Universitas Indraprasta PGRI
Address: Jl. Nangka No. 58 C (TB. Simatupang), Kel. Tanjung Barat, Kec. Jagakarsa, Jakarta Selatan 12530, Indonesia.
☎ +62 (021) 7818718 - 78835283; url: www.unindra.ac.id; psyclrev@unindra.ac.id

Psychocentrum Review

ISSN 2656-8454 (Electronic) | ISSN 2656-1069 (Print)
Editor: Hayu Stevani

Publication details, including author guidelines
URL: http://journal.unindra.ac.id/index.php/pcr/about/submissions#authorGuidelines

Psychoeducation Webinar to Overcoming Stress in COVID-19 Survivors

Dhian Kusumastuti, Ika Yuniar Cahyanti, Endang Retno Surjaningrum, Ilham Nur Alfian
Airlangga University, Surabaya, Indonesia

Article History
Received : 29 January 2022
Revised : 09 March 2022
Accepted : 15 March 2022

How to cite this article (APA 6th)
Kusumastuti, D., Cahyanti, I. K., Surjaningrum, E. R., & Alfian, I. N., (2022). Psychoeducation Webinar to Overcoming Stress in COVID-19 Survivors. *Psychocentrum Review, 4*(1), 75-84. DOI: 10.26539/pcr.41906

The readers can link to article via https://doi.org/10.26539/pcr.41906

Correspondence regarding this article should be addressed to:
Dhian Kusumastuti, Airlangga University, Surabaya, Indonesia, E-mail: dhian.kusumastuti-2019@psikologi.unair.ac.id,

The authors whose names are listed in this manuscript declared that they have NO affiliations with or involvement in any organization or entity with any financial interest (such as honoraria; educational grants; participation in speakers' bureaus; membership, employment, consultancies, stock ownership, or other equity interest; and expert testimony or patent-licensing arrangements), or non-financial interest (such as personal or professional relationships, affiliations, knowledge or beliefs) in the subject matter or materials discussed in this manuscript. This statement is signed by all the authors to indicate agreement that the all information in this article is true and correct.

Psychocentrum Review (2022), 4(1),75-84
ISSN 2656-8454 (Electronic) | ISSN 2656-1069 (Print)
https://doi.org/10.26539/pcr.41906

Psychocentrum Review

Original Article

Psychoeducation Webinar to Overcoming Stress in COVID-19 Survivors

Dhian Kusumastuti[1], Ika Yuniar Cahyanti[2], Endang Retno Surjaningrum[3], Ilham Nur Alfian[4]

Airlangga University, Surabaya, Indonesia

Abstract. The COVID-19 pandemic had brought several negative impacts on various aspects of life, including causing stress. Stress during the pandemic afflicted all levels of society, including the COVID-19 survivor itself. One of the ways to deal with stress was the provision of psychoeducation. The provision of psychoeducation during the pandemic could be done online in the form of webinars. The effectiveness of the webinar activity was measured by analyzing the differences in the results of stress management knowledge levels and stress levels in the pre-test and post-test sessions. The level of stress management knowledge was measured using a stress management knowledge scale (Guttman split-half Coefficient = .791) while stress was measured using the PSS-10-C scale (α = 0.734). There was an increase in the knowledge score of stress management and a decrease in stress score. It also showed that webinar psychoeducation had a significant effect on the level of knowledge of stress management and stress levels. These results implied that psychoeducation through webinars should be taken into account as a method to overcome COVID-19 Survivor's stress problems in the midst of a pandemic that required us to limit social contact.

Keywords: Covid-19 Survivor; Psychoeducation; Coping Stress; Webinar; Education Quality

Correspondence author: Dhian Kusumastuti, Airlangga University, E-mail: dhian.kusumastuti-2019@psikologi.unair.ac.id, Surabaya, Indonesia.

Introduction

The pandemic that had occurred over the past year had caused several impacts. It made several negative impacts on various aspects of life. This pandemic made physical health impacts, but also mental health impacts (Kaligis et al., 2020). The existence of social distancing and social interaction not only had an impact on daily activities but also harms people's mental health (Lakhan et al., 2020).

Various mental health problems occurred during the COVID-19 pandemic. This pandemic could be a stressful situation for various groups of people (Kaligis et al., 2020). The prevalence of stress in China was known to range from 8.1-29.29%, India was at 11.6%, while Italy was at 14.6% (Lakhan et al., 2020). While in Indonesia, it was known that 22.2% of the population experiences mild to severe stress (Widyana et al., 2020). The Indonesian government in collaboration with the Himpunan Psikologi Indonesia (HIMPSI) provides mental health services called SEJIWA. As of May 2020, it was known that SEJIWA had received 14,916 calls from people who complained of having mental health problems (Kaligis et al., 2020).

Stress during the pandemic was also suffered by COVID-19 survivors who had been contaminated by the virus itself. Based on a survey conducted by the SATGAS COVID-19 for the Ikatan Psikologi Indonesia (2020), it was found that as many as 32.5% of COVID-19 patients experienced psychological distress. Not only that, 11.4% even experienced low trauma symptoms and 15.6% experienced high trauma symptoms. This data had increased compared to May 2020 which was below 30%.

The stress experienced by patients and survivors of COVID-19 could be caused by physical and non-physical factors. On physical factors, the symptoms experienced when suffering from the COVID-19 virus will certainly cause stress. Decreased energy, loss of the ability to smell or taste, headaches, and difficulty breathing experienced by COVID-19 sufferers will cause stress. Based on the research that had been done, it was also known that physical symptoms that resemble COVID-19 infection as previously mentioned had a significant positive relationship with the psychological impact (Wang et al., 2021).

The stress experienced by COVID-19 survivors was not only caused by physical factors but also caused by non-physical factors such as the stigma in society towards sufferers of this disease. The forms of stigmatization included ostracism, social rejection, labeling as carriers of the virus in the local environment, refusing funerals for COVID-19 sufferers, and so on (Matulessy, 2020). Social stigma could cause physical and mental damage and increase a variety of negative symptoms such as stress, depression, to drug abuse (Earnshaw, 2020). Over time, stigma as the cause of discrimination and exclusion could affect one's self-esteem and eventually become a thing worse than the COVID-19 virus itself (Sulistiadi et al., 2020).

Although stress was a normal response during a crisis, however, it could affect the immune system which could reduce or worsen the body's condition (Kaligis et al., 2020). Even in some cases, it was known that there were people who cannot cope with the mental stress they experienced and committed suicide (Lakhan et al., 2020). Based on this, interventions were needed to overcome stress levels for COVID-19 survivors in Indonesia.

One of the intervention methods that could be done to reduce stress levels was to provide psychoeducation on how to manage stress. Psychoeducation was an activity to disseminate education about general psychology or other information that affects the psychosocial welfare of the community (Nisa, 2018). Based on the physical restrictions during the pandemic, psychoeducation could be held by providing materials online.

As technology continued to evolve, many internet users were looking for information about conditions, symptoms, and treatment regarding various health problems including mental health (Reavley & Jorm, 2015). In response to this, various parties ranging from governments, companies, organizations, and individuals provided information about mental health on the internet to spread these pieces of information more widely to those in need (Reavley & Jorm, 2015). Over time, not only the dissemination of information about mental health that could be provided on the internet but psychological interventions can also be provided through the internet. The intervention form which was often given via the internet is psychoeducation, which was conducted in the form of webinars. Just like the purpose of disseminating mental health information through the internet, holding psychoeducation through webinars also aimed to provide a wider impact of psychological interventions to those in need.

Webinars were basically seminars to discuss a theme which were conducted online by utilizing internet-based platforms (Mansyur et al., 2019). Like a seminar, a webinar involved an active psychoeducational method, such as presentations conducted online through various internet-based platforms such as zoom, youtube, google meet, and so on. In today's developing era, webinars had become one of the psychoeducational methods which were used. It had several advantages such as reduce transportation budgets because it was held online, easier to manage participant registration, and provide opportunities for more people from various regions to be able to get an education (Durahman & Muhammad Noer, 2019). Not only that, but webinars were also often chosen by various groups of people to be able to get new

knowledge because of the practical, fast, and often free electronic certificate (Gunawan et al., 2020).

Methods

Participants

Participants in this intervention activity voluntarily registered themselves to join this webinar. The event dissemination was helped by Covid Survivor Indonesia (CSI) as the first COVID-19 survivor community in Indonesia. Information dissemination was carried out online through various social media accounts belonging to Covid Survivor Indonesia (CSI) such as Instagram, Facebook, and Telegram. After one week, there were 189 participants registered to take part in this webinar. Unfortunately, there were only 74 participants who filled out the pre-test and post-test completely out of 189 registered participants. The age of participants in this webinar ranged from 18 to 54 years (M = 23.311; SD = 8.183).

Table 1. Demographic of Participants

Data Demografis	Frequency	Percent
Jenis Kelamin		
Laki-laki	15	20.270
Perempuan	59	79.730
Total	74	100.000
Domisili (Provinsi)		
Bali	2	2.703
Banten	5	6.757
DI Yogyakarta	4	5.405
DKI Jakarta	2	2.703
Gorontalo	1	1.351
Jambi	2	2.703
Jawa Barat	19	25.676
Jawa Tengah	14	18.919
Jawa Timur	14	18.919
Kalimantan Barat	2	2.703
Kalimantan Timur	1	1.351
Nusa Tenggara Timur	1	1.351
Provinsi Kalimantan Selatan	1	1.351
Riau	2	2.703
Sulawesi Tengah	1	1.351
Sumatera Barat	2	2.703
Sumatera Utara	1	1.351
Total	**74**	**100.000**

Measurements

There were two aspects measured in this research. The first one was knowledge about how to manage stress, and the second one was the level of stress itself. We developed the knowledge of stress management measurement based on Lazarus and Folkman's theory of the Transactional Model of Stress (Biggs et al., 2017). Initially, we made 20 items in Indonesian that had to be answered on a Likert scale of agree, disagree, and don't know. Based on the analysis test, the Guttman Split-Half Coefficient reliability value was .536. Based on these results, we conducted validity analysis. Several items had a Pearson's r

https://doi.org/10.26539/pcr.41906

value below .30, so we eliminate these items. In the end, there were 10 items with a reliability value of .791 (Table 1). These 10 items were used to measure the level of knowledge of stress management in this activity.

Table 2. Reliability of Stress Management Knowledge Scale

Reliability Statistics			
Cronbach's Alpha	Part 1	Value	.623
		N of Items	5
	Part 2	Value	.781
		N of Items	5
	Total N of Items		10
Correlation Between Forms			.661
Spearman-Brown Coefficient	Equal Length		.796
	Unequal Length		.796
Guttman Split-Half Coefficient			.791

Table 3. Stress Management Knowledge Scale

No	Item	Agree	Disagree	Don't Know
1	The transactional Model of Stress explains that stress comes from the transaction process of individuals and the environment	1	0	0
2	The process of assessing the situation and the individual is called appraisal	1	0	0
3	A COVID-19 survivor can put a stigma on their self	1	0	0
4	Primary Appraisal is the process of assessing whether a situation is perceived as threatening / hurting the individual	1	0	0
5	Secondary Appraisal is the process of assessing whether an individual has sufficient capacity to deal with situations that are evaluated as threatening/injuring	1	0	0
6	The question "am I able to deal with this problem?" is a question we can ask ourselves in the Secondary Appraisal process	1	0	0
7	Coping stress is an effort used by an individual to be able to deal with stress	1	0	0
8	Problem-Focused Coping is a stress-management strategy in which a person directly confronts a stressor	1	0	0
9	One of the steps that can be applied in emotion-focused coping is to allow ourselves to cry when we are feeling sad	1	0	0
10	If you have applied one type of coping and it still causes a sense of stress, then we need to reapply other coping strategies	1	0	0

Note: The scale was administered to participants in Indonesian

Stress levels were measured using the Pandemic-Related Perceived Stress Scale of COVID-19 (PSS-10-C) developed by Campo-Arias et al., (2020) based on the Perceived Stress Scale (PSS-10). Campo-Arias, Pedrozo-Cortés, & Pedrozo-Pupo (2020) made modifications to the PSS-10 scale according to the conditions that occurred during the COVID-19 pandemic. The PSS-10-C scale as a result of a modification of the PSS-10

scale measures the level of stress in individuals specifically related to the current pandemic conditions.

Validity analysis for PSS-10-C conducted with Exploratory Factor Analysis and showed that PSS-10-C was a valid measuring instrument with α = 0.86, Bartlett with χ^2 = 1.399.35; *df* = 54; $p < .001$ and *KMO* = .82. The examiner did the translation into Indonesian and then carried out a pre-analysis on 109 respondents. The examiner also performed a reliability analysis on the PSS-10-C scale used in this intervention activity. The reliability value obtained was .734 which indicates a good value (Cortina, 1993).

Intervention Procedure

The intervention was carried out online using the Zoom application as a medium. Stress management education material was based on Lazarus and Folkman's Transactional Model of Stress theory. The material was delivered using the share screen feature that could be seen by all participants in the Zoom Room. The material was delivered interactively using the Slido feature in the Google Slides application. This feature allowed participants to answer questions given by the presenters and all participants could see the answers given by other participants. The questions asked using the Slido feature included the form of stress experienced by the participants, the stress management methods that had been tried before, and several other questions. The presentation lasted for approximately 50 minutes and was followed by a question and answer session for approximately 50 minutes.

Data Analysis

The effectiveness of this webinar was measured by comparing the scores at the pre-test and post-test. Statistical analysis was carried out by comparing the average values in the pre-test and post-test sessions. After that, the analysis will be continued by using the paired sample t-test technique. The entire analysis process used in this study will use the Jamovi for mac application.

Results

Mean Comparison

The evaluation of the intervention was first carried out by comparing the mean score of 74 participants obtained in the pre-test with the post-test of this webinar. Based on the mean obtained after the webinar, it was known that there were differences in the mean score of knowledge on how to manage stress between the pre-test and post-test sessions. There were also differences in the average value of the stress level score.

Table 4. Mean Comparison

Descriptive	N	Mean	SD	SE
Total Knowledge Pre-test	74	6.149	2.899	.337
Total Knowledge Post-test	74	8.716	1.692	.197
Total Stress Pre-test	74	20.230	5.393	.627
Total Stress Post-test	74	18.622	5.830	.678

https://doi.org/10.26539/pcr.41906

Paired Sample T-Test

We conducted a normality test before conducted the paired sample t-test. Based on the Shapiro-Wilk normality test, it was known that the stress management knowledge data had abnormal data so that the Wilcoxon nonparametric technique will be used. While the stress level data had normal data so the student parametric technique will be used in the paired sample t-test analysis.

Table 5. Normality Test Result

Test of Normality (Shapiro-Wilk)	W	*p*
Total Knowledge Pre-test - Total Knowledge Post-test	.943	.002
Total Stress Pre-test - Total Stress Post-test	.986	.587

Based on the paired sample t-test analysis, it was known that the p-value for both knowledge of stress management and stress level in the pre-test and post-test sessions was $p < .005$. It showed that there was a significant difference between the level of knowledge of stress management and the level of stress in the pre-test and post-test sessions. Based on this result, it was also known that this webinar had a large effect size (effect size = .857) on changing the level of stress management knowledge. Meanwhile, for the level of stress, this webinar had a relatively small effect (size effect = .322).

Table 6. Paired Sample T-Test Result

Measure 1	Measure 2	Test	Statistic	df	p	Effect Size
Total Knowledge Pre-test	Total Knowledge Post-test	Student	-6.899	73	< .001	-.802
		Wilcoxon	110.000		< .001	-.857
Total Stress Pre-test	Total Stress Post-test	Student	2.771	73	.007	.322
		Wilcoxon	1488.500		.007	.388

Follow-Up Phase

After the intervention was carried out, we did a 7-day follow-up. We sent a questionnaire contained a scale to measure the level of knowledge of stress management and the PSS-10-C scale to measure stress levels. Unfortunately, there were only 3 participants who filled out the questionnaire out of 74 participants who were contacted by email. The 7-day follow-up showed that the stress management knowledge did not decrease and stress level after 7 days after the intervention did not increase.

Discussion

Mental health problems experienced by COVID-19 survivors in Indonesia were stress problems. This problem was caused by various things such as the physical symptoms, the amount of bad news displayed by the media, to the social stigma received by COVID-19 survivors in Indonesia. Unfortunately, there was not enough education about stress management in our society. Therefore, it was necessary to provide education on how to manage the stress faced by COVID-19 survivors in Indonesia.

Results showed that this webinar as an intervention of stress significantly affected the level of stress management knowledge of the participants. This form of intervention even had a large effect on increasing the stress management knowledge of the participants. These results were in line with previous studies regarding the effectiveness of psychoeducation on the level

of individual knowledge. In previous research on increasing mental health knowledge in adult individuals, psychoeducational programs were known to be effective and efficient programs (Shaygan et al., 2021). Similar results were shown from other studies which stated that psychoeducation could improve attitudes and knowledge about mental health right after the intervention was given (Brooks et al., 2021).

Not only had a significant effect on increasing stress management knowledge, but the results also showed that this intervention had a significant effect on reducing stress levels experienced by participants. This was in line with previous research which had proved that psychoeducation programs could reduce global distress (Dolan et al., 2021). Although this intervention d to have a significant effect, the effect was relatively small in reducing stress levels. It was also supported by previous research which stated that the effect size of psychoeducational intervention on stress levels was small although it had a significant effect (Van Daele et al., 2012). However, intervention with psychoeducational methods remained an effective intervention for individuals of various ages and different backgrounds (Van Daele et al., 2012).

The results of data analysis showed that webinars as the form of online psychoeducation were had a significant impact on the level of stress management knowledge the level of stress itself. This was in line with several previous studies regarding the effectiveness of online psychoeducation. Based on previous research, it was known that psychoeducational interventions with online multimedia decrease stress levels experienced by COVID-19 patients (Shaygan et al., 2021). Other studies had also shown the same thing that online stress management in college students was known to reduce stress levels as measured by the PSS-10 scale in the control group (Hintz et al., 2015).

The follow-up results after the implementation of the intervention activities show that these activities tend to provide lasting results for at least 7 days after the implementation of the activities. This result was in line with previous research which stated that improvements in global distress in participants in psychoeducational activities were maintained during follow-up (Dolan et al., 2021). Other studies even stated that the results of psychoeducational interventions could still be permanent within 3 weeks after the activity was carried out (Hintz et al., 2015).

The effectiveness of this intervention activity could be supported by several things. One of the things that were predicted to be a supporting factor was the relatively short duration of the intervention. The webinar was an intervention activity that only involves one meeting with the participants with a duration of approximately two hours. Previous research had shown that psychoeducational intervention programs with shorter implementation periods will produce better effects (Van Daele et al., 2012). Psychoeducation programs with a long duration tend to create boredom for the activity participants (Mohalik & Poddar, 2020). So that the boredom that arises could affect the effectiveness of the psychoeducation program provided. Thus, psychoeducational activities with a shorter implementation time could have a better effect.

Another factor that was predicted to be a supporting factor was the support provided by the Covid Survivor Indonesia (CSI) community as the first community to accommodate COVID-19 survivors in Indonesia. COVID-19 survivors tend to sort news only from the sources they trusted. Covid Survivor Indonesia (CSI) as the first community to accommodate COVID-19 survivors in Indonesia had the strength and had been trusted by many COVID-19 survivors in Indonesia. Hence, when this community disseminated information about the webinar, many community members were interested in participating in this webinar and involved in some interactive activities in this event.

Although this intervention had a significant influence on participants' stress management knowledge and the level of stress itself, this intervention was not free from limitations. The first limitation of this intervention activity was the problem of connectivity or internet network. During the intervention activity, participants could hear the speaker's voice fluently and clearly. However, suddenly the presenters were cut off/thrown out of the zoom meeting

https://doi.org/10.26539/pcr.41906

room where the intervention activities were carried out. It happened because there was a network problem at the location where the presenters were delivering the activity materials. Although this could be resolved quickly and intervention activities could be resumed, this was something important that needs attention. Previous research had shown that the connectivity or quality of the internet network contributes significantly to the effectiveness of a webinar activity (Dwiyanti, 2021).

Another limitation of this study was the limited number of participants filling out the pre-test and post-test questionnaires. Based on the analysis, it was known that there were only 109 participants who filled out the pre-test questionnaire, 92 participants who filled out the post-test questionnaire, and only 74 participants who filled out both pre-test and post-test questionnaires out of 189 registered participants. Although 74 data was a sufficient number to carry out statistical analysis, a larger number of pre-test and post-test data was expected to improve the results of the analysis.

Conclusion

Based on the data analysis process that had been carried out, it could be concluded that webinars as the form of online psychoeducational had a significant influence on changing the level of participants' stress management knowledge and the level of stress itself. This was in line with several previous studies that stated face-to-face and online psychoeducation had a significant effect in increasing the level of knowledge about mental health issues and decreasing stress levels. However, this activity also had several limitations, including internet network problems during the implementation of the intervention activities and limited pre-test-post-test data compared to the number of registrants for this activity. Apart from the shortcomings found in this study, webinars as the form of online psychoeducation should be considered as stress management intervention that could be carried out during a pandemic condition that limited physical contact.

Acknowledgements

This research was conducted as part of a professional psychology study in Airlangga University. We would like to thank Covid Survivor Indonesia (CSI) as a community that has collaborated in this research. We hope that this research could bring a good impact for Covid Survivor's mental health in this pandemic situation.

Refrences

Biggs, A., Brough, P., & Drummond, S. (2017). Lazarus and Folkman's Psychological Stress and Coping Theory. In C. L. Cooper & J. C. Quick (Eds.), *The Handbook of Stress and Health: A Guide to Research and Practice* (pp. 351–364). John Wiley & Sons, Inc.

Brooks, S. K., Weston, D., Wessely, S., & Greenberg, N. (2021). Effectiveness and Acceptability of Brief Psychoeducational Interventions After Potentially Traumatic Events: A Systematic Review. In *European Journal of Psychotraumatology* (Vol. 12, Issue 1). https://doi.org/10.1080/20008198.2021.1923110

Campo-Arias, A., Pedrozo-Cortés, M. J., & Pedrozo-Pupo, J. C. (2020). Escala de estrés percibido relacionado con la pandemia de COVID-19: una exploración del desempeño psicométrico en línea. *Revista Colombiana de Psiquiatría*, *49*(4), 229–230. https://doi.org/10.1016/j.rcp.2020.05.005

Cortina, J. M. (1993). What Is Coefficient Alpha? An Examination of Theory and

Applications. *Journal of Applied Psychology*. https://doi.org/10.1037/0021-9010.78.1.98
Dolan, N., Simmonds-Buckley, M., Kellett, S., Siddell, E., & Delgadillo, J. (2021). Effectiveness of Stress Control Large Group Psychoeducation for Anxiety And Depression: Systematic Review and Meta-Analysis. *British Journal of Clinical Psychology*. https://doi.org/10.1111/bjc.12288
Durahman, N., & Muhammad Noer, Z. (2019). Aplikasi Seminar Online (Webinar) Untuk Pembinaan Wirausaha Baru. *Jurnal Manajemen Informatika*, *6*(2).
Dwiyanti, D. (2021). Analisis Faktor-Faktor yang Memengaruhi Efektivitas Webinar selama Masa Pandemi Covid-19. *Ideas: Jurnal Pendidikan, Sosial, Dan Budaya*, *7*(2). https://doi.org/10.32884/ideas.v7i2.339
Earnshaw, V. (2020). Don't Let Fear Of Covid-19 Turn into Stigma. In *Harvard Business Review*.
Gunawan, I. G. D., Suda, I. K., & Primayana, K. H. (2020). Webinar Sebagai Sumber Belajar di Tengah Pandemi Covid-19. *Purwadinata: Jurnal Agama Dan Budaya*, *4*(2).
Hintz, S., Frazier, P. A., & Meredith, L. (2015). Evaluating an online stress management intervention for college students. *Journal of Counseling Psychology*, *62*(2). https://doi.org/10.1037/cou0000014
Ikatan Psikologi Indonesia. (2020). *Kiprah Psikolog Klinis untuk Indonesia di Masa Pandemi*.
Kaligis, F., Indraswari, M. T., & Ismail, R. I. (2020). Stress during COVID-19 pandemic: Mental health condition in Indonesia. *Medical Journal of Indonesia*, *29*(4). https://doi.org/10.13181/mji.bc.204640
Lakhan, R., Agrawal, A., & Sharma, M. (2020). Prevalence of Depression, Anxiety, and Stress during COVID-19 Pandemic. *Journal of Neurosciences in Rural Practice*, *11*(4). https://doi.org/10.1055/s-0040-1716442
Mansyur, A. I., Purnamasari, R., & Kusuma, R. M. (2019). Webinar Sebagai Media Bimbingan Klasikal Sekolah Untuk Pendidikan Seksual Berbasis Online (Meta Analisis Pedagogi Online). *Jurnal Bimbingan Konseling Universitas Syiah Kuala*, *4*(1).
Matulessy, A. (2020). *Social Stigma Toward Covid-19 Patients In Indonesia (The Indonesian Psychological Association Combats Stigma Against Those Affected by COVID-19)*. American Psychological Association.
Mohalik, R., & Poddar, S. (2020). Effectiveness of Webinars and Online Workshops during the COVID-19 Pandemic. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3691590
Nisa, N. K. (2018). *Pengaruh Psikoedukasi dan Interactive Nursing Reminder Berbasis Short Message Service dengan Pendekatan Teori Lawrence Green terhadap Peningkatan Kualitas Hidup Klien Tuberkulosis*. Surabaya: Airlangga University.
Reavley, N. J., & Jorm, A. F. (2015). Psychoeducation and The Internet. In *Mental Health in The Digital Age*. https://doi.org/10.1093/med/9780199380183.003.0009
Shaygan, M., Yazdani, Z., & Valibeygi, A. (2021). The Effect of Online Multimedia Psychoeducational Interventions on The Resilience and Perceived Stress of Hospitalized Patients With Covid-19: A Pilot Cluster Randomized Parallel-Controlled Trial. *BMC Psychiatry*, *21*(1). https://doi.org/10.1186/s12888-021-03085-6
Sulistiadi, W., Rahayu, S., & Harmani, N. (2020). Handling of Public Stigma on Covid-19 in Indonesian Society. *Kesmas*, *15*(2). https://doi.org/10.21109/KESMAS.V15I2.3909
van Daele, T., Hermans, D., Van Audenhove, C., & Van Den Bergh, O. (2012). Stress Reduction Through Psychoeducation: A Meta- Analytic Review. *Health Education and Behavior*, *39*(4). https://doi.org/10.1177/1090198111419202
Wang, C., Chudzicka-Czupała, A., Tee, M. L., Núñez, M. I. L., Tripp, C., Fardin, M. A., Habib, H. A., Tran, B. X., Adamus, K., Anlacan, J., García, M. E. A., Grabowski, D., Hussain, S., Hoang, M. T., Hetnał, M., Le, X. T., Ma, W., Pham, H. Q., Reyes, P. W. C., … Sears, S. F. (2021). A Chain Mediation Model on Covid-19 Symptoms and Mental Health Outcomes in Americans, Asians and Europeans. *Scientific Reports*, *11*(1).

https://doi.org/10.1038/s41598-021-85943-7
Widyana, R., Merli Safitri, R., & Sumiharso. (2020). Community Mental Health Survey in Covid-19 Pandemic Situation in Indonesia. In *Pakistan Journal of Medical and Health Sciences 14* (2), 1540–1547. Lahore Medical And Dental College.