of Infectious Diseases*, 200(9), 1434–1442. https://doi.org/10.1086/606014
- Miyauchi, M., & Nakajima, H. (2016). Determining an Effective UV Radiation Exposure Time for Vitamin D Synthesis in the Skin Without Risk to Health: Simplified Estimations from UV Observations. *Photochemistry and Photobiology*, 92(6), 863–869. <u>https://doi.org/10.1111/php.12651</u>
- Ren, S. Y., Gao, R. D., & Chen, Y. L. (2020). Fear can be more harmful than the severe acute respiratory syndrome coronavirus 2 in controlling the corona virus disease 2019 epidemic. *World Journal of Clinical Cases*, 8(4), 652–657. <u>https://doi.org/10.12998/wjcc.v8.i4.652</u>
- Rosyanti, L., & Hadi, I. (2020). Dampak Psikologis dalam Memberikan Perawatan dan Layanan Kesehatan Pasien COVID-19 pada Tenaga Profesional Kesehatan. *Health Information : Jurnal Penelitian*, 12(1), 107–130. <u>https://doi.org/10.36990/hijp.vi.191</u>
- 30. Usher, K., Durkin, J., & Bhullar, N. (2020). The COVID-19 pandemic and mental health impacts. *International Journal of Mental Health Nursing*, 29(3), 315–318. https://doi.org/10.1111/inm.12726