

Factors Affecting the Acceleration of Healing for COVID-19 Patients



Kursiah Warti Ningsih, Muhammad Giatman, Desi Nindya Kirana, Rahmi Pramulia FS, Dona Martilova

Abstract: COVID-19 is a pandemic that has occurred since the beginning of 2020 which began in the city of Wuhan in China. In principle, the virus cannot enter the body if you have good immunity. Indonesia had reached the highest mortality rate of around 9.11 percent on Saturday, April 4, 2020. The purpose of this study was to find out what are factors in accelerating the healing of COVID-19 patients. This type of research is quantitative analytic with a correlational research design using a cross-sectional study approach. This research will be conducted in the isolation room of the Kampar River Puskesmas inpatient in October-November. The results of the study stated that there was a relationship between sex and the acceleration of healing of COVID-19 patients with a p-value of $0.013 < 0.05$, there was no relationship between community support and accelerated healing of COVID-19 patients with a p-value of $0.079 > 0.05$, there was a relationship between family support with the acceleration of healing of patients COVID-19 with p-value $0.009 > 0.05$, there is a relationship between mental burden by accelerating patient recovery COVID-19 with p-value $0.011 < 0.05$, there is a relationship between degenerative diseases by accelerating patient recovery COVID-19 with p-value $0.001 < 0.05$ and there is a relationship between comorbidities and the acceleration of healing in COVID-19 patients with a p-value of $0.029 < 0.05$.

Keywords: COVID-19, Mental Burden, Family Support, Degenerative Diseases.

I. INTRODUCTION

COVID-19 is a pandemic that has occurred since the beginning of 2020 which started in the city of Wuhan in China. This disease began to enter Indonesia in March 2020. The spread of this disease is very fast, causing excessive fear in the Indonesian people because a vaccine has not been found to prevent this disease. COVID-19 is caused by a virus,

where this virus can weaken the functions of several body functions. In principle, the virus cannot enter the body if you have good immunity [1-2].

Until early May 2020, the number of COVID-19 cases in the world reached 3.4 million cases with a world mortality rate of 3.4%, where positive cases in Indonesia reached more than 10 thousand cases. About 2% of infected patients are in critical condition and generally associated with morbid conditions. Studies in China co-Several Report that COVID-19 is associated with hypertension with a mean of 21%. Several studies have also shown that comorbid patients with COVID-19 are associated with increased case severity and even risk of death at present [3, 4]. Based on data from the Task Force for the Acceleration of Handling COVID-19 (Tuesday, April 7, 2020), this figure has dropped to 8 percent. But still higher than the global death rate of 5.7 percent. A total of 2,738 cases were confirmed in Indonesia with 221 cases of death. Indonesia is side by side with the three countries that have the highest death rates in the world. For information, the mortality rate is obtained by calculating the number of patients who died divided by positive cases, then multiplied by 100 percent. When viewed from the statement of the World Health Organization (WHO), the individual mortality rate is related to their age and medical history. People who are susceptible to being infected with COVID-19 and need special treatment are old age groups and/or with congenital diseases such as hypertension, heart problems, lungs, cancer, or diabetes [5].

Field evaluation of independent isolation activities is less effective in preventing the spread of this virus. The government requires that every positive case of COVID, with or without symptoms, be isolated at the nearest health facility. One of the health facilities that provide isolation is Puskesmas Kampar Kiri. Puskesmas isolates and provides health education with researchers to COVID-19 patients to accelerate patient healing [6-8].

II. RESULTS

A. Univariate analysis

Table- I: Frequency distribution of respondents

No	Variable	Frequency	Percentage (%)
1	Age		
	Old	14	45.2
	Young	17	54.8
	Total	31	100
2	Gender		
	Female	18	58.1
	Male	13	41.9
	Total	31	100

Manuscript received on May 11, 2021.

Revised Manuscript received on May 22, 2021.

Manuscript published on May 30, 2021.

* Correspondence Author

Kursiah Warti Ningsih* is a Doctoral Student of Technology and Vocational Education, Universitas Negeri Padang - Indonesia and Lecturer of the Study Program of Public Health, STIKes Payung Negeri Pekanbaru-Indonesia. Email: kursiahwartiningasih@payungnegeri.ac.id

Muhammad Giatman is a Senior lecturer/professors of Technology and Vocational Education, Universitas Negeri Padang-Indonesia. Email: giatman@ft.unp.ac.id

Desi Nindya Kirana is a Lecturer of the Study Program of Midwifery, STIKes Payung Negeri Pekanbaru-Indonesia. Email: desinindyakirana@gmail.com

Rahmi Pramulia FS, Lecturer of the Study Program of Public Health, STIKes Payung Negeri Pekanbaru-Indonesia. Email: rahmipramulia86@gmail.com

Dona Martilova, Lecturer of the Study Program of Midwifery, STIKes Payung Negeri Pekanbaru - Indonesia. Email: dhonalova@gmail.com

© The Authors. Published by Blue Eyes Intelligence Engineering and Sciences Publication (BEIESP). This is an [open access](https://creativecommons.org/licenses/by-nc-nd/4.0/) article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>)

Factors Affecting the Acceleration of Healing for COVID-19 Patients

3	Community Support		
	Negative	18	58.1
	Positive	13	41.9
	Total	31	100
4	Family Support		
	Negative	14	45.2
	Positive	17	54.8
	Total	31	100
5	Mental Burden		
	Stress	16	51.6
	No Stress	15	48.4
	Total	31	100
6	Degenerative Diseases		
	Yes	10	32.2
	No	21	67.7
	Total	31	100
7	Complementary Diseases		
	Available	15	48.4
	None	16	51.6
	Total	31	100

Based on the results of Table-I, it was found that respondents with old age were 45.2% of respondents with the female gender, 58.1%, respondents who supported negativity from the community were 58.1% of respondents who supported negativity from the family were 58.1%. as much as 45.2% of respondents experienced stress as much as 51, 6% of respondents with the degenerative disease as much as 32.2% of respondents with the disease, and as many as 48.2%.

B. Bivariate analysis

Table- II: Frequency distribution of respondents

Variable	Healing				Total n (%)	P-Value	OR (95% CI)
	Sleep with		Problems sleep is not problematic				
	N	%	N	%			
Gender							
Female	14	77.8	4	22.2	18 (100)	0.013	7,875 (1,560-39,763)
Male	4	30.8	9	69.2	13 (100)		
Total	18	58.1	13	41.9	31 (100)		
Community Support							
Negative	13	72.2	5	27.8	18 (100)	0.079	4.160 (0.909-19.032)
Positive	5	38.5	8	61.5	13 (100)		
Total	18	58.1	13	41.9	31 (100)		
Family Support							
Negative	12	85.7	2	14.3	14 (100)	0.009	11,000 (1,823-66,367)
Positive	6	35.3	11	64.7	17 (100)		
Total	18	58.1	13	41.9	31 (100)		
Mental Load							
Stress	13	81.2	3	18.8	16 (100)	0.011	8.667 (1.661 to 45.208)
Do not stress	5	33.3	10	66.7	15 (100)		
Total	18	58.1	13	41.9	31 (100)		
Degenerative Diseases							
There were					10 100 0 0 15 (100)		
No	8	38.1	13	61.9	16 (100)		
Total	18	58.1	13	41.9	31 (100)		
morbidity							
there are					12 80.0 3 20.0 14 (100)		
No	6	37.5	10	62.5	17 (100)		
Total	18	58.1	13	41.9	31 (100)		

Based on the results of the study, it was found that there was a relationship between sex and the acceleration of healing of COVID-19 patients with a p-value of 0.013 <0.05, there was no relationship between community support and acceleration. healing of COVID-19 patients with a p-value of 0.079 > 0.05, there is a relationship between family support and accelerated healing of COVID-19 patients with a p-value of 0.009 > 0.05, there is a relationship between mental load and accelerated healing of patients with COVID-19 with a p-value of 0.011 < 0.05, there is a relationship between degenerative diseases by accelerating patient recovery COVID-19 with p-value 0.001 <0.05 and there is a relationship between comorbidities accelerated patient recovery COVID-19 with p-value 0.029 <0.05.

III. DISCUSSION

Based on the research results, it can be seen that there is a relationship between gender and the acceleration of healing in COVID-19 patients with a p-value of 0.013 <0.05. Male respondents recovered faster than female patients by 7.8

times. Gender is also suspected to be a factor related to the level of body resistance against viruses, including COVID-19. Most sufferers of the disease caused by the COVID-19 virus (COVID-19) are men. This is based on research that shows men are more likely to experience more severe COVID-19 infections. There are receptors in our body that are also influenced by hormones and a person's gender. Because the genetics are different, the chromosomes are different, it affects the body's resistance and response to infection [9, 10].

Based on the results of the study, it can be seen that there is no relationship between community support and the accelerated healing of COVID-19 patients with a p-value of $0.079 > 0.05$. This pandemic has an impact not only on major sectors such as health and the economy but also in the social interactions of people's lives which require an adaptation process in efforts to prevent virus transmissions such as social distancing or physical distancing.

Apart from referring to health protocols, it is not enough, it needs adaptation in responding to this big change to be able to deal with physical and mental health problems in the community. One way to relieve anxiety or stress experienced by society in social work practices with individuals is relaxation. Relaxation activities in the technological era can not only be done through direct methods but have also been present in various digital platforms in the community. This is also supported by electronic news media which also recommend relaxation activities [11-13].

Based on the results of the study, it can be seen that there is a relationship between family support and the accelerated healing of COVID-19 patients with a value of $0.009 > 0.05$. Respondents who received positive support from families heal faster than patients who received the support of families by 11 times. A psychologist Muhammad Chalid said the family has an important role for positive patient COVID-19, mild symptomatic and asymptomatic (OTG) to be cured. He said support such as positive information about the COVID-19 virus could increase the immunity of exposed patients. With this support, OTG patients can still have positive thoughts to increase their immunity. The public also needs to have an understanding that COVID-19 occurs throughout the world and all diseases have a cure [14].

Based on the results of the study, it can be seen that there is a relationship between mental load and the acceleration of healing of COVID-19 patients with a p-value of $0.011 < 0.05$. Respondents who did not experience stress recovered faster than patients who experienced stress by 8.6 times. The lives of all people seem to have stopped because of restrictions, such as schools, work, health services, etc. It is undeniable that it can cause panic, fear, and anxiety in the community. Therefore, the community must manage stress when this pandemic and social restrictions are taking place. Stress management can be defined as actions to control, manage, manage stress. Stress itself can be interpreted as the body's reaction both psychologically and physically due to external pressure or tension. During this pandemic, the source of stress (stressor) was news about COVID-19 and social restrictions imposed by the government which hurt society. Stress cannot be avoided, but how can someone minimize this stress so that they can still act positively [15].

Based on the results of this research is that there is a relationship between degenerative diseases by accelerating patient recovery COVID-19 with a p-value $0,001 < 0,05$. Respondents who did not have the disease degenerative heal faster than patients who have a disease degenerative 2.6 times. The endurance of parents is considered to be more susceptible to COVID-19 than younger age groups. Degenerative diseases that are already in the body of the parents will make this virus easy to attack the body's immune system. The most vulnerable are the age group over 60 years. Diseases degenerative such as diabetes, cholesterol, heart disease, and gout, will further aggravate the health conditions of parents if they are infected with COVID-19. According to Nini, the young age group has a much stronger immune

system. Young people who are exposed to COVID-19 often do not cause any symptoms, because their immune systems are still strong. However, when young people transmit this virus to their parents, the parents will be infected faster than these young people [16. 17].

Based on the results of the study, it can be seen that there is a relationship between comorbidities and the accelerated healing of COVID-19 patients with a p-value of $0.029 < 0.05$. Respondents who did not have comorbidities recovered faster than patients who had comorbidities by 6.7 times. The condition of COVID-19 is getting worse due to the statistics of serious diseases in Indonesia which are also concerning. Basic Health Research (Riskesmas) 2018 presents the statistics. As many as 34.1 percent of Indonesia's population over 18 years of age already has hypertension. Then diabetes mellitus at the age of more than 15 years reaches 10.9 percent. The board of the Indonesian Internal Medicine Specialist Association (PAPDI) also noted that 1.5 percent of the people suffer from cardiovascular comorbidities, 3.7 percent with chronic lung disorders, cancer with a total of 1.8 cases per 1 million population, and autoimmune as many as 3 percent. Old age and congenital diseases are a deadly combination of factors that can bring the risk worst COVID-19 infection to Indonesia [17, 18].

IV. CONCLUSION

From the research that has been conducted on factors affecting patient healing acceleration COVID-19 in Puskesmas Kampar Kiri: Results Distribution frequency obtained of respondents with old age as much as 45.2%, 58.1% female gender, getting support negative from the community 58.1%, getting support negative from family 45.2%, respondents who experienced stress were 51.6%, respondents with diseases degenerative were 32.2%, and respondents who had comorbidities were 48, 2%. The results of the bivariate study showed that the variables that affected the acceleration of healing in COVID-19 patients were gender, family support, mental burden, degenerative diseases, and congenital diseases. And the factor that does not affect the acceleration of healing for COVID-19 patients is community support.

ACKNOWLEDGMENT

The author would like to never stop to thank God Almighty who has given gifts and opportunities in developing knowledge. Thank you to all academicians of STIKes Payung Negeri Pekanbaru, as well as friends and students who have helped in this research activity. Do not forget to also thank the Payung Negeri Foundation for facilitating this research activity and do not forget to thank the employees of the Kampar Kiri Puskesmas who have facilitated researchers in researching COVID-19 patients and thank you to the patient's COVID-19 who were treated at the Puskesmas Kampar Kiri who had agreed to be our respondents.

REFERENCES

1. D. Hermon, Ganefri, A. Putra, Erianjoni, E. Yuniarti, O. Oktorie, and P.M. Indika. COVID-19 Mitigation Policy, Environmental Geography, and Public Universities. India. Sara Book Publication. 2020, 100.
2. R. Fernandes, N. Susilawati, R. Muspita, E.V. Putra, E. Amri, A. Akbar, and A. Putra. Voter Education for The Deaf During The Covid-19 Pandemic. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 2020. 17(6), 10518-10528.
3. B.B. Tiksnadi, N. Sylviana, A.L. Cahyadi, A.C. Undarsa. Routine Exercise to Increase Immunity for Hypertensive Patients During the COVID-19 Pandemic. *Indones J Cardiol*. 2020; 41(2), 112-9.
4. F.T. Dewi, A. Sriatmi, and N. Nandini. Persepsi Dampak Ekonomi dan Sosial terhadap Kerentanan Fisik pada Status Kesehatan selama Pandemi COVID-19 (Studi Kasus di Provinsi Jawa Tengah). *MEDIA KESEHATAN MASYARAKAT INDONESIA*, 2020. 20(1), 19-25.
5. R.A. Syakurah, and J. Moudy. Pengetahuan terkait usaha pencegahan Coronavirus Disease (COVID-19) di Indonesia. *HIGEIA (Journal of Public Health Research and Development)*, 2020. 4(3), 333-346.
6. Ningsih, K.W., Ambiyar, M.G. and Emulyani, D.P., The Effect of Aromatherapy on Work Stress in Sialang Rindang Village Office. *International Journal of Management and Humanities*. 2021, 5(7), 94-97.
7. D.E. Juliawan, Y.S. Prabandari, and T.N.S. Hartini. Evaluation of malnutrition prevention programs through promotion and monitoring of growth of children under five. *MasyBer Medical*. 2010, 26(1), 7-11.
8. Y. Yuniarti, Z. Shaluhayah, and B. Widjanarko. Kinerja Petugas Penyuluh Kesehatan Masyarakat dalam Praktek Promosi Kesehatan di Dinas Kesehatan Kabupaten Pati. *Jurnal Promosi Kesehatan Indonesia*, 2012, 7(2), 165-173.
9. Jaji. Pengaruh Pendidikan Kesehatan Dengan Media *Leaflet* Terhadap Pengetahuan Warga Dalam Pencegahan Penularan COVID 19. *Proceeding Seminar Nasional Keperawatan*, 2020, 6(1), 135-140.
10. Fadli, Safruddin, A.S. Ahmad, Sumbara, and R. Baharuddin. Faktor yang Mempengaruhi Kecemasan pada Tenaga Kesehatan Dalam Upaya Pencegahan Covid-19. *Jurnal Pendidikan Keperawatan Indonesia*, 2020, 6(1), 57-65.
11. M.B.T. Sampurno, T.C. Kusumandyoko, and M.A. Islam. Budaya media sosial, edukasi masyarakat, dan pandemi COVID-19. *SALAM: Jurnal Sosial dan Budaya Syar-i*, 2020. 7(5).
12. A.M. Fadhilla, M.K. Dewi, and Y. Andriane. Relationship between Education Level and Knowledge of Swallowing Drugs Supervisor with Healing Adult Lung Tuberculosis Patients at UPTD in Inpatient Health Center Ciranjang, Cianjur Regency in 2018. 2019.
13. T.T. Sari. Self-Efficacy and Family Support for Successful Learning from Home during the COVID-19 Pandemic. *Educ JJ Educ Res Dev*. 2020; 4(2). 127-36.
14. S. Sukesih, U. Usman, S. Budi, and D.N.A. Sari. Knowledge and Attitudes of Health Students About Prevention of COVID-19 in Indonesia. *J Nursing and Midwifery*. 2020; 11(2), 258.
15. S. K. M. Eliska. Faktor-Faktor yang Mempengaruhi Kelelahan Kerja Pada Tim Relawan Covid-19 Di Kota Binjai. *Jurnal Kesehatan Ilmiah Indonesia (Indonesian Health Scientific Journal)*, 2020. 5(2), 1-12.
16. S. K. N. Aula. Peran Tokoh Agama Dalam Memutus Rantai Pandemi Covid-19 Di Media Online Indonesia. *Living Islam: Journal of Islamic Discourses*, 2020. 3(1), 125-148.
17. Rianto, B., Ambiyar, H., Aryantiningsih, D.S., Ayu, F., Rahmiati, S.E. and Melyanti, R.. Utilization of the Google Classroom Application as a Solution to Learning Blood in the Pandemic Time COVID-19. *Annals of the Romanian Society for Cell Biology*, 2021. pp.13257-13264.
18. H. B. N. Fitriyati. Pengaruh Terapi "Kidung Wahyu Kalaseba" Terhadap Resiliensi Psikologis Menghadapi Pandemi Covid-19 Bagi Mahasiswa Prodi Tasawuf dan Psikoterapi Universitas Islam Negeri Walisongo. *Piwulang: Jurnal Pendidikan Bahasa Jawa*, 2020. 8(2), 176-185.



Desi Nindya Kirana, is a Lecturer of the Study Program of Midwifery, STIKes Payung Negeri Pekanbaru - Indonesia.



Rahmi Pramulia FS, is a Lecturer of the Study Program of Public Health, STIKes Payung Negeri Pekanbaru - Indonesia.



Desi Nindya Kirana, is a Lecturer of the Study Program of Midwifery, STIKes Payung Negeri Pekanbaru - Indonesia.

AUTHORS PROFILE



Kursiah Warti Ningsih, is a Doctoral Student of Technology and Vocational Education, Universitas Negeri Padang - Indonesia and Lecturer of the Study Program of Public Health, STIKes Payung Negeri Pekanbaru - Indonesia.



Muhammad Giatman, is a Senior lecturer/professor of Technology and Vocational Education, Universitas Negeri Padang - Indonesia.