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Levels of Stress, Anxiety, and Depression in the Initial Stage of Movement Control Order in Malaysia: A Sociodemographic Analysis †

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Abstract: Due to the COVID-19 epidemic, many have lost their source of income, causing them to be socially isolated and consequently limiting their participation in social events. This has led to the occurrence of mental health illnesses and has impacted the level of life satisfaction. This study assessed the effect of the introduction of movement control orders (MCOs) in Malaysia during the initial phase of the COVID-19 epidemic. Between 1 April 2020 and 30 May 2020, a Google form containing a questionnaire assessing socio-demographic information and the effects of MCO on mental health was made available to the public via email and a social media forum, and 762 responses were collected. Those who took the initiative to fill out the responses were therefore categorized as survey participants. City-dwelling Chinese-ethnic women between the ages of 18 and 25 who have mild to severe symptoms of sadness, anxiety, and stress were at the highest risk for developing mental health disorders, according to the study. The firms should be accorded appropriate consideration, acknowledgement, focus, and financial support. The goal of mental health programs for affected individuals should be to create a society free of the mental health difficulties, which can grasp the soul and mind and, eventually, improve the quality of life.

Keywords: mental health; movement control order; COVID-19

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1. Introduction

Mental health is not merely health issue, but it can affect the well-being of living. This is incongruent with the definition by another piece of literature [1], which defines mental health as a state of well-being of individuals who are aware of the capabilities of themselves to withstand the pressures of life and, in turn, contribute to society and country. In fact, the global burden of diseases and disabilities is influenced by mental health, which can affect productivity and, in turn, hinder the economic development of a country [2].

Malaysia has carried out movement control orders to stop the COVID-19 virus from spreading. The impacts were substantial, as most of the people lost a source of income, causing social distancing and limiting social activities, which are among the major and apparent factors for the occurrence of mental health disorders and affect the well-being of life [3,4]. There is a scarcity of research in Malaysia on health and psychological health throughout the COVID-19 epidemic. Theoretically, the pandemic was projected to have both positive and negative effects on Malaysia's mental health [5]; therefore, it is substantial

to be studied, as there is not yet a quantitative study on health and mental wellbeing in Malaysia's community [6].

Among the positive effects during the period of movement control expected by the author is that people at home are thus encouraged to spend time with family, which can increase the family's state of harmony and encourage a balanced life, which ultimately has a favorable effect on Malaysians' overall mental health. However, theoretically, the pandemic is expected to provide positive and negative effects on mental health in Malaysia [5]. Since there has not been a quantitative study that looks at the mental health of the Malaysian community during the COVID-19 pandemic, research on mental health in Malaysia is crucial [6]. This study obtained quantitative evidence of mental health problems using a Depression Anxiety Stress Scale 21 (DASS-21) analysis and further examined the relationship between mental problems and sociodemographic factors such as race, age, and gender. DASS-21, in both the Malay and English version, was used to assess mental health. The DASS has been used widely as an instrument that is recognized for determining symptoms of depression, anxiety, and stress [7]. In addition, the Depression Anxiety Stress Scale 21 (DASS-21) was employed in many cultures and other nations during COVID-19 as a screening tool to identify a person's level of depression, anxiety, and stress [8–10].

As a result, this study aimed to investigate the physical and mental health of the Malaysian society during the period of Movement Control Orders in order to combat the COVID-19 pandemic.

2. Literature Review

A pandemic known as the Novel Coronavirus 2019 (COVID-19) has had a tremendous impact on our societies, economies, health, and human behaviour [11]. The COVID-19 pandemic caused many countries to carry out sanctions and the closure of socio-economic activities [12]. This includes Malaysia, which implemented movement control directives to stop the COVID-19 virus from spreading. The impacts were substantial, as most of the people lost a source of income, causing social distancing and limiting social activities, which are among the major and apparent factors for the occurrence of mental health disorders and affecting the well-being of life [3,4].

Disease outbreaks are able to affect the state of mental health of the people, culture and environment. It is because this pandemic has been spreading quickly to the whole world that it has led to great fear, concern, and anxiety, especially to certain groups, e.g., the elderly people and people with comorbid disorders [13]. It has the potential to affect existing diseases and can lead to psychiatry-related symptoms, which may be related to impaired mental and interaction immunity [14].

3. Research Design

This study was quantitative in nature. This quantitative research only displays descriptive data. Using an internet questionnaire, the information was gathered through a survey. Before distributing questionnaires, it was required to establish the population to ensure that sampling could be undertaken. For this study, the population consisted of B40 and M40 household members earning less than RM9620 per year. This study used a purposive sampling strategy. A purposeful sample, also known as a judging or expert sample, is a nonprobability sample type. The fundamental objective of a purposive sample is to produce a statistically representative sample of the population. A purposive sample is one whose characteristics are specified for a study-relevant goal. Participants in the final sample represented 14 states in Malaysia (Table 1).

Table 1. Respondents' Profile.

Gender	%	Race	%
Male	53.9	Malay	68.2
Female	46.1	Chinese	14.7
State		Indian	12.3
Perlis	1.4	Others	4.7
Kedah	7.7	**Education level**	
Pulau Pinang	14.2	Doctor of Philosophy (PhD)	6.4
Perak	8.1	Master	13.8
Selangor	27.8	Bachelor's degree	29.7
Johor	9.2	Diploma	22.2
Negeri Sembilan	2.8	STPM/Certificate	4.9
Melaka	2.1	SPM/MCE	18.1
Pahang	3.1	PMR/SRP	3.0
Terengganu	3.1	UPSR/Completed Primary 6	0.8
Kelantan	5.5	No formal education	1.2
Sabah	3.7	**Employment sector**	
Sarawak	2.4	Government sector	32.0
W.P. Labuan	0.3	Private sector	46.3
W.P. Putrajaya	1.2	Self employed	21.7
W.P. Kuala Lumpur	7.3	**Category of income**	
Area		Based on hourly/daily/weekly	13.3
Urban	66.9	Based on monthly	69.7
Rural	33.1	Based on piece rate	17.1
Age		**Monthly salary**	
18–25 years old	15.7	RM580 and below	5.0
26–30 years old	14.2	RM580–RM980	6.3
31-40 years old	39.5	RM981–RM2614	27.6
41-60 years old	28.7	RM2615–RM4360	27.3
61 years old and above	1.8	RM4361–RM9619	33.9

From April 1 to May 30 of 2020, 762 replies in total were gathered throughout the data collection period. During the movement control order period, online surveys were used to perform the research for two months. The Google forms containing the study's questions were sent publicly via email and platforms for social media, like Facebook and WhatsApp. Those who took the initiative to fill out the responses were therefore categorized as survey participants. Thus, the final sample included respondents from 14 Malaysian states.

The online survey was distributed using Google Forms to contacts and contacts of contacts, in accordance with the snowball and simple sampling methods. Contacts were urged to widely distribute the survey to their networks. Studies were analyzed using a descriptive analysis and the Depression, Anxiety, and Stress Scale (DASS). The Depression, Anxiety, and Stress Scale (DASS) is a screening test for identifying a person's level of depression, anxiety, and stress. With this screening test, you can find out your mental health status and whether you are stressed, worried, or depressed. The DASS is an instrument that is often used to assess the level of an individual for the analysis of depression and anxiety. DASS has no implications for patients or individuals in the classification system, such as the discrete diagnostic manual and Mental Disorder Statistics (DSM) and any disease classification. The DASS only evaluates the symptoms that are associated with depression, anxiety, and stress [15]. In the early stages of using DASS, it contained 42 items but was modified to 21 items. The DASS was much used in psychology-related studies, in which its reliability and validity have been recognized in various fields of study. Thus, the DASS is an instrument that is recognized for determining symptoms of stress, anxiety, and depression [7]. During COVID-19, the DASS-21 was utilized in several cultures and countries as a screening tool to identify a person's level of depression, anxiety, and stress [8–10].

It is also worth noting that this study was employed in the scope of social science and not into psychology studies, by technical means. This research does not involve any patients of known mental health; instead, it was conducted generally on community basis. The data collected originated from the society; therefore, they were not adhered with ethical or confidentiality issues. The respondents' responses were only used for academic purposes alone.

4. Analysis and Discussion

4.1. Respondent's Profile

The profile of the study's respondents is shown in Table 1. The majority of respondents were males of Malay ethnicity who represented respondents from all states in Malaysia. Most respondents were working in the of private sector and represented all levels of education, from no formal education to having a doctorate degree. Furthermore, the majority of respondents were located in the city. In the aspects of age and salary, respondents represented the age of engaging in work actively and coming from a B40 and M40 category in Malaysia.

4.2. DASS-21 Score Analysis

The DASS-2 Score Analysis in Table 2 reveals that nearly a quarter of Malaysian respondents during the era of the mobility control order suffered from mental health issues. As many as 23.1% of Malaysians have at least a mild mental health problem to a very bad problem. If the components of the mental health problems of the Malaysian community are detailed, almost 10% of the respondents experienced severe and very severe symptoms for both mental problem components of depression and anxiety during the movement control period in Malaysia to combat the COVID-19 pandemic.

Table 2. DASS-21 score and Mental Health Problem Components.

DASS-21 Scoring	Percentage (%)
Normal	76.9
Mild	10.9
Moderate	8.7
Severe	2.9
Very severe	0.7
Depression Level	
Normal	71.1
Mild	8.9
Moderate	10.8
Severe	5.0
Very severe	4.2
Anxiety Level	
Normal	71.4
Mild	5.5
Moderate	13.3
Severe	4.5
Very severe	5.4
Stress Level	
Normal	75.9
Mild	8.1
Moderate	8.9
Severe	6.3
Very severe	0.8

4.3. Cross-Tabulation Analysis

Table 3 shows the rate and the percentage-level of depression and whether respondents showed symptoms of depression or not within the different socio-demographic variables. The results of the study found that respondents living in urban areas showed

more symptoms of depression (30%) than those living in rural areas (26.6%). In addition to that, the findings of the study found that respondents that were aged 18–25 years showed symptoms of depression that were much higher, namely 45%, and this is consistent with the conclusions of [16] in Spain. The study's findings also revealed that, in Northern Spain, during the COVID-19 pandemic's emergency period, one-quarter of respondents involved in the study had mental health problems. Respondents experienced depression (27.5%), had symptoms of anxiety (26.9%), and experienced stress (26.5%), respectively. This group which is the most active in socializing may have been experiencing a higher probability of depression symptoms due to the closure of social engaging places, such as central shopping malls and entertainment centers, where the percentage is nearly twice as much compared to the other age groups.

Table 3. Rate and Percentage of Depression, Anxiety, and Stress Levels for demographic factors [1].

Variables	Category	Depression		Anxiety		Stress	
		Normal	Not Normal *	Normal	Not Normal *	Normal	Not Normal *
Gender	Male	292	119	300	111	319	92
		71.0%	29.0%	73.00%	27.00%	77.60%	22.40%
	Female	250	101	244	107	259	92
		71.2%	28.8%	69.50%	30.50%	73.80%	26.20%
	Total	542	220	544	218	578	184
		71.1%	28.9%	71.40%	28.60%	75.90%	24.10%
Area of Living	Urban	357	153	365	145	386	124
		70.0%	30.0%	71.60%	28.40%	75.70%	24.30%
	Rural	185	67	179	73	192	60
		73.4%	26.6%	71.00%	29.00%	76.20%	23.80%
	Total	542	220	544	218	578	184
		71.1%	28.9%	71.40%	28.60%	75.90%	24.10%
Age	18–25 years old	66	54	63	57	84	36
		55.0%	45.0%	52.50%	47.50%	70.00%	30.00%
	26–30 years old	83	25	78	30	82	26
		76.9%	23.1%	72.20%	27.80%	75.90%	24.10%
	31–40 years old	216	85	225	76	228	73
		71.8%	28.2%	74.80%	25.20%	75.70%	24.30%
	41–60 years old	165	54	167	52	173	46
		75.3%	24.7%	76.30%	23.70%	79.00%	21.00%
	61 years old and above	12	2	11	3	11	3
		85.7%	14.3%	78.60%	21.40%	78.60%	21.40%
	Total	542	220	544	218	578	184
		71.1%	28.9%	71.40%	28.60%	75.90%	24.10%
Race	Malay	389	131	396	124	404	116
		74.8%	25.2%	76.20%	23.80%	77.70%	22.30%
	Chinese	61	51	56	56	75	37
		54.5%	45.5%	50.00%	50.00%	67.00%	33.00%
	Indian	69	25	66	28	69	25
		73.4%	26.6%	70.20%	29.80%	73.40%	26.60%
	Others	23	13	26	10	30	6
		63.9%	36.1%	72.20%	27.80%	83.30%	16.70%
	Total	542	220	544	218	578	184
		71.1%	28.9%	71.40%	28.60%	75.90%	24.10%
Employment Sector	Government	196	48	188	56	192	52
		80.3%	19.7%	77.00%	23.00%	78.70%	21.30%
	Private	235	118	232	121	257	96
		66.6%	33.4%	65.70%	34.30%	72.80%	27.20%
	Self-employed	111	54	124	41	129	36
		67.3%	32.7%	75.20%	24.80%	78.20%	21.80%
	Total	542	220	544	218	578	184
		71.1%	28.9%	71.40%	28.60%	75.90%	24.10%
Category of income	Hourly/daily/weekly basis	62	39	61	40	78	23
		61.4%	38.6%	60.40%	39.60%	77.20%	22.80%
	Monthly basis	401	130	394	137	404	127
		75.5%	24.5%	74.20%	25.80%	76.10%	23.90%
	Piece rated basis	79	51	89	41	96	34
		60.8%	39.2%	68.50%	31.50%	73.80%	26.20%
	Total	542	220	544	218	578	184
		71.1%	28.9%	71.40%	28.60%	75.90%	24.10%

Table 3. *Cont.*

Variables	Category	Depression		Anxiety		Stress	
		Normal	Not Normal *	Normal	Not Normal *	Normal	Not Normal *
Monthly income	RM580 and below	30 78.9%	8 21.1%	30 78.90%	8 21.10%	32 84.20%	6 15.80%
	RM580 to RM980	32 66.7%	16 33.3%	34 70.80%	14 29.20%	35 72.90%	13 27.10%
	RM981 to RM2614	148 70.5%	62 29.5%	155 73.80%	55 26.20%	161 76.70%	49 23.30%
	RM2615 to RM4360	147 70.7%	61 29.3%	145 69.70%	63 30.30%	158 76.00%	50 24.00%
	RM4361 to RM9619	185 71.7%	73 28.3%	180 69.80%	78 30.20%	192 74.40%	66 25.60%
	Total	542 71.1%	220 28.9%	544 71.40%	218 28.60%	578 75.90%	184 24.10%

[1] Number of respondents, n = 762; * Not Normal = Respondents at least being mildly to severely affected.

Table 3 also illustrates the level of anxiety related to the demographic variables. In terms of gender disparities, severe symptoms of depression were more prevalent in women, with statistics showing that 30.5% of women in Malaysia suffered from at least a few anxiety symptoms during the COVID-19 pandemic, compared to only 27% of male respondents. The study's findings are consistent with the results of the study by [17] in Taiwan and [18] in Italy, who found that the occurrence of the symptoms of anxiety is higher for women than men. Despite the fact that mental issues do not favor race or skin color and can happen to anyone, this study found that the respondents from a Chinese ethnicity suffer from anxiety symptoms the most (50%) compared to other ethnicities during the movement control order.

Table 3 also shows the rate and the percentage of the impact of if respondents experienced stress symptoms or not on different sociodemographic variables. Relatively, women who lived in the city and were aged 18–25 years were the demographic that were most prone to stress symptoms, compared to other demographic factors. From the aspect of the employment sector, available respondents who worked in the private sector who suffered from the risk of stress symptoms was high, contributing 27% compared to respondents who worked in the government or even worked alone. In addition, of respondents who received wages based on job (piece rated)/freelancer/working online, food delivery employees working through the phone applications and e-hailing drivers were those who demonstrated stress symptoms, contributing to 26.2% of the respondents at least experiencing symptoms of stress either mildly or severely affected compared to respondents who received monthly or even a weekly salary while the pandemic struck.

5. Conclusions

This study did not consider medical cases and therefore did not require ethical consent. This study is in line with studies conducted by many researchers in the same field [12,19–21]. Therefore, this study does not require any ethical concern. This was a cross-sectional study that relied mostly on self-reported questionnaires to quantify psychiatric symptoms; no clinical diagnosis was made. The gold standard for mental diagnosis consists of a structured clinical interview and functional neuroimaging [21,22].

The study's findings demonstrate that communities in Malaysia experience impaired mental health as a result of the COVID-19 epidemic, as evidenced by signs of stress, anxiety, and sadness. The results of this study found that almost a quarter of respondents need to be given attention, as there is a probability that this figure may increase while the world is making the best efforts to reduce the number of deaths brought on by the COVID-19 pandemic and COVID-19 positive cases.

With the deteriorating economic situation, of course, many companies went bankrupt, and many individuals will lose their source of income. Individuals should manage their personal financial situation and, at the same time, their mental health in a stable state. Economic uncertainty and loss of employment may not only cause a person to lose sanity but also cause indirect costs to immediate family members. This is because family members

must bear the patient's cost financially and have to sacrifice their rest time to pay attention and care for the patient. Therefore, the crucial moral support from individuals to family and friends is much needed.

In addition to the disabled and the elderly who need to be given attention, women also need support during this pandemic. The findings of the study found that female respondents living in the city is a demographic group that shows the highest mental health problems, at least to a small extent to very severe, either through depression, anxiety, or stress. This is probably because the women who are married and living in the city are working women. With the state of closing economic activities and the need to work from home, these women need to be juggling to do their work activities and "work" at the home at the same time. This is exacerbated by children's online school activities, which need to be given attention for as long as they are indoors due to the closure of the school during the movement control order period in Malaysia.

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