# DEPRESSION, ANXIETY AND STRESS LEVEL AMONG LOW-INCOME FAMILY DURING COVID-19 PANDEMIC IN MALAYSIA

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# ABSTRACT

In January 2020, a new coronavirus epidemic began in Wuhan, China, and now is spreading globally as a pandemic in March 2020. To date, about 123,498 million cases have been reported worldwide and about 2.71 million deaths were reported. This newly discovered pandemic has majorly impacted many things such as tourism, the economy, and others. Because of this, low-income households (also known as B40) seem to be affected. Through a survey conducted online in the state of Pahang, Malaysia, this study aims to examine the level of depression, anxiety, and stress faced by B40 households. The study extracted data from 128 respondents (N=128) from B40 households around the state by using the DASS-21 online form. The result of the study showed that 31% respondents had moderate depression, 40% had severe depression, and 22% had extremely severe depression. Moreover, 15% respondents had moderate anxiety, 16% had severe anxiety, and 68% had extremely severe anxiety. The result also showed that 31% respondents had moderate stress, 36% had severe stress, and 18% had extremely severe stress. All scores were tabulated from the administration of the Depression, Stress, and Anxiety Scale (DASS-21) inventory. The result showed that the government sector and self-employed groups differed slightly at p < 0.051. Regardless of the employment sector within B40 respondents, this study showed that they are prone to have mental health issues especially depression, anxiety, and stress. The limitation of this study is the sample size. So, it is advisable for future studies to increase the sample size so that the data will have a significant value.

Keywords: Anxiety, COVID-19, Depression, Low-Income Family, Stress, Malaysia

## **INTRODUCTION**

Malaysia is currently heading towards a developed country with high income that will attract more investors outside Malaysia. As the COVID-19 pandemic also hits Malaysia and worsens its spread globally, Malaysia is one of the countries that have been affected a lot by this current pandemic. COVID-19 or coronavirus is a newly discovered coronavirus that causes an infectious disease which results in a majority of people infected by this virus will have mild to moderate respiratory symptoms (WHO, 2019). One of the most infected sectors is Malaysia's economic sector. The spread of the COVID-19 virus decreases labour supply and output while lockdowns, company closures, and social isolation disrupt the economy globally (Chudik, 2020). As we can see, lots of people lose their job because of this pandemic, especially citizen that has been classified in B40 which classifications are based on their household income.

B40, M40, and T20 are household groups that exist in the household income distribution structure in Malaysia. According to the Department of Statistics Malaysia (2020), B40 is a household income under RM4,360, M40 is a household income between RM4,360 to RM9,619, and T20 is a household group whose income exceeds RM9,619. While B40 group in Pahang has been classified into four groups which are B1, B2, B3, and B4, these groups are particularly

vulnerable and at high risk when it comes to economic pressure in a country (Zarinah et al., 2018). Hence, the government of Malaysia has introduced economic assistance to help Malaysians, especially for the B40 household group so that they can survive during this economic turmoil such as Bantuan Prihatin Nasional (Husain, 2020).

Based on previous studies, economic instability has a positive relationship to depression (Siefert et al., 2000). This is due to individual concerns about the financial level, unemployment when being fired and the future of the family which disrupt the emotional balance among low-income families (Ladwig et al., 2001). Lower socioeconomic status is related to lower educational achievement, unemployment, and financial debt which are linked to a higher incidence of mental illness such as depression (Chang et al., 2021; Ross et al., 2020). Basically, the rate of depression, anxiety, or stress slightly higher in low socioeconomic status based on previous research (Ibrahim et al., 2019). Lockdown or movement control order has slightly given some effect to depression, anxiety, and stress rate but the recorded number of COVID-19 cases in the low-income country does not accurately represent the pandemic's true scope (Aung et al., 2021). But generally, the COVID-19 pandemic really gives a big impact on society as mentioned in (Wang et al., 2021) high unemployment, declining household income, rising costs, and disrupted student learning were some of the negative social and economic effects. Low individual income was linked to more psychological distress in general (Chan et al., 2019). The objectives of this study were to:

- a) Examine the level of depression, anxiety, and stress among B40 households in the state of Pahang, Malaysia.
- b) determine the level of depression in B40 households among public, private, and self-employed workers in the state of Pahang, Malaysia.

#### **METHODS**

A survey study was conducted on 128 respondents (n=128) from the state of Pahang, Malaysia which includes 11 districts. This study was also conducted online by using Google form that has two sections, Section A and Section B. Section A includes demographic data such as educational level, job scopes, households' incomes, number of family members, lifestyles, religious practices, and family relationship while Section B is the Depression, Stress, and Anxiety Scale (DASS-21) form. The link was distributed to local leaders by using social media platforms such as Facebook, Telegram, and others. The data was distributed and collected within one month. In other to evaluate depression, anxiety, and stress level among respondents, the data was categorized into three levels, low, medium, and high. For descriptive analysis, the data was computed by looking at mean, standard deviation, and percentage. Meanwhile, for inferential analysis, one-way ANOVA was used to explore significant levels between these aspects by using Statistical Package for the Social Sciences (SPSS) version 23.

#### RESULTS

Table 1 shows percentages of depression, anxiety, and stress among low-income families during COVID-19 pandemic, based on DASS-21. Firstly, the analysis showed among all respondents, 31% had moderate, and 40% had severe depression and 22% had extremely severe depression. Then, 15% had moderate, and 16% had had severe and 68% had extremely severe anxiety. In addition, 31% had moderate, and 36% had severe stress and 18% had extremely severe stress scores based on the DASS-21 inventory. From the data, it shows that among B40 respondents had severe levels of depression and stress (40% and 36% respectively) and for anxiety; the data shows about 68% of respondents faced extremely severe.

Table 1 PERCENTAGES OF DEPRESSION, ANXIETY AND STRESS AMONG LOW-INCOME FAMILY DURING COVID-19 PANDEMIC IN PAHANG, MALAYSIA						
Items Scale Percentage						
Depression	Moderate	31				
	Severe	40				
	Extremely Severe	22				
Anxiety	Moderate	15				
	Severe	16				
	Extremely Severe	68				
Stress	Moderate	31				
	Severe	36				
	Extremely Severe	18				

Table 2 shows mean and standard deviation of depression among low-income family during COVID-19 pandemic, based on DASS-21. For this survey, about 30 respondents currently working for the government sector, 70 respondents are from the private sector and self-employed are 28 of the total respondents. The mean for those three sectors is 3.6, 3.7, and 4.1 respectively, standard deviation showed 0.10 for the government sector, 0.9 for the private sector, and 0.8 for self-employed. Analysis showed that self-employed respondents had experienced the highest depression compared to respondents who were employed for government and private sectors.

Table 2 MEAN AND STANDARD DEVIATION OF DEPRESSION AMONG LOW-INCOME FAMILY DURING COVID-19 PANDEMIC IN PAHANG, MALAYSIA				
	Ν	Mean	SD	
Government Sector	30	3.6	0.1	
Private Sector	70	3.7	0.9	
Self-Employed	28	4.1	0.8	

Table 3 shows one-way ANOVA of depression among low-income family during COVID-19 pandemic, based on DASS21. Results show that there was a significant difference effect of depression among low-income families during MCO COVID 19 at the p<0.05 level p=0.027 0.047.

Table 3 ONE-WAY ANOVA OF DEPRESSION AMONG LOW- INCOME FAMILY DURING COVID-19 PANDEMIC IN PAHANG, MALAYSIA					
	Sum of Squares	DF	Mean Square	F	Sig.
Between groups	4.747	2	2.373		
Within groups	94.745	125	0.758	3.131	0.047
Totals	99.492	127			

Table 4 shows multiple comparisons of depression (according to working sector using Tukey Test) among low-income family during COVID-19 pandemic, based on DASS-21. The result showed that the government sector and self-employed groups differed slightly at p<0.051.

It can be concluded that depression among low-income family during the pandemic is slightly differs during the study period.

Table 4 MULTIPLE COMPARISONS OF DEPRESSION (ACCORDING TO WORKING SECTOR USING TUKEY TEST) AMONG LOW-INCOME FAMILY DURING COVID-19 PANDEMIC IN PAHANG, MALAYSIA						
Working Sector	Working Sector	Mean	e Sig.	95% Confidence Interval		
( <b>I</b> )	( <b>J</b> )	(I-J)		Lower Bound	Upper Bound	
Government	Private	-0.13333	0.763	-0.584	0.3173	
	Self- Employed	-0.54048	0.051	-1.0831	0.0022	
Private	Government	0.13333	0.763	-0.3173	0.584	
	Self- Employed	-0.40714	0.096	-0.8689	0.0546	
Self- Employed	Government	0.54048	0.051	-0.0022	1.0831	
	Private	0.40714	0.096	-0.0546	0.8689	

# **DISCUSSION AND CONCLUSION**

From the above data, descriptive analysis shows that depression among B40 or the lowincome families in Pahang State during COVID-19 pandemic was quite severe and should not be taken lightly. This is because of economic turmoil that happens during the outbreak of COVID-19 that affected around the globe and resulted in retrenchment and so on. 40% of respondents that showed the severe depression rate can increase to extremely severe or can lead to suicidal cases which usually happened to people with a high level of depression without seeking any professional help. Due to this scenario, uncertainty in economic factors for instance loss of job due to COVID-19 seems to increase in mental health issues that happen daily. Furthermore, many people seem to have a sense of anxiety because of the outbreak which can affect all regardless of age, sex, or medical history. Based on our findings, there is a significant difference in the result based on our sample by using descriptive analysis of data but when the researcher tries to analyze the data inferentially, there is no significant difference between the level of depression among B40 households' income and employment sector. This might happen because the sample size in this study is small (N=128). Certainly, there are limitations to the study. First, the sample size in this study is too small which cannot be generalized to all. Another potential limitation is that the study was conducted within a short time. This study also measured based on the symptom of depression, anxiety, and stress only without considering the traits that the respondents might feel. Another suggestion for future studies is to focus more on intervention rather than the only survey so that the issue can be counter effectively. The prevalence of anxiety is much higher than either depression or stress, with some differences in their correlates except for age. These differences need to be further explored for the development of better intervention programs and appropriate support services targeting this group.

All in all, the baseline data collected from this study indicates that there is a crucial need to establish psychosocial support system for community in Malaysia, particularly for low-income family in the state of Pahang. As suggested by Bakar (2020), the support system to combat mental health issues like depression, anxiety, and stress during this pandemic crisis of COVID-19 shall be comprise of psychological First Aid (PFA) and effective provision of counseling services.

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