

## The impact of family support, social support and social information towards stress cases on covid-19 survivors : a cross-sectional study

M. Fais Satrianegara<sup>1\*</sup>, Bs. Titi Haerana<sup>1</sup>, Hasridah<sup>1</sup>

<sup>1</sup> Department of Public Health, Faculty of Medicine and Health Sciences, Universitas Islam Negeri Alauddin Makassar, 92113, Indonesia

\*Email Corresponding: (fais.satrianegara@uin-alauddin.ac.id)

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### Abstract

**Background:** Covid-19 causes enormous panic and anxiety in society. Infection-induced immune system disorders can cause psychopathology, and the remaining symptoms of psychiatry are observed after the coronavirus outbreak. Survivors of COVID-19 appear to have an increased risk of residual psychiatric symptoms, and psychiatric diagnoses that occur due to excessive worry and anxiety. Worry and anxiety themselves can cause stress. The purpose of this study was to study the impact of family support, social support and social information on stressful events in Covid-19 survivors in the Nuha District of East Luwu Regency in 2021.

**Method:** Quantitative research with an approach of observational analytics with a cross-sectional design. Sample size is 327 of 1781 populations in the Nuha District of East Luwu Regency in 2021. Data were collected by interview using the DASS 42 questionnaire. Statistical analysis using the linear regression test.

**Results:** The results showed that all independent variables (family support, social support and social information) simultaneously affect the dependent variable (stress cases) in Covid-19 survivors. The results of the regression equation for family support has a significant impact on the incidence of stress in Covid-19 survivors ( $p=0.004$ ;  $R^2 = 0.025$ ;  $Y = a + bX$  or  $1.952 + 0.743 X$ ). Social support has a significant impact on the incidence of stress in Covid-19 survivors ( $p=0.000$ ;  $R^2 = 0.039$ ;  $Y = a + bX$  or  $1.973 + 0.556 X$ ). Social information has a significant impact on the incidence of stress in Covid-19 survivors ( $p=0.000$ ;  $R^2 = 0.052$ ;  $Y = a + bX$  or  $1.667 + 0.667 X$ ).

**Conclusion:** There is an impact on family support, social support, and social information on the occurrence of stress on Covid-19 survivors in Nuha District East Luwu in 2021.

**Key words:** Covid-19, Family Support, Social Support, and Social Information

### INTRODUCTION

Covid-19 has been making headlines throughout the world since it was first discovered in Wuhan, China. Many individuals have perished from the coronavirus that causes the Covid-19 illness as a result of the disease's rapid spread. Covid-19 has sparked a lot of public anxiety and dread. 53.8 percent of individuals who participated in a preliminary study on the acute psychological response to the Covid-19 pandemic in the general Chinese population reported that the outbreak had a moderate to severe psychological impact (1). An pandemic of Covid-19, which has ravaged people's mental and physical health, is spreading worldwide because of its broad

distribution (2)

The transmission of Covid-19 continues to increase, this can be seen from the number of global COVID-19 cases from 223 countries, the number of confirmed cases is 127,000,000, cases recovered are 72,200,000, and those who died are 2,790,000. Covid-19 data in Indonesia continues to increase, case data in March 2021, there were 1,476,452 confirmed cases, 1,312,543 recovered cases, and 39,983 deaths (3). South Sulawesi is one of the provinces that has experienced the impact of the COVID-19 pandemic, which is the province with the 5th highest level in Indonesia, the data confirmed for Covid-19 in South Sulawesi Province are 50,342 cases,

46,598 patients have been declared recovered, and 730 people declared dead (4).

East Luwu Regency ranks 3rd with the highest number of Covid-19 cases in South Sulawesi province, the number of confirmed cases in East Luwu Regency is 3,803 patients, 3,683 patients have recovered, and 62 patients have died from Covid-19. East Luwu Regency has 11 sub-districts, and the sub-district with the highest cases of Covid-19 is in the Nuha sub-district with 1552 confirmed cases, 1518 recovered patients, and 8 cases of death (5).

Amount 80 percent of the difficulties with Covid-19 are due to psychological illnesses, with the remaining 20 percent coming from health-related problems, according to the Covid-19 Task Force report. Surveying people's mental well-being via an online self-exam, the Indonesian Association of Mental Medicine Specialists (PDSKJI) performed a study. An evaluation of 1,552 people was carried out in order to identify three psychological disorders, including anxiety, depression, and trauma, among others. With a minimum age of 14, and an upper limit of seventy-one, most respondents were female (76.1 percent). There were 23.4 percent of respondents from West Java, DKI Jakarta, 16.9 percent of those from Central Java and East Java, respectively (6).

Psychopathology can be caused by immunological damage caused by infection, and previous coronavirus outbreaks have had psychiatric effects. Psychological repercussions are reportedly linked to the Coronavirus (COVID-19) pandemic that caused severe acute respiratory syndrome, according to several accounts. Covid-19 was chosen to investigate the psychopathological affect it has on survivors in addition to clinical and inflammatory factors (7). Survivors of COVID-19 appear to be more susceptible than the general population to mental sequelae and new psychiatric diagnoses as a result of their dread and worry (8). Covid-19 survivors can still experience clinical symptoms of Covid-19 after recovering from Covid-19 after three months out of the hospital, not only the general symptoms of Covid-19 but also have an impact on

psychology, as for the common symptoms that are usually experienced by Covid-19 survivors, particularly joint pain, leg pain, muscle pain and cough that deserve attention (9).

COVID-19-related stresses are also linked to psychological pain. Anxiety, depression, and post-traumatic stress disorder (PTSD) symptoms are all linked to a poor self-image. Having the disease diagnosed has been linked to higher anxiety and PTSD symptoms, and living alone during an epidemic has been linked to an increased sense of hopelessness and worry.. Exposed Covid-19 survivors experience more peritraumatic stress symptoms when placed in a high-risk group or confined. Finally, according to the findings, having close family members in high-risk groups is linked to increased anxiety and depressive symptoms (10).

Stress may be caused by a variety of reasons, both internal and external to the individual (11). Covid-19 survivors with family members or close relatives have been found to have increased symptoms of stress and anxiety, with the intensity of the link with stress symptoms being weak and that with anxiety and depression symptoms being significant. Depression and anxiety are exacerbated when a person's spirits are low due to worries about the health of affected family members or feelings of guilt with spreading the sickness. Even if the loved ones recover, these symptoms may last for a longer time than imagined (12).

The usage of ruqyah can help alleviate the symptoms of depression caused by excessive stress. Patients who had independent ruqyah during radiation therapy showed significant reductions in depression, with an average reduction of 11.4 percent compared to the levels seen before independent ruqyah was performed, according to previous study (13).

Mental health is one of the important aspects of human life that can cause mental disorders in society (14). Due to the COVID-19 outbreak, responders may suffer from PTSD, depression, and drug abuse among survivors, victims' family, medical staffers and

other vital personnel. It also emerged from the aftermath of the September 11 terrorist attacks that a federally funded program was established to help people who had been impacted by the catastrophe (15). Patients who develop PTSD in the context of mild traumatic brain injury further suggest that PTSD may occur in some patients (16).

During this pandemic, there are at least three types of stress, namely academic stress which is usually experienced by students, work stress, and stress in the family. The death rate for COVID-19 sufferers continues to increase, causing public anxiety. This triggers excessive and unreasonable thoughts and worries among the people. Many people have a high suspicion of people who have signs of COVID-19. This makes people keep digging for news about *Coronavirus* (17).

It's impossible to imagine how many survivors or patients of COVID-19 are being treated at the COVID ward. Internalized stigma, feelings of shame, humiliation, fury, and questions such as, "Why did God punish me and my family?" all contributed to the pain of the experience. The practice of socially separating oneself from one's family while in "coop" is morally repulsive. In other words, people who have been diagnosed with COVID-19 infection and treated in COVID wards have serious mental health issues (18).

There is a significant incidence of depression, anxiety, insomnia, post-traumatic stress disorder (PTSD), and Parkinson's disease among survivors of Covid-19 (PD). Mental health prevention and intervention programs that provide complete care for persons affected by mental illness may be made possible, based on the findings of this study. While taking efforts to limit the virus's spread across the community, the needs of people who are sick or who are suffering severe symptoms should be given top priority. This will help make medical care as stress-free as possible for those patients and their families. The quickest way to deal with the pandemic-related mental health issues is to teach medical practitioners to deal with and prevent these problems from occurring again (19).

Based on the background described above, it can be seen that mental health is one of the important aspects in human life that can cause mental disorders in the community (13). The purpose of this study was to see the influence of family support, social support, and social information on stressful events in Covid-19 survivors in the Nuha District of East Luwu Regency in 2021.

## METHOD

This study uses the type of quantitative research. Quantitative research views human behavior as a predictable and social reality, objective and measurable (20). The approach used in this research is a cross-sectional study approach where the research is carried out at a certain time and no other research will be carried out at different times for comparison (21).

A population is an object or subject that has certain qualities and characteristics determined by the researcher (22). The population in this study were all people in Nuha District in East Luwu Regency who recovered from Covid-19. Total population are 1518 survivors. Sample size calculation in cross-sectional studies with a 95% confidence interval (CI) obtained 327 survivors that were addressed as samples. The sampling technique is probability sampling, namely the simple random sampling method. This research was conducted in Nuha District, East Luwu Regency on September 21-12 October 2021.

Data were collected by interview using the Depression, Anxiety, and Stress Scales 42 (DASS-42) questionnaire. The internal reliability of the DASS-42 was assessed using Cronbach's alpha was 0.888 for the depression scale, 0.866 for the stress scale, 0.833 for the anxiety subscales. This research was conducted door to door to be interviewed. Research ethics comes from the health research ethics committee "ethical exemption" with registered B.109/KEPK/FKIK/VIII/2021 and the questionnaire that had been tested for validation and reliability was used to measure stress, Family support in this study is the presence or absence of support that Covid-19

survivors get from a family member. Social support in this study is the presence or absence of the support that Covid-19 survivors get from the community such as neighbors, peers and supportive environmental conditions. And social information in this study is the existence of information received by Covid-19 survivors by word of mouth or from social media, both negative and positive information.

The data obtained from the interviews were processed using a laptop through the 2010 version of the Microsoft Excel program and the SPSS (Service Package for Social Science) version 16.0 using the Linear Regression test. Processed data to see the influence of family support, social support,

and social information on the incidence of stress in Covid-19 survivors

## RESULTS

Among 327 survivors that were addressed as samples. The results of linear regression analysis showed all independent variables (family support, social support and social information) simultaneously affect the dependent variable (stress cases). The results of the regression equation for the family support variable is ( $p = 0.004$ ;  $R^2 = 0.025$ ;  $Y = a + bX$  or  $1.952 + 0.743 X$ ), social support is ( $p = 0.000$ ;  $R^2 = 0.039$ ;  $Y = a + bX$  or  $1.973 + 0.556 X$ ) and social information is ( $p=0.000$ ;  $R^2 = 0.052$ ;  $Y = a + bX$  or  $1.667 + 0.667 X$ ). The next paragraph will explain in detail each variable.

**Table 1.** The impact of family support on the incidence of stress in Covid-19 survivors in Nuha District, East Luwu Regency in 2021

Research variable	Stress										Total	P-Value	
	Normal		Mild stress		Moderate stress		Heavy stress		Stress is very heavy				
	n	%	n	%	n	%	n	%	n	%			N
Family support													
There is Support	90	30	44	15	55	19	78	26	28	10	295	100	0.004
No Support	5	16	1	3	6	18	15	47	5	16	32	100	
R = 0.159	R <sup>2</sup> = 0.025		Y = a + bX or 1.952 + 0.743 X										
Social Support													
There is Support	73	39	28	15	16	9	54	28	16	9	187	100	0.000
No Support	22	16	17	12	45	32	39	28	17	12	140	100	
R = 0.198	R <sup>2</sup> = 0.039		Y = a + bX or 1.973 + 0.556 X										
Social Information													
Positive	51	45	16	14	12	11	28	24	7	6	114	100	0.000
Negative	44	21	29	13	49	23	65	31	26	12	213	100	
R = 0.228	R <sup>2</sup> = 0.052		Y = a + bX or 1.667 + 0.667 X										

Based on table 1, the results of the linear regression test on the family support variable show a p-value = 0.004 where p-value < 0.05, which means that family support has a significant effect on the incidence of stress in Covid-19 survivors, means that H<sub>0</sub> is rejected and H<sub>a</sub> is accepted. The correlation value (R) is 0.159 and it is

explained that the percentage of the influence of family support variables on stress events is termed as the determinant coefficient which is the result of squaring R, the determinant coefficient (R<sup>2</sup>) is 0.025, which means that the effect of family support on stress events is equal to 25%, while the rest is influenced by other variables.

From the equation  $Y = a + bX$  or  $1.952 + 0.743 X$  state that if there is no value of family support then the stress value is 1.952, the regression coefficient  $X$  is 0.743 which states that each addition of 1 value of family support, then the stress value increases by 0.743 because the value of the regression coefficient is positive then, it can be said that family support positive effect on the incidence of stress in Covid-19 survivors.

The linear regression test on the social support variable shows a  $p$ -value = 0.000, where the  $p$ -value  $< 0.05$ , which means that social support has a significant effect on the incidence of stress in Covid-19 survivors, means that  $H_0$  is rejected and  $H_a$  is accepted. The correlation value ( $R$ ) is 0.198 and it is explained that the percentage of the influence of social support variables on stress events is termed as the determinant coefficient which is the result of squaring  $R$ , the determinant coefficient ( $R^2$ ) is 0.039, which means that the effect of social support on stress events is equal to 39%, while the rest is influenced by other variables.

From the equation  $Y = a + bX$  or  $1.973 + 0.556 X$  state that if there is no value social support then the stress value is 1.973, the regression coefficient  $X$  is 0.556 which states that each addition of 1 value of social support, then the stress value increases by 0.556 because the value of the regression coefficient is positive then, it can be said that social support has a positive effect on the incidence of stress in Covid-19 survivors.

The linear regression test on the social information support variable shows a  $p$ -value = 0.000 where  $p$ -value  $< 0.05$ , which means that social information has a significant effect on the incidence of stress in Covid-19 survivors, it means that  $H_0$  is rejected and  $H_a$  is accepted. The correlation value ( $R$ ) is 0.228 and it is explained that the percentage of the influence of social information variables on stress events is termed as the determinant coefficient which is the result of squaring  $R$ , the determinant coefficient ( $R^2$ ) is 0.052, which means that the effect of social information on stress events is equal to 52%, while the rest is influenced by other variables.

From the equation  $Y = a + bX$  or  $1.667 + 0.667 X$  state that if there is no value of social information then the stress value is 1.667, the regression coefficient  $X$  is 0.667, which states that each addition of 1 value of social information, then the stress value increases by 0.667 because the value of the regression coefficient is positive, then it can be said that social information positive effect on the incidence of stress in Covid-19 survivors.

## DISCUSSION

Family support has a significant effect on the incidence of stress in Covid-19 survivors. Family support is needed by Covid-19 survivors so that they are motivated to stay healthy and return to normal as before experiencing Covid-19. Most families motivate each other if there is a family that goes through Covid-19 either using social media or by bringing food to their family in quarantine, be it self-quarantining or in company housing.

Supportive sessions with psychiatrists via teleconference are consistent with the outcomes of the current study according to Swapnajeet Sahoo and colleagues in 2020. The anxiety she had as a result of her anxieties was completely eliminated. During the discussions, she was able to voice her worries, including her inability to support her family, her future, and the possible stigma she would encounter. As a consequence of the beneficial sessions, he began to feel better and calmer. One of the patient's cousins (who is not infected) who is constantly in contact with the patient and is tasked with encouraging the patient to stay active and keep busy by watching videos/movies on YouTube channel, reading things he enjoys on the internet, and praying to God is also involved in the treatment (18).

The sources of support from the family are mostly provided by husbands, wives, and parents. There are even some who are motivated by their parents-in-law and their children, and some are even motivated by a 9-year-old child.

This research is also in line with Yidung Tu's research, 2021 where the impact of



stress due to Covid-19 can be decreased with the family support felt by COVID-19 survivors. Unexpectedly, the family support felt by Covid-19 survivors intensifies the effects of the stress caused by Covid-19 (23).

According to Xin Cai et al., 2020, Covid-19 survivors require immediate family assistance in order to cope with the disease's symptoms, which are also supported by this study. Symptoms of stress and sadness have a limited correlation with physical pain, but it has a strong predictive value for more severe anxiety symptoms. Because physical discomfort may be both a source of and a result of passive emotions, we were unable to separate their combined effects (24).

Social support has a significant effect on the incidence of stress in Covid-19 survivors. This happens because if the respondent gets social support such as peers, neighbors, or coworkers, it will motivate them to stay healthy. After all, most of the respondents experience symptoms after recovering from Covid-19. Social support mostly comes from colleagues and peers, because most of the respondents were shunned from their neighbors when they started experiencing Covid-19 until they recovered from Covid-19. Some experience stress even though they receive social support, this happens because they only get social support from colleagues or peers, not the neighbors where they live so they are only supported through social media because Nuha implements WFH (Work From Home).

Helping Covid-19 survivors recover from their trauma will require a large amount of social assistance. Good social support can help alleviate stress-related symptoms including anxiety and sadness, as observed in prior research. Previous research has shown that adequate social support helps alleviate the emotional stress associated with traumatic experiences. This study validates this conclusion.

Social information has an influence on the incidence of stress in Covid-19 survivors. In the social information variable, some respondents get positive information but are stressed due to a lack of social support. As for those who get negative news but are not

stressed because they don't believe in Covid-19 and are more confident in controlling their personalities. Trust in information During Covid-19, it is necessary to first consider the existing news because some news exaggerates or does not match the reality. Regarding information, people who provide information will still be responsible for the information they spread.

## CONCLUSION

There is a significant effect on family support on the incidence of stress in Covid-19 survivors with p-value = 0.004 where p-value <0.05. There is no significant effect on social support on the incidence of stress in Covid-19 survivors p = 0.000 where p value > 0.05. There is a significant effect on social information on the incidence of stress in Covid-19 survivors p = 0.000 where p <0.05.

For survivors Covid-19 to continue to comply with the protocol health and maintain their health so they don't experience Covid-19 again and community to maintain health so as not to experience Covid-19 again despite receiving benefits from the Government, however Covid-19 is very dangerous for yourself and those around you, especially your family

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