

## THE DEPRESSIVE AND ANXIETY SYMPTOMS AND PSYCHOLOGICAL DISTRESS AMONG INDONESIAN ADULTS DURING COVID-19 PANDEMIC

Sisilia Orlin<sup>1</sup>, Felix Wijovi<sup>1</sup>, Nadya Nathalia Evangelista<sup>1</sup>, Stella Angelina<sup>1</sup>, Devina Adella Halim<sup>1</sup>, Audrey Hamdoyo<sup>1</sup>, Timotius Ivan Hariyanto<sup>1</sup>, Darien Alfa Cipta<sup>1</sup>, Andree Kurniawan<sup>2\*</sup>

<sup>1</sup>Faculty of Medicine, Pelita Harapan University, Tangerang, Banten, Indonesia

<sup>2</sup>Department of Internal Medicine, Faculty of Medicine, Pelita Harapan University, Tangerang, Banten, Indonesia

Correspondence: Andree Kurniawan

Email: andree.kurniawan@uph.edu Phone: +622154010130

### ABSTRACT

**Introduction:** COVID-19 outbreak has caused changes around the world with many policies made to stop the spread of this virus since it started in 2019. Indonesia with the overall highest positive cases in South-East Asia has been challenged with prolonged restriction policy issued from early 2020 until now due to continuous increase of cases. This study aims to know the mental health of Indonesia citizens during early quarantine before it changed into restriction. **Method:** Indonesian version DASS-21 questionnaire was used in this cross-sectional study to assess Indonesian adults aged > 25 years old using an online platform from 22<sup>nd</sup> April, 2020 to 28<sup>th</sup> May, 2020, then analyzed using T-test and one-way ANOVA. **Result:** All participants have no depression and stress symptoms that meet the threshold for probable depression according to the DASS-21 instrument. On the other hand, 26.3% participants showed anxiety symptom with severity classified into mild (16.0%), moderate (8.9%), and severe (0.4%). **Conclusion:** This study also found relationship of depression, anxiety, and stress characteristic with gender, age marital status, and income in adults during pandemic. Where in this study shows male, younger age, unmarried status, and lower income people have higher scale of depression, anxiety, and stress characteristic. This finding may help Indonesia's government and citizens to assess the restriction to mental health of Indonesian adults for further effective policy implementation.

**Keywords:** Mental health, Indonesian adults, Depression Anxiety Stress Scale 21 (DASS-21), COVID-19 Pandemic

### INTRODUCTION

COVID-19 was first found in Wuhan City, Hubei Province of China on 31st December, 2019 where a few clusters of pneumonia cases were reported. On 30th January, 2020, the WHO emergency committee reached consensus on the COVID-19 outbreak as a public health emergency of international concern (PHEIC) (Lai et al., 2020). Transmission of COVID-19 by droplet is supported by many scientists because of lack of evidence for airborne transmission and high infectivity with incubation period up to two weeks (Wu, Chen and Chan, 2020). As of 15<sup>th</sup> January, 2021, Indonesia has a total of 882,418 positive cases of COVID-19 with 25,484 deaths (COVID-19, 2020). The first

Indonesia COVID-19 confirmed case happened on 2nd March, 2020 and followed with a rapid increase, especially in Java province. In early March, physical distancing was promoted to reduce transmission of COVID-19. The governor of Jakarta declared a state of emergency and regulated large scale social restriction from 31st March, 2020 until early June, which closed most businesses and suspension of large gatherings (World Health Organization Indonesia, 2020).

The restriction policy made by the government certainly altered the usual activities of the public, thus the COVID-19 pandemic as a public health emergency not only affected health and safety but also wellbeing, which included feeling of insecurity, confusion, emotional isolation,

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and stigmatization (Pfefferbaum and North, 2020). People that might be vulnerable to psychological problems due to the pandemic are children, adolescents, elderly, jobless or homeless, suspected/ diagnosed patients with COVID-19, health workers, and those with pre-existing mental conditions (Das, 2020). Stressors might happen previously, during, or even after quarantine/ restriction. During quarantine, stress might be caused by duration, fear of infection, inadequate supplies, and lack of information. After quarantine stressor might also happen due to finance and stigmatization (Brooks et al., 2020).

The World Health Organization and World Health Assembly saw the importance of mental health, thus, in 2013, they adopted a Comprehensive Mental Health Action Plan. (World Health Organisation, 2017). Depression, anxiety, and stress often affect population worldwide, especially in such sudden events like a pandemic which cause a heavy burden to society. Depression is defined as a disorder characterized by melancholic feeling of unhappiness, grief, sadness, and despair. Anxiety is a disorder characterized by feelings of anxiety, fear, apprehension of danger, and often accompanied with physical symptoms of restlessness, tension, tachycardia, or dyspnea. Stress is characterized by significant dissociative states seen after overwhelming trauma (American Psychiatric Association, 2013). The World Health Organization saw the importance of a planned response to mental health disorder associated with disability, premature mortality, and which may impact their families, community, or society (World Health Organisation, 2017).

Previous epidemic/ endemic has been associated with 30% increase of suicide because of economic issues in 2003 and stigmatization to health workers or infected patients in 2014 and 2018 (Torales et al., 2020). The strategy to prevent the same thing happening is by improving the monitoring or reporting rates of mental health problems and finding out the causes

of those problem for a long-term strategy (Holmes et al., 2020). Lack of knowledge about COVID-19 prevention in Indonesia population also proves the urgency to understand the long-term effect of the COVID-19 pandemic, including mental health (Adella Halim et al., 2020; Pfefferbaum and North, 2020).

Similar studies have been done before; however, in Indonesia study that measures the score of depression, anxiety, and stress symptoms specifically for adults during the COVID-19 pandemic is not much done in the early period of the pandemic in Indonesia. Thus, this study is necessary to monitor and increase reported depression, anxiety, and stress cases of Indonesian general population during the COVID-19 pandemic. The aim of this study is to assess or measure the depression, anxiety, and associated psychological distress of Indonesian people during the COVID 19 pandemic and associated demographic factors. The demographic factors being studied in our study are: gender, age, marital status, education level, work from home, income changes and range during pandemic.

## **METHODS**

### **Sample and Procedure**

This cross-sectional study was done in Indonesia from 22<sup>nd</sup> April, 2020 to 28<sup>th</sup> May, 2020 using an online platform. The data were advertised by using e-posters that were shared to various social media and links of e-form attached to it. This study also has ethical approval with number 141/K-LKJ/ETIK/IV/2020 obtained from Pelita Harapan University, Indonesia ethics board.

The criteria for this study are adult people aged more than 25 years old and who agreed to join this study by signing e-informed consent. The authors set starting age from 26 until 65 based on the World Health Organization definition of adults above 19 years old and below 65 years old. In addition, as the population target is Indonesian, authors followed the statistical

trend of undergraduate study completion at age 23-25 years old in Indonesia, thus age was categorized above 25 years old to reduce the bias of having students. Data with adults working as health workers or studying as medical students are also excluded to avoid bias results..

Participants were given questionnaire online with a few sections, starting with explanation of purpose, informed consent, participant identity, demographic data, and DASS-21 questionnaire. During the informed consent and identity section, participants who are not eligible were directly directed to submit section and not required to continue with the study. All participants' demographic data regarding their gender, age, marital status, education level, ability to work from home during the pandemic, income changes during the pandemic, and income range normally before the pandemic were also included in this study. A total of 269 data was collected after inclusion and exclusion criteria processing was done

Income changes during the pandemic are categorized into: same, decrease, no steady income, and no income at all. Decrease option meant for the full-time workers still tied with a contract and getting paid less because of the pandemic. No steady income is similar to freelancers where before and during the pandemic they have no full-time job. The income range of participants is divided into: above Rp10.000.000 (690USD), Rp5.000.000-Rp10.000.000 (345-690USD), below Rp5.000.000 (345USD), and no income. This range is based on the minimum wage in the capital city as around Rp4.500.000 (310USD).

### **Instruments**

Depression Anxiety Stress Scale 21 (DASS-21) Questionnaires were used to quantitatively measure and distinguish the three axes of emotional syndrome including depression, anxiety, and stress. Depression scales measure hopelessness, low self-esteem, and low positive affection. Anxiety

scales evaluate autonomic arousal and situational anxiety. Stress scales measure tension, negative affection, and agitation.(González-Rivera, Pagán-Torres and Pérez-Torres, 2020)

The Indonesia version of DASS-21 Questionnaire validation given to college students by Kinanthi has Cronbach's alpha 0.912 overall with reliability per dimension 0.853, 0.777, and 0.905, respectively, to depression, anxiety, and stress symptoms. The results are classified into five, which are normal, mild, moderate, severe, and extremely severe. Depression category scores are: 0 – 4 for normal, 5 – 6 for mild, 7 – 10 for moderate, 11 – 13 for severe, and 14 above for extremely severe. Anxiety category score: 0 – 3 for normal, 4 – 5 for mild, 6 – 7 for moderate, 8 – 9 for severe, and 10 above for extremely severe. Stress category score: 0 – 7 for normal, 8 – 9 for mild, 10 – 12 for moderate, 13 – 16 for severe, and 17 above for extremely severe. (Kinanthi et al., 2020)

### **Statistical analysis**

Collected data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 25.0. First data were categorized into some categories that had been set before, then the data were cleaned from exclusion criteria. Then descriptive analysis was done to know the demographic of data including sex, age, marital status, education level, work from home, and income.

The DASS-21 variables were presented with mean and standard deviation of scale from each domain depression, anxiety, and scale. In addition, domains having abnormal result were further classified into class of severity of respective psychological symptoms. The classification result was then presented in percentage.

Analysis result mean of DASS-21 was then carried out by using T-test and one-way ANOVA to each variable. Demographic data including gender, age, marital status, education level, ability to work from home during the pandemic,

income changes, and income range were each analysed with respect to domain scale mean of depression, anxiety, and stress from DASS-21. Each domain was then presented independently with each variable categories and the association result.

## RESULTS

### Result of DASS – 21

The Indonesia version of DASS-21 questionnaire shows 100% respondents do

not have any symptoms of depression and stress. The mean of depression is  $3.03 \pm 1.278$ , while the mean of stress is  $4.67 \pm 1.840$  for Indonesia's adult population. The mean for overall anxiety is  $6.22 \pm 2.294$  which score indicated moderate sign of anxiety. Respondents in this study also have various anxiety severity categories where 74.7% show normal results, 16.0% show mild symptoms, 8.9% show moderate symptoms, and 0.4% show severe symptoms.

**Table 1.** DASS – 21 result in Indonesia population (N= 269)

DASS-21	Overall Mean	SD	Categories	N	Percentage (%)
Depression	3.03	1.278	Normal	269	100
Anxiety	6.22	2.294	Normal	201	74.7
			Mild	43	16.0
			Moderate	24	8.9
			Severe	1	0.4
Stress	4.67	1.840	Normal	269	100

### Description of the sample

A total of 269 Indonesian adult population aged between 26-65 years old was collected with a mean age of  $38.12 \pm 10$ . Participants were also classified with latest education, marital status, workplace during pandemic, income range, and the income changes during pandemic. The majority of the participants are male (58.4%), aged 26-35 years old (49.1%), married (56.9%), and bachelors (50.6%).

In general, male and female distribution does not differ too much with percentage 58.4% male and 41.6% female. Age is classified into four categories, which are 49.1% aged 25-35, 22.3% aged 36-45, 31.9% aged 46-55, and 6.7% aged 56-65. This classification is based on WHO range for adult age in addition to data of normal graduated age in Indonesia. Marital status in this study is classified into 38.3% unmarried, 56.9% married, and 4.8% divorced.

The education level of subjects is classified into six categories including elementary, junior high school, high school, diploma, bachelor, and master degree. The participants' last education in this study is categorized into 0.7% elementary level, 1.9% junior high school level, 24.5% high school level, 12.6% diploma level, 50.6% bachelor level, and 9.7% master degree level.

This study also includes the work change of respondents during the COVID-19 pandemic, which is important because of socioeconomic factors that may influence the occurrence of depression, anxiety, or stress. Most respondents are able to work from home (39.8%); however, this number does not greatly differ from respondents that are only able to work partially at home (36.4%). Most respondents also have decreased income due to COVID-19 (39.0%) and range of income less than Rp5.000.000 (33.8%).

**Table 2.** Demographic distribution of participants

Variable	Distribution	Frequency	Percentage (%)
Gender	Male	157	58.4
	Female	112	41.6
Age	26-35	132	49.1
	36-45	60	22.3
	46-55	59	31.9
	56-65	18	6.7
Marital status	Unmarried	103	38.3
	Married	153	56.9
	divorced	13	4.8
Education	Elementary	2	0.7
	Junior high school	5	1.9
	High school	66	24.5
	Diploma	34	12.6
	Bachelor	136	50.6
	Master	26	9.7
Work from home	Yes	107	39.8
	Partially	98	36.4
	No	34	12.6
	Unemployed	30	11.2
Income changes during pandemic	Same	94	35.0
	Decrease	105	39.0
	No steady income	29	10.8
	No income at all	41	15.2
Income range	> Rp10.000.000	82	30.5
	Rp5.000.000-Rp 0.000.000	57	21.2
	< Rp5.000.000	91	33.8
	No income	39	14.5

The majority population in Indonesia have different abilities to work from home in accordance to their respective job and law of restriction which allows essential sectors to keep going, while the rest must be stopped. Thus, this study categorized work from home into able, partially, unable, and unemployed where the distribution ranged 39.8% able to work from home, 36.4% partially work from home, 12.6% unable to work from home, and 11.2% unemployed during the COVID-19 pandemic.

The income change during the pandemic is an important variable as psychological effect is mostly contributed from financial problems; thus, this study especially asked the question regarding this issue. This study found that 35.0% of

participants have the same income before and during pandemic, 39.0% of participants' income reduced during the pandemic, 10.8 participants have no steady income, and 15.2% have no income at all during the pandemic.

This study also categorized the income range into more than 10 million rupiah, 5 to 10 million rupiah, less than 5 million rupiah, and no income at all. These categories are based on the minimum wage based on government issues in Jakarta as the capital city of Indonesia which is 5 million rupiah each month; this reference is taken as this study centered in Java as most highly populated region in Indonesia. The participants' income ranges with 30.5% earn more than 10 million rupiah each month, 21.2% earn 5 to 10 million rupiah

each month, 33.8% earn less than 5 million rupiah each month, and 14.5% earn no income at all.

### Analysis of the variable and DASS – 21

Analysis results of the depression domain all showed normal value within every variable. However, males have higher results (mean:3.24±1.375) compared to females (mean:2.73±1.065) with p-value 0.003, thus there is a significant difference between depression value in each gender. Between the age group, age 26-35 indicates the highest result in the depression domain (mean:3.30±1.348) and p-value of 0.010. From marital status, depression results were found highest in unmarried adults (mean:3.35±1.419) with p-value 0.001. For

the education level, results were found highest in high school graduated adults (mean:3.33±1.439) with p-value 0.231.

The analysis of DASS 21 depression found highest in respondents that were unable to work from home (mean:3.47±1.522) compared to people that were able or partially to work from home in addition to unemployed with p-value 0.121. Depressive symptoms were found most elevated in adults who have no steady income in this pandemic (mean:3.21±1.424) compared to other options of income changes during the pandemic with p-value of 0.760. Respondents with income below Rp5.000.000 showed highest DASS 21-depression result (mean:3.57±1.572) and p-value of 0.000 .

**Table 3.** Analysis of Variables DASS-21 for Depression

Variable	Distribution	Depression		
		μ	SD	P
Gender	Male	3.24	1.375	<b>0.003</b>
	Female	2.73	1.065	
Age	26-35	3.30	1.348	<b>0.010</b>
	36-45	2.76	1.233	
	46-55	2.82	1.151	
	56-65	2.71	0.985	
Marital status	Unmarried	3.35	1.419	<b>0.001</b>
	Married	2.88	1.172	
	divorced	2.31	0.480	
Education	Elementary	2.00	0.000	0.231
	Junior HS	3.20	1.095	
	High school	3.33	1.439	
	Diploma	2.88	1.094	
	Bachelor	2.98	1.291	
	Master	2.77	0.951	
Work from home	Yes	2.87	1.229	0.121
	Partially	3.06	1.200	
	No	3.47	1.522	
	Unemployed	3.00	1.339	
Income changes during pandemic	Same	2.97	1.150	0.760
	Decrease	3.08	1.313	
	Not steady	3.21	1.424	
	None at all	2.93	1.385	
Income range (million rupiah)	>10	2.59	0.929	<b>0.000</b>
	5 - 10	3.00	0.982	
	<5	3.57	1.572	
	No income	2.74	1.093	

Analysis of results of anxiety domain in males have higher results (mean:6.67±2.513) compared to females (mean:5.59±1.773) with p-value 0.000, which means there is a significant difference between DASS 21-anxiety value score in each gender. Between the age group, age 26-35 showed the highest anxiety result (mean:6.74±2.417) and p-value of 0.003. From marital status, anxiety result was found highest in unmarried adults (mean:6.93±2.410) with p-value 0.000. From education level, the highest anxiety result was found in junior high school graduated adults (mean:7.40±2.608) with p-

value 0.166.

The analysis of DASS 21-anxiety showed the highest result in adults that were unable to work from home (mean:6.68±2.306) compared to people that were able or partially to work from home or unemployed with p-value 0.168. The result of anxiety was found highest in adults who have no steady income in this pandemic (mean:6.97±1.424) compared to other options of income changes during the pandemic with p-value of 0.313. Adults with income <Rp5.000.000 show highest DASS 21-anxiety result (mean:7.18±2.747) and p-value of 0.000.

**Table 4.** Analysis of Variables DASS-21 for Anxiety

Variable	Distribution	Anxiety		
		μ	SD	P
Gender	Male	6.67	2.513	<b>0.000</b>
	Female	5.59	1.773	
Age	26-35	6.74	2.417	<b>0.003</b>
	36-45	5.83	2.079	
	46-55	5.77	2.044	
	56-65	5.29	1.929	
Marital status	Unmarried	6.93	2.410	<b>0.000</b>
	Married	5.80	2.150	
	divorced	5.54	1.561	
Education	Elementary	4.00	0.000	0.166
	Junior HS	7.40	2.608	
	High school	6.64	2.298	
	Diploma	6.18	2.110	
	Bachelor	6.15	2.365	
	Master	5.54	1.964	
Work from home	Yes	5.86	2.329	0.168
	Partially	6.46	2.235	
	No	6.68	2.306	
	Unemployed	6.20	2.265	
Income changes during pandemic	Same	6.06	1.150	0.313
	Decrease	6.16	1.313	
	Not steady	6.97	1.424	
	None at all	6.20	1.385	
Income range (million rupiah)	>10	5.35	1.666	<b>0.000</b>
	5 - 10	6.11	1.760	
	<5	7.18	2.747	
	No income	5.97	2.206	

Analysis of results of stress showed normal categories in all variables; however, quantitatively it showed some difference within variables. Males have higher results of DASS 21-stress (mean:4.96±2.011) compared to females (mean:4.28±1.490) with p-value 0.001. Between the age group, age 26-35 showed the highest stress result (mean:5.11±2.051) and p-value of 0.002. From marital status, stress result was found highest in unmarried adults (mean:5.18±2.051) with p-value 0.000. From the education level, the highest stress result was found in high school graduated adults (mean:4.95±1.827) with p-value

0.453 but statistically not significant.

Adults that were unable to work from home showed the highest DASS 21-stress results (mean:4.97±1.915) compared to people that were able or partially to work from home or unemployed with p-value 0.459. The result of stress was also found highest in adults that have no steady income in this pandemic (mean:5.03±2.009) compared to other options of income changes during the pandemic with p-value of 0.679. Adults with income <Rp5.000.000 show highest DASS 21-stress result (mean:5.27±2.206) and p-value of 0.000.

**Table 4.** Analysis of Variables DASS-21 for Stress

Variable	Distribution	Stress		
		$\mu$	SD	P
Gender	Male	4.96	2.011	<b>0.001</b>
	Female	4.28	1.490	
Age	26-35	5.11	2.051	<b>0.002</b>
	36-45	4.22	1.511	
	46-55	4.42	1.535	
	56-65	3.94	1.391	
Marital status	Unmarried	5.18	2.052	<b>0.000</b>
	Married	4.43	1.657	
	divorced	3.46	0.660	
Education	Elementary	3.00	0.000	0.453
	Junior HS	5.40	2.302	
	High school	4.95	1.827	
	Diploma	4.68	1.590	
	Bachelor	4.57	1.876	
	Master	4.46	1.944	
Work from home	Yes	4.47	1.920	0.459
	Partially	4.79	1.818	
	No	4.97	1.915	
	Unemployed	4.70	1.512	
Income changes during pandemic	Same	4.55	1.597	0.679
	Decrease	4.69	1.963	
	Not steady	5.03	2.009	
	None at all	4.66	1.944	
Income range (million rupiah)	>10	4.00	1.457	<b>0.000</b>
	5 - 10	4.84	1.521	
	<5	5.27	2.206	
	No income	4.44	1.569	



## DISCUSSION

This is among the earliest studies which evaluate depressive and anxiety symptoms and psychological distress, specifically for adults during the end phase of COVID-19 large scale social restriction in Indonesia. This means we can know the characteristics of Indonesian adults near the end of restriction after one month. The data are obtained mostly from Java citizens where most COVID-19 positive cases are found; it can represent the overall Indonesia population characteristics during the pandemic.

The result showed that all Indonesia's population that participated in this study have a normal score of depression and stress; however, about 26.3% showed anxiety symptoms. This finding differs from study by Argo, Kurniawan et al., (2021) which found depression in Indonesia adults during COVID-19. The participants in this study might not have any depression or stress symptoms because data that we collected happened during almost the end of large scale restriction. During the government restriction, most economic stores were closed and coincidentally fell on Eid Mubarak holiday, so most population had already returned to their hometown early and spent the restriction with their family. Regular contact with loved ones is suggested by the WHO to cope with the pandemic healthily, thus staying with family gives a positive impact for mental health and might be the reason of low score for both depression and stress symptoms in this study. In addition, as study was done during the early period of COVID-19 in Indonesia, it is possible that people had not yet been impacted greatly to cause depression or stress (World Health Organization, 2020).

The positive finding of anxiety symptoms is in line with Jungmann and Witthöft (202) and Xiong et al. (2020). Jungmann and Witthöft (2020) explain anxiety can be caused by cyberchondria about pandemic information and adaptive

emotion regulation of the general population regarding the plausibility of getting disease serves as risk factor of anxiety. Although this study did not measure the communication and social aspect of participants, as this study was taken at the early period of COVID-19 in Indonesia, it is reported that the news and knowledge regarding it is still limited. Study by Anindyajati and Ahmad (2020) explain that inaccessible information, lack of social connection, unsupportive environment, and lack of surveillance can likely contribute as anxiety trigger (Ahmad and Murad, 2020; Anindyajati et al., 2021).

Previous study by Argo et al., Mazza et al. and Verma and Mishra shows different results regarding gender wherein, females tend to have higher risk of depression, anxiety, and stress (Argo et al., 2021; Mazza et al., 2020; Verma and Mishra, 2020). In this study, however, we found that males have higher risk of getting depression, anxiety, and stress. This might be explained by males have higher risk of getting psychological issues as they have responsibility as head of family. In Indonesia, the majority of families only have one income source from the male, as females mostly choose to become a housewife. This statement coincides with data by AIPEG and Monash University which presented Indonesia's women labor participation as relatively low compared to men with a ratio of 2:3 (AIPEG and Monash University, 2017).

The result also showed that the population aged 26-35 and unmarried have a higher score value of depression, anxiety, and stress. Study by Serafini et al. (2020) also shows younger ages have a higher tendency of getting depressed, anxious, and stressed, although we found differences in the study population starting at 18 years old. Our study also coincides with study by Argo et al. (2021) which found that adult population in Indonesia is 4.6 times likely to have psychological symptoms like depression, anxiety, and stress compared to adolescents. This can be explained by

Indonesia's prevalence of active worker population within age 26 to 35. In addition, this starting age is mostly fresh graduates, which might cause sudden changes of the pandemic situation to impact their life to start their profession. Emerging adulthood or younger adults might have higher tendency with psychological issues because it is a transitional age from young adulthood to middle adulthood where many changes should be happening in their life, for example, starting a career, marriage, family, and many others (Wood et al., 2018).

Adults with income below Rp5.000.000 also had a higher score of depression, anxiety, and stress. This result is also similar to Serafini et al.'s (2020) previous study which shows correlation of less income with depression, anxiety, and stress as economic issues are a big contributor to psychological problems. We also found the group who have no income scored better anxiety symptoms than adults who have income below Rp5.000.000. It is possible that the group which has no income in our studies are those who are dependent on another person or family member for their living and personally have less concern about financial issues, at least for the relatively short-term social restriction. This study is also in line with findings by Ettman et al. (2020) which explained people who used to have income but less have greater risk of having depression as they are more stressor exposure with many political and economic changes happening while being unprepared for the COVID-19 pandemic.

This study shows no significant relationship between education level and DASS-21 score. This result is similar to the Verma and Mishra (2020) study that shows no relationship between education level and symptoms of depression, anxiety, and stress. For this study, that all three scores show no significant difference might be explained because the information about COVID-19 has been disseminated among the population regardless the education group. To our knowledge, the government has

been using several media platforms for this purpose, including social media. This in line with the fact of high smartphone penetration in Indonesia (Marius and Pinontoan, 2014).

This study failed to show the relationship between work from home and DASS-21 score. This finding is different compared to study by Maaza et al. (2020), where having to go out to work has significant differences with symptoms of depression, anxiety, and stress. Although no relationship was found, this study showed slightly higher scores for people that were unable to work from home. This is possible because their safety is at risk when they have to go work outside where there is a possibility of meeting others who might be a carrier of the virus (Li et al., 2020).

There is also no significant difference for income change and DASS 21 score. This result cannot be compared with other studies because there was no study found categorizing the changes of income during the pandemic. In this study, adults that have no steady income show a higher score of DASS-21 which might due to uncertainty in fulfilling daily needs, where they need to survive this pandemic without knowing when it will end. Another study explains unsteady paid workers have higher concern due to inability to plan the future where they have to worry about payday and bill payment due date (Gross, Musgrave and Janciute, 2018).

The limitation of this study is because it uses an online platform; this means we cannot reach remote populations that have no access to the internet. Further study to improve this finding needs to be done by increasing the number of participants, more controlled distribution, and follow-up following certain events. In addition, participants' history of depressive, anxiety symptoms and psychological distress also need to be taken into account. Further studies are also warranted to elaborate factors contributing to higher depression, anxiety, and stress level among

the groups with less income, unmarried, and younger adult.

## CONCLUSION

In conclusion, that Indonesia's adult population has no depression and stress might be related to the fact the restriction fell near the holiday period from April to May. In addition, the score is relatively normal because adults mostly spend their holiday with family and do activity together. However, 26.3% showed symptoms of mild, moderate, and severe anxiety due to facing a disease that is easily transmitted and has no vaccine yet. This study also found there is a relationship between gender, age, marital status, and income range with depression, anxiety, and stress characteristic in adults during pandemic. Adult depressive, anxiety symptoms and psychological distress are mostly affected by the economic level, thus the government played a crucial role in this challenging pandemic that not only faced health issues but also economic issues that might correlate with one another.

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