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Indonesia's Mental Health Status during the Covid-19 Pandemic

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Abstract. *This study aims to analyze Indonesia's mental health status during the Covid-19 pandemic. The study is an observational analytic study used a cross-sectional approach. The research was conducted to Indonesian population. Convenience sampling was used to select 1458 Indonesians as the research sample. The Depression, Anxiety, and Stress Scale (DASS-42) was utilized in this study, which was translated, validated, and disseminated through social media from April 12 to 25 2020. Data analysis was performed using Mann-Whitney, Chi-square tests, and logistic regression with a significance value of p <0.05 (OR and 95%CI). The incidence of depression, anxiety, and stress was 20.8%, 34.6%, 25.4%, respectively. Meanwhile, respondents who experienced depression, anxiety, and stress categorized as moderate to very severe were 12.4%, 26.3%, and 16%. Factors that influenced mental health during the Covid-19 pandemic are career background in health care and commit health behaviors (washing hands after coughing, sneezing, and touching the nose). The government is expected to carry out effective risk communication, maximize COVID-19 response policies in Indonesia, and actuate mental health services by small communities in their environment thus mental health problems preventive can be resolved immediately.*

Keywords: *Covid-19; mental health; depression; anxiety; stress; Indonesia.*

INTRODUCTION

Covid-19 has been considered an aesthetic medical and public health emergency. It has also been declared a pandemic by the WHO due to its high case fatality rate (CFR) (Hua & Shaw, 2020). Governments around the world have taken a variety of precautionary steps to disrupt the transmission chain, including self-quarantine and the closing of public areas in China. In addition, measures such as maintaining physical distance, wearing masks, frequently washing hands with soap and water, and following proper coughing and sneezing etiquette must be done in an effort to stop the increase in the number of Covid-19 infections (Wang et al., 2020; Kim et al., 2019). The international focus on Covid-19 was then utilized as a springboard for all countries to follow China's lead, and Indonesia takes similar initiatives.

While the world is focusing on physical health as a result of the Covid-19 pandemic, mental health symptoms are also a severe issue. The epidemic wreaked havoc on many parts of life, including psychological and emotional well-being. Studies show that quarantined individuals have a higher psychological risk of depression, emotional problems, irritation, stress, insomnia, and

post-traumatic symptoms (Brooks et al., 2020; Usher et al., 2020). Excessive worry, melancholy, decreased appetite, and irritability are some of the other symptoms that can develop (Centers for Disease Control and Prevention, 2019).

According to a study conducted on students in Semarang on early detection of mental health problems due to the Covid-19 pandemic, 63.6% of the respondents had mental health problems, more than half of them had anxiety or worry (59%), and as many as 9% of respondents considered suicide (Iqbal & Rizqulloh, 2020). The emergence of this psychological response must be addressed immediately to avoid future mental problems, such as long-term physical health problems, lower interpersonal connection quality, decreased quality of life, substance abuse, and suicide. Early treatment of respondents with mental illnesses can help them perform better at work (Mojtabai et al., 2017).

Depression is an emotional disorder characterized by feelings of sadness, hopelessness, guilt, and meaninglessness for an extended period of time. As a result, it influences motivation to engage in activities in daily life as well as interpersonal relationships (Dirgayunita, 2016). While anxiety is the emergence of feelings of fear and caution or an uneasy and unpleasant awareness of certain threatening situations whose sources are unknown and internal (Desyanti & Handayani, 2017). Stress is a person's reaction to environmental demands and is defined as something that burdens or exceeds his ability and endangers his well-being (Lumongga, 2016).

Several previous studies have not specifically explained the sociodemographic and behavioral determinants of the incidence of depression, anxiety, and stress in the general population during the Covid-19 pandemic. As a result, researchers are eager to dig deeper into these factors. The purpose of this study is to discuss the potential determinants of mental health (depression, anxiety, and stress) during the Covid-19 pandemic in Indonesia in order to reduce the pandemic's negative impact. This study hypothesizes that there is a relationship between sociodemographic characteristics (age, gender, religion, marital status, education level, occupation, career background, personal expenses in one month, clinical characteristics, and behavior during the pandemic) and the incidence of depression, anxiety, and stress among Indonesians during the Covid-19 pandemic. This study is expected to assist health workers in monitoring and evaluating individuals' mental health in the face of Covid-19, ensuring that there are no sequelae that can have a negative impact on each individual's quality of life after the pandemic ends.

METHOD

This is an observational analytic study with a cross-sectional research design. The study was conducted in Indonesia. The sample was selected using the convenience sampling technique. A total of 1,458 respondents participated in filling out a closed questionnaire that was distributed from 12 to 25 April 2020 using Google Forms and shared through social media platforms.

The Depression, Anxiety, and Stress Scale (DASS-42) was used in this study as a self-report measurement tool that measures depression, anxiety, and stress developed by the Psychology Foundation Australia and has been translated into Indonesian (Damanik, 2006). The DASS-42 is made up of 42 questions about negative emotional symptoms, with the individual rating the presence or absence of these symptoms in the previous week. The questionnaire's validity and reliability were tested at random on 60 people in Palembang in January 2020 using Corrected item-total Correlation analysis, yielding a validity value of 0.499-0.813 and a reliability value of 0.90, indicating that it was valid and reliable.

The collected data were then checked or validated through data validation, which was the

process of eliminating incorrect answers. Coding was done to provide a specific code to facilitate the data recording process, and data tabulation was performed by creating a table from the data obtained using the Microsoft Excel application. The data were also statistically analyzed using the IBM SPSS Statistics 26 program. All independent variables and survey responses were subjected to descriptive statistics. To compare characteristics with the DASS subscale, Mann-Whitney and Chi-square tests (alternatives: Fisher exact test and person chi-square test) were used. The most influential variables on mental health were analyzed using multivariate analysis with multiple logistic regression predictive model and presented as odds ratio (OR) and 95% CI, with a significance of $p<0.05$

RESULTS AND DISCUSSION

The average age of the 1,458 respondents was 25.93 ((SD ±9.988) years. The majority of them were female (70.2%), Muslim (86.9%), unmarried (78.9%), and highly educated (67%). Almost half of the respondents (49.5%) were students, working as health workers (49.9%). As much 90.9% of the respondents stated that they had no family history of mental disorders and no history of chronic disease (94.1%). The respondents followed government advice, such as staying at home (84.4%), practicing cough and sneeze etiquette (97.5%), washing hands with soap (98.8%) and after coughing, sneezing, and touching the nose (82.4%), and using cloth masks (93%). In addition, most of the respondents (80%) did not have family members who had been infected with Covid-19 and had become ODP (Person under supervision) or PDP (Patience under supervision) (59%) (Table 1).

According to the findings, as many as 20.4 % of the total respondents had symptoms of depression, more than one-third had symptoms of anxiety (34.6%), and a quarter had symptoms of stress (25.4%). Meanwhile, 12.4% experienced moderate to severe depression, 26.3% experienced anxiety, and 16% experienced stress. Figure 1 depicts the severity of each.

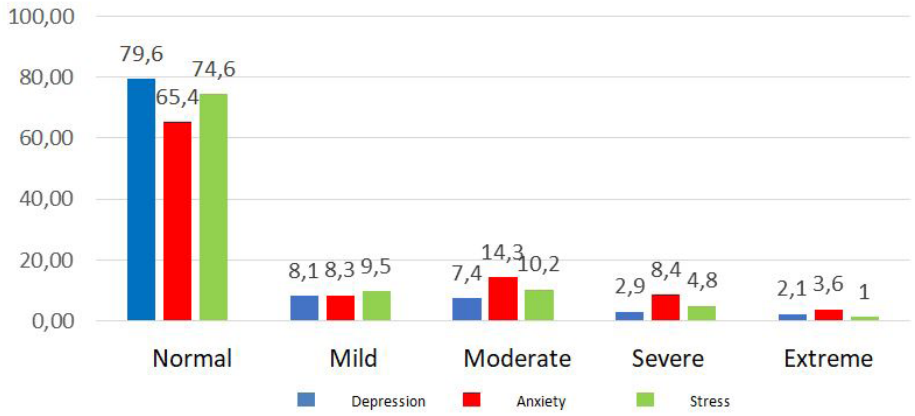

Figure 1.
Percentage of mental health status in Indonesia (n=1.458)

The findings revealed a significant relationship between age, marital status, education level, career background, the behavior of washing hands with soap after coughing, sneezing, and touching the nose, using cloth masks, and having family members infected with Covid-19 on the community's mental health status (depression, anxiety, and stress) with a significance value of p

Table 1.
Respondent characteristics and mental health status in Indonesia (Depression, Anxiety, and Stress)

Variable	Depression				Anxiety			Stress		
	Total Sample n=1458 n(%)	Yes n=298 n(%)	No n=1160 n(%)	p	Yes n=504 n(%)	No n=954 n(%)	p	Yes n=371 n(%)	Yes n=371 n(%)	p
Age, mean±SD	25.93±9.988	23.61±7.59	26.52±10.44	<0.001*	23.90±7.772	27.00±10.831	<0.001*	23.77±7.223	26.66±10.674	<0.001*
Gender										
Male	435 (29.8)	88 (20.2)	347 (79.8)	0.954	126 (29.0)	309 (71.0)	0.004 **	93 (21.4)	342 (78.6)	0.024**
Female	1023 (70.2)	210 (20.5)	813 (79.5)		378 (37.0)	645 (63.0)		278 (27.2)	745 (72.8)	
Religion										
Buddhism	44 (3.0)	8 (18.2)	36 (81.8)	0.702	12 (27.3)	32 (72.7)	0.869	7 (15.9)	37 (84.1)	0.708
Hinduism	5 (0.3)	1 (20.0)	4 (80.0)		2 (40.0)	3 (60.0)		2 (40.0)	3 (60.0)	
Islam	1267 (86.9)	261 (20.6)	1006(79.4)		446 (35.2)	821 (64.8)		327 (25.8)	940 (74.2)	
Catholic	57 (3.9)	12 (21.1)	45 (78.9)		17 (29.8)	40 (70.2)		13 (22.8)	44 (77.2)	
Kong Hu Cu	2 (0.1)	1 (50.0)	1 (50.0)		1 (50.0)	1 (50.0)		1 (50.0)	1 (50.0)	
Protestant	73 (5.0)	15 (20.5)	58 (79.5)		23 (31.5)	50 (68.5)		19 (26.0)	54 (74.0)	
Others	10 (0.7)	0 (0.0)	10 (100.0)		3 (30.0)	7 (70.0)		2 (20.0)	8 (80.0)	
Marital Status										
Single	1150 (78.9)	259 (22.5)	891 (77.5)	<0.001	423 (36.8)	727 (63.2)	0.002	314 (27.3)	836 (72.7)	0.004
Divorced	26 (1.8)	6 (23.1)	20 (76.9)	***	9 (34.6)	17 (65.4)	***	7 (26.9)	19 (73.1)	***
Married	282 (19.3)	33 (11.7)	249 (88.3)		72 (25.5)	210 (74.5)		50 (17.7)	232 (82.3)	
Education Level										
Low (SD/SMP)	26 (1.8)	7 (26.9)	19 (73.1)	0.002***	13 (50.0)	13 (50.0)	0.001	6 (23.1)	20 (76.9)	0.011***
Middle (SMA)	455 (31.2)	117 (25.7)	338 (74.3)		185 (40.7)	270 (59.3)	***	139 (30.5)	316 (69.5)	
High (S1/S2/S3)	977 (67.0)	174 (17.8)	803 (82.2)		306 (31.3)	671 (68.7)		226 (23.1)	751 (76.9)	
Have a family history of chronic diseases										
Yes	76.4 (52.4)	168 (22.0)	596 (78.0)	0.140	293 (38.4)	471 (61.6)	0.002**	212 (27.7)	552 (72.3)	0.040**
No	694 (47.6)	130 (18.7)	564 (81.3)		211 (30.4)	483 (69.6)		159 (22.9)	535 (77.1)	

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Variable	Total Sample n=1458 n(%)	Depression Yes n=298 n(%)	Depression No n=1160 n(%)	Depression p	Anxiety Yes n=504 n(%)	Anxiety No n=954 n(%)	Anxiety p	Stress Yes n=371 n(%)	Stress No n=371 n(%)	Stress p
Behavioral Characteristics: Follow the advice to stay at home										
Yes	1231 (84.4)	252 (20.5)	979 (79.5)	0.970	417 (33.9)	814 (66.1)	0.382	308 (25.0)	923 (75.0)	0.680
No, I have to go to work	223 (15.3)	45 (20.2)	178 (79.8)		85 (38.1)	138 (61.9)		62 (27.8)	161 (72.2)	
No, I am not afraid of Corona	4 (0.3)	1 (25.0)	3 (75.0)		2 (50.0)	2 (50.0)		1 (25.0)	3 (75.0)	
Apply coughing and sneezing etiquette										
Yes	1422 (97.5)	284 (20.0)	1138(80.0)	0.010**	491 (34.5)	931 (65.5)	0.984	363 (25.5)	1059(74.5)	0.798
No	36 (2.5)	14 (38.9)	22 (61.1)		13 (36.1)	23 (63.9)		8 (22.2)	28 (77.8)	
Wash hands with soap										
Yes	1441 (98.8)	289 (20.1)	1152(79.9)	0.002**	494 (34.3)	947 (65.7)	0.063	362 (25.1)	1079 (74.9)	0.019**
No	17 (1.2)	9 (52.9)	8 (47.1)		10 (58.8)	7 (41.2)		9 (52.9)	8 (47.1)	
Wash hands after coughing, sneezing or touching nose										
Yes	1201 (82.4)	221 (18.4)	980 (81.6)	<0.001	392 (32.6)	809 (67.4)	0.001**	281 (23.4)	920 (76.6)	<0.001
No	257 (17.6)	77 (30.0)	180 (70.0)	**	112 (43.6)	145 (56.4)		90 (35.0)	167 (65.0)	**
Wear cloth mask										
Yes	1356 (93.0)	263 (19.4)	1093(80.6)	0.001**	459 (33.8)	897 (66.2)	0.046*	336 (24.8)	1020(75.2)	0.044**
No	102 (7.0)	35 (34.3)	67 (65.7)		45 (44.1)	57 (55.9)		35 (34.3)	67 (65.7)	
Have a family infected with Covid-19										
Yes	121 (8.3)	21 (17.4)	100 (82.6)	0.002**	37 (30.6)	84 (69.4)	0.040*	29 (24.0)	92 (76.0)	0.022
No	1167 (80.0)	225 (19.3)	942 (80.7)		394 (33.8)	773 (66.2)		284 (24.3)	883 (75.7)	***
I do not know	170 (11.7)	52 (30.6)	118 (69.4)		73 (42.9)	97 (57.1)		58 (34.1)	112 (65.9)	
Have a family member who becomes ODP / PDP*										
Yes	404 (27.7)	83 (20.5)	321 (79.5)		138 (34.2)	266 (65.8)		99 (24.5)	305 (75.5)	0.035
No	860 (59.0)	163 (19.0)	697 (81.0)	0.050	281 (32.7)	579 (67.3)	0.013*	208 (24.2)	652 (75.8)	***
I do not know	194 (13.3)	52 (26.8)	142 (73.2)		85 (43.8)	109 (56.2)		64 (33.0)	130 (67.0)	

**ODP- Person Under Supervision; PDP- Patience Under Supervision*

*p< 0.05, *Mann-Whitney, ** Continuity Correction, *** Pearson Chi-square*

Table 2.
Multivariate logistic regression of respondent characteristics and mental health status in Indonesia (Depression, Anxiety, and Stress)

Variable	Depression			Anxiety			Stress		
	B	p	AOR (95% CI)	B	p	AOR (95% CI)	B	p	AOR (95% CI)
Age	0.021	0,116	1.021 (0,995-1.049)	0.042	<0.0001	1.043 (1.028-1.057)	0.038	<0,0001	1.039 (1.020-1.058)
Gender									
Male			**NA**	0.487	<0.0001	1.627 (1.259-2.103)	0.427	0,004	1.533 (1.150-2.044)
Female						Ref			Ref
Religion									
Buddhism									
Hinduism									
Islam									
Catholic			**NA**			**NA**			**NA**
Kong Hu Cu									
Protestant									
Others									
Marital Status									
Single	-0.350	0,239	0.705 (0.394-1,262)						
Divorced	-0.591	0,272	0.554 (0.193-1.589)			**NA**			**NA**
Married			Ref						
Education Level									
Low							0.986	0,08	2.682 (0.888-8.096)
Middle			**NA**			**NA**	-0.162	0,28	0.851 (0.634-1.141)
High									Ref
Occupation									
Employee	0.349	0,129	1.417 (0.903-2,223)				0.060	0,785	1.061 (0.692-1.629)
College student	0.142	0,517	1.153 (0.750-1.771)				0.085	0,692	1.089 (0.714-1.662)
Student	-0.023	0,949	0.977 (0.486-1.965)			**NA**	-0.381	0,312	0.683 (0.326-1.431)
Entrepreneur	0.630	0,077	1.877 (0.934-3.771)				0.076	0,811	1.079 (0.578-2.014)
Unemployed and retired			Ref						Ref

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Variable	Depression			Anxiety			Stress		
	B	p	AOR (95% CI)	B	p	AOR (95% CI)	B	p	AOR (95% CI)
Career Background									
Health sector	0.586	<0.0001	1.797 (1.336-2.418)	0.719	<0.0001	2.052 (1.624-2.593)	0.465	0,002	1.592 (1.193-2.125)
Non-health sector		Ref		Ref		Ref			
Monthly Personal Expense (in Rupiah									
<1 million									
1-2 million									
2-5 million			**NA**			**NA**			**NA**
5-10 million									
>10 million									
Have a family history of mental disorder									
Yes	-0.498	0,019	0.607 (0.401-0.921)			**NA**	-0.759	<0.0001	0.468 (0.319-0.687)
No			Ref						Ref
Have a history of chronic diseases									
Yes			**NA**			**NA**	0.600	0,019	0.549 (0.332-0.907)
No									Ref
Have a family history of chronic diseases									
Yes			**NA**	-0.343	0,003	0.709 (0.565-0.890)			***NA***
No						Ref			
Follow the advice to stay at home									
Yes									
No, I have to go to work			**NA**			**NA**			**NA**
No, I am not afraid of corona									
Apply coughing and sneezing etiquette									
Yes	0.546	0,144	1.727 (0.830-3.594)			**NA**			**NA**
No			Ref						

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Variable	Depression			Anxiety			Stress		
	B	p	AOR (95% CI)	B	p	AOR (95% CI)	B	p	AOR (95% CI)
Wash hands with soap									
Yes			**NA**			**NA**			**NA**
No									
Wash hands after coughing, sneezing, and touching nose									
Yes	0.386	0,02	1.472 (1.063-2.038)	0.323	0,027	1.381 (1.037-1.839)	0.441	0,004	1.555 (1.149-2.105)
No			Ref			Ref			Ref
Wear cloth mask									
Yes	0.515	0,026	1.674 (1.063-2.636)			**NA**			**NA**
No			Ref						
Have a family infected with Covid-19									
Yes	0.612	0,044	1.844 (1.017-3.342)				0.293	0,332	1.341 (0.741-2.425)
No	0.540	0,044	1.716 (1.184-2.488)			**NA**	0.331	0,123	1.392 (0.914-2.121)
I do not know			Ref						Ref
Have family member who become ODP/PDP									
Yes				0.441	0,017	1.555 (1.081-2.235)	0.346	0,115	1.413 (0.920-2.172)
No			**NA**	0.486	0,004	1.626 (1.166-2.266)	0.287	0,174	1.333 (0.881-2.016)
I do not know						Ref			Ref
R square			**0.083**			**0.094**			**0.089**

Note. NA: Not Available (variable excluded from model)

<0.05 (Tabel 1).

The results of multivariate analysis with multiple logistic regression showed that the risk factors associated with symptoms of depression during the Covid-19 pandemic were career background in the health sector (p<0.001, OR 1.797 (1,336-2,418), practicing health behaviors (washing hands after coughing, sneezing and touching the nose (p=0.02, OR 1.472 (1.063-2.038), and having a family member infected with Covid-19 (p=0.044, OR 1.844 (1.017-3.342). Furthermore, the risk factors that influence anxiety are age (p <0.001, OR 1.043 (1.028-1.057), gender (p <0.0001, OR 1.627 (1.259-2.103), career background in health (p <0.001, OR 2.052 (1.624-2.593), practicing health behaviors (washing hands after coughing, sneezing, and touching the nose) (p= 0.027, OR 1.381 (1.037-1.839), and no family became ODP/PDP (p=0.004, OR 1.626 (1.166-2.266). Risk factors associated with symptoms of stress during the Covid-19 pandemic are age (P < 0.0001, OR 1.039 (1.020-1.058), gender (p=0.004, OR (1.533 (1.150-2.044), low educational background (p=0.08, OR 2.682 (0.888-8.096), career background in health (p=0.002, OR 1.592 (1.193-2.125) and practicing health behaviors (washing hands after coughing, sneezing, and touching the nose) (p=0.004, OR 1.555 (1.149-2.105) (Table 2).

The R Square values for depression, anxiety, and stress are 0.083, 0.094, and 0.089, respectively, indicating that the variables in the model influence the incidence of depression, anxiety, and stress by 8.3%, 9.4%, and 8.9%, while the rest is influenced by other variables not included in the research model.

This study aims to analyze the determinants of the mental health condition of Indonesians during the Covid-19 pandemic. The results showed that the prevalence of mental health conditions in Indonesia was first nationally indicated by depression and anxiety. Our findings also revealed that depression and anxiety in Indonesia are three times higher than the previous year in the world, during the eruption of the disaster (Ritchie & Roser, 2018; Kementerian Kesehatan RI, 2018; Aryanata & Utami, 2019).

In the midst of a pandemic, sudden changes in society cause a person to quickly adapt to new conditions. Society is befuddled by new habits, causing the brain's stressor patterns to shift. Furthermore, social isolation, lack of interaction, and limited physical movement can be anxiety triggers. People believe the environment outside their homes is unsafe, and they are uneasy inside their homes (Putra, 2020). The Covid-19 pandemic has hampered interpersonal communication due to the implementation of policies such as self-isolation, lockdown, and social distancing. Individuals are required to interact less with one another as a result of this policy, and they are also obligated to protect themselves from becoming too close to their families due to the spread of viruses transmitted through droplets from the respiratory tract (Zhang et al., 2020). This will alter one's self-identity, which may increase the risk of depression, anxiety, stress, and emotional disturbances.

Meanwhile, our findings are comparable to those of meta-analyses from various countries (Luo et al., 2020; Guo et al., 2016). This study found the prevalence of moderate to extreme depression, anxiety, and stress, and was comparable to that of mental health disorders in Japan, China, the United Kingdom, and Bangladesh (Ueda et al., 2020; Wang et al., 2020; Pierce et al., 2020; Banna et al., 2020). The Covid-19 pandemic affects mental health not only in Indonesia but also in countries with better healthcare systems. The growing number of mental health disorders in various countries must be addressed immediately because they can have long-term consequences even if this pandemic lasts another year, as is predicted. As a result, it is critical to understand how to deal with mental health issues, particularly for those in the extreme categories, and this provides an opportunity for countries to collaborate to find solutions and strengthen resilience during a

pandemic.

According to the findings of this study, several sociodemographic characteristics such as age, marital status, education level, and career background can all have an impact on mental health statuses such as depression, anxiety, and stress. The average young age in this study was more likely to experience mental health problems during the pandemic. According to previous Riskesdas (basic health research) findings, mental disorders began to appear between the ages of 15 and 24 and are increasing with age (Indrayani & Wahudi, 2019; Annisa & Ifdil, 2016). Several uncertainties that emerged during the pandemic, such as changes in learning adaptation, layoffs, and financial problems as a result of the economy's negative effects, caused younger people to experience mental health problems (Ngadi et al., 2020; UNFPA & IFRC, 2020). Furthermore, the involvement of young adults in social media, particularly men who are more likely to have access to digital devices and the Internet, exposes them to more misinformation online, which can cause psychological stress (The Lancet, 2017; Lu et al., 2018; UNFPA & IFRC, 2020; Moudy et al., 2020). Meanwhile, for women, it is due to the concept of femininity and family responsibility, particularly during the implementation of the social restriction policy (Droogenbroeck et al., 2018; Wenham et al., 2020).

Meanwhile, in this study, marital status is associated with depression, anxiety, and stress, which is consistent with previous findings (Lee et al., 2015; Stein et al., 2017; Dong et al., 2018; Shi et al., 2020; Singh et al., 2020). Work-from-home policies and lockdown in some areas allow married respondents to spend more time with their family members, resulting in improved health and mental well-being and, as a result, higher perceptions of well-being (Singh et al., 2020). Meanwhile, for respondents who are not married or divorced, this policy causes social distancing because they are unable to gather with friends or family, leading to feelings of loneliness, depression, and anxiety.

When compared to those with a higher level of education, those with a lower level of education are more likely to experience stress twice during the pandemic. The level of education can influence a person's knowledge, and knowledge can influence attitudes and actions in preventing Covid-19 by 5 to 6.7 times (Linardi et al., 2021; Moudy et al., 2020). Respondents with a higher level of education are more knowledgeable about Covid-19 (Linardi et al., 2021). Individuals with a low level of education, on the other hand, struggle with a lack of acceptance and understanding of an object or material. This can affect their prevention behaviors and treatment, as well as knowledge of Covid-19 transmission routes (Kementerian Pemberdayaan Perempuan dan Perlindungan Anak dan Badan Pusat Statistik, 2018).

Although respondents with a health background are thought to have better knowledge, individuals who work in the health field may experience poor mental health conditions. Medical backgrounds are 1.5 to 2 times more likely than non-medical backgrounds to experience depression, anxiety, and stress during the pandemic (Zhu et al., 2020). People with medical backgrounds typically work in high-risk environments such as health care. There are risks of virus exposure, concerns about transmitting and caring for their loved ones, a lack of personal protective equipment (PPE), longer working hours, and involvement in emotional and ethical resource allocation decisions, all of which contribute to increased burnout, health concerns, and fear among people working in high-risk environments (Pfefferbaum & North, 2020; Brooks et al., 2018).

During the pandemic, respondents who engaged in health behaviors such as washing their hands after coughing, sneezing, and touching their noses were associated with symptoms of depression, anxiety, and stress. Washing hands after coughing, sneezing, or touching the nose increases the risk of depression, anxiety, and stress symptoms by 1.3 to 1.5 times. According to Masyah (2020), the anxiety and pressure that arose during the Covid-19 pandemic could have been

caused by several government preventive measures and policies, as well as respondents' perceptions such as fear of falling ill, risking being infected and infecting others, and general Covid-19 symptoms similar to other diseases that can be suspected as a Covid-19 infection. Changes in daily living habits caused by Covid-19 may heighten the perception of severity, resulting in an increase in symptoms that endanger mental health. The researchers discovered that respondents with moderate levels of anxiety used more preventive measures during the 2003 SARS-CoV epidemic (Ueda et al., 2020).

Participants with a family history of mental disorders and families with chronic diseases tend to have more symptoms of depression, stress, and anxiety. This is consistent with previous findings that, in addition to biological factors, a family history of chronic disease is associated with a vulnerable group at risk for complications, increasing psychiatric stress (Kementerian Kesehatan RI, 2018; Salari et al., 2020; Pradana & Casman, 2020). The Covid-19 pandemic causes uncertainty in a variety of situations, including psychological uncertainty, which leads to mental health disorders in respondents who have a medical history. Meanwhile, respondents who have or do not have family/friends/relatives who are infected with Covid-19 or who become ODP/PDP have the same risk of developing depression or anxiety disorders. Respondents who are aware that their inner circle is infected with Covid-19 and perceive a threat to the lives of those closest to them, as well as those who are concerned about being infected, quarantined, negatively stigmatized, and separated from loved ones, are more likely to experience poor mental health (Bromet et al., 2017; Tang et al., 2014; Brooks et al., 2018; Person et al., 2004).

This study has limitations, one of which is that the research design used is cross-sectional, with data collected at a specific time, making it impossible to distinguish a cause-and-effect relationship between exposure and disease. Furthermore, because sampling was done using convenience sampling techniques and online to avoid the transmission of Covid-19, there may be sample bias and an inability to reach respondents who do not use or are less active on the internet.

CONCLUSION

The Covid-19 pandemic has had a negative impact on individual's mental health in Indonesia. Respondents with a background in the health sector and respondents who engage in health behaviors (washing hands after coughing, sneezing, and touching the nose) are factors that have the potential to cause symptoms of depression, anxiety, and stress during the Covid-19 pandemic. The government is expected to carry out effective risk communication, maximize Covid-19 response policies in Indonesia, and activate mental health services by involving the smallest community in their environment so that mental health prevention can be resolved immediately.

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