

## Are Emotional Stress, Sop Compliance, Career-Family Conflict and Physical Risk Indicators to Pandemic Fatigue?

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### Abstract

The nation's health capacity will be at a critical level if the number of Covid-19 cases continues to rise. As the pandemic situation is still considered long and endless, society is now facing pandemic fatigue. This situation will have a negative impact on the delivery of public health services. A survey was conducted on 2047 people in Malaysia to study the degree of pandemic fatigue and the factors contributing to that situation. Samples were selected from 14 states in Malaysia. Respondents were members of the public from various religious, educational, occupational and income backgrounds. The results of the study found that the level of pandemic fatigue in society was moderate. The indicator is worrying because there is a potential for the level of pandemic fatigue to be higher if the MCO is extended further. Factors contributing to pandemic fatigue are emotional stress, career-family conflict, SOP compliance and physical risk. The findings will provide input to the Ministry of Health Malaysia (MOH) and the National Security Council (NSC) in their efforts to curb the spread of Covid-19. Covid-19 spread can be curbed by organising strategies to combat pandemic fatigue, in addition to the Covid-19 vaccine. Effective strategies are needed to alleviate risks that can affect health and trigger confusion, stress, and anxiety in society. If pandemic fatigue is not addressed effectively, it can affect the morale and motivation of the society to continue following the directives and SOP set by the government.

**Keywords:** Pandemic Fatigue, Covid-19, SOP, Emotional Stress, Career-Family Conflict

### Introduction

Since 1 January 2021, Malaysia has recorded a drastic increase in new COVID-19 cases, and the figures have reached thousands. This situation is of great concern, not only to the general public but also to stakeholders in dealing with the COVID-19 pandemic. As the pandemic situation is still considered long and endless, society is now facing pandemic fatigue (Huang et al., 2020; Nicola et al., 2020; Sohrabi et al., 2020; Tian et al., 2020; Wang et al., 2020; WHO, 2020).

Pandemic fatigue, if left unaddressed, could threaten Malaysia's ability to deal with the spread of Covid-19. Non-compliance with standard operating procedures (SOP) and new norms in preventing Covid-19 infection due to pandemic fatigue can contribute to a sudden surge of daily infections. This situation will cause the period of the movement control order (MCO) to be extended even longer. The public, therefore, needs to provide support and play an important role to fully comply with standard operating procedures (SOP) and be able to adapt to the new norms regardless of their positions and status.

A study conducted by Adam & Walls (2020) found that work-life imbalances, limited interactions, limited social movements, and the need to adhere to SOP every day have caused physical and mental fatigue in society. Meanwhile, data reported by WHO (2020) found that most countries are facing pandemic fatigue based on the increase in the number of those infected due to non-compliance with restrictions and standard operating procedures. This long period of enforced SOP compliance has also led to stress, loss of motivation and emotional disturbance in the community (Habersaat et al., 2020).

Pandemic fatigue has been listed as one of the Covid-19 syndromes (Nicola, et al., 2020; Sohrabi et al., 2020; Wang, et al., 2020). Fatigue is viewed as the main symptom of a variety of physical and psychiatric problems. There are numerous factors influencing individuals who experience pandemic fatigue. Amongst them are age, gender, physical and psychological conditions, diet, mental status, physical health and personality (Finsterer & Mahjoub, 2014). Fatigue is a condition that occurs when an individual is in a state of stress as a physiological and pathological reaction or, it can be a symptom of a disease (Lai et al., 2020; Matias et al., 2020).

In Malaysia, people from all walks of life have made sacrifices over the past year to prevent the spread of Covid-19 by adopting SOP and complying with government directives. However, perhaps because they have been facing this pandemic for too long, Malaysians are beginning to be negligent and displaying a carefree attitude by ignoring SOP. Such an attitude could certainly jeopardise government efforts to curb the spread of Covid-19 (Huang et al., 2020; Nicola et al., 2020). Malaysia is expected to continue facing the spread of the Covid-19 until the end of next year, as other countries also face problems to curb the pandemic.

Therefore, society needs to work together by employing new methods and strategies to increase the people's motivation to comply with SOP. The pandemic fatigue faced by Malaysians must be managed to the fight to curb Covid-19 further. Continuous adherence to SOP and government directives is still an important preventive measure (Habersaat et al., 2020). However, the pattern has shown a decline in the commitment to comply with SOP and this development is a very worrying indicator of pandemic fatigue. Other countries have taken initiatives to curb pandemic fatigue. Turkey has conducted a poll through social media to understand public sentiments. Besides that, the German government is in talks with philosophers, historians, theologians and behavioural and social researchers to formulate strategies to curb the spread of the virus.

The results of the studies that have been conducted show consistent findings. Wearing face masks, washing hands, and physical distancing are still important measures in preventing infection (Wang et al., 2020; WHO, 2020). Therefore, continuous health research and

education are necessary so that new norms, including compliance with SOP, can be cultivated along with law enforcement. Factors that contribute to pandemic fatigue need to be identified to formulate strategies and programmes to curb this syndrome in society. Therefore, this proceeding will discuss indicators of pandemic fatigue among the public in Malaysia.

## **Methodology**

### *Study Design*

This study employs a cross-sectional quantitative survey design by using the Google Forms questionnaire online. Malhotra, Sham and Crsip (1996) stated that cross-sectional design is a method of data collection on one type of sample from a population studied on a one-time basis based on the attributes of current respondents.

## **Population and Study Sample**

The study population refers to the general public consisted of Malaysian citizens who face the Covid-19 pandemic situation and obey the movement control order (MCO). A total of 2047 members of the public were selected as the study sample. The study sample was chosen based on the purposive sampling method by taking into account the inclusive criteria to fulfil the objectives of the study. The criteria that have been set were: Malaysians, living in Malaysia, employed and married, healthy during the time of the study and at least 18 years old.

## **Study Location**

The study location involved members of the public residing in 14 states and Federal Territories in Malaysia (refer to Table 1).

## **Study Instrument**

This study used several self-constructed test tools based on the literature and models related to the study, namely:

Part A: Demographic profile (10 items)

Part B: Pandemic fatigue (10 items)

Part C: SOP compliance (5 items)

Part D: Emotional stress (9 items)

Part E: Work-family conflict (9 items)

Part F: Physical risks (8 items)

Examples of items developed in the instrument are:

1. Pandemic fatigue	<p>During the Covid-19 pandemic, I:</p> <ul style="list-style-type: none"> <li>• feel so tired physically</li> <li>• have problems to begin doing something</li> <li>• have problems thinking clearly</li> <li>• do not want to do anything</li> </ul>
2. SOP compliance	<p>During the Covid-19 pandemic, I still:</p> <ul style="list-style-type: none"> <li>• wash my hands frequently using soap/hand sanitiser</li> <li>• avoid being in public and crowded places</li> <li>• avoid touching/shaking other people's hands</li> <li>• practise physical distancing</li> </ul>
3. Emotional stress	<p>During the Covid-19 pandemic, I:</p> <ul style="list-style-type: none"> <li>• feel stressed out due to financial problems</li> <li>• feel lonely in facing this crisis</li> <li>• am having a sleep disorder</li> <li>• am feeling anxious while at home</li> <li>• prone to get irritated, even on minor issues</li> </ul>
4. Work-family conflict	<p>Throughout the experience of working from home, I:</p> <ul style="list-style-type: none"> <li>• feel less productive</li> <li>• lose focus to work</li> <li>• feel distracted by household chores</li> <li>• feel disturbed by other family members</li> </ul>
5. Physical risk	<p>During the Covid-19 pandemic, I:</p> <ul style="list-style-type: none"> <li>• always work with incorrect body posture</li> <li>• always sit for a long time while working</li> <li>• make less body movement</li> <li>• work statically for a long period</li> </ul>

The instrument has been approved by the UKM Ethics Committee on 10 December 2020 (UKM/111/8/JEP-2020-756). All test tools consist of a 4-point Likert scale (never, sometimes, often, very often).

### Pilot Study

A pilot study was conducted to test the validity and reliability of the study. A total of 30 civilians who were undergoing movement control orders (MCO) were selected as the study sample. Cronbach's alpha values indicate the scale reliability is strong and acceptable. The results of the scale reliability analysis are as follows:

Table 1

#### Scale reliability

Scales	Alpha	Alpha values
1. Pandemic fatigue	0.786	
2. SOP compliance	0.782	
3. Emotional stress	0.869	
4. Work-family conflict	0.905	
5. Physical risk	0.843	

### Data Analysis

Study data were analysed using 'Statistical Package for the Social Science for Windows'. Study data from Google Forms was transferred to SPSS. Descriptive and inferential analyses were conducted on the data to measure the objectives of the study. Frequency and percentage descriptive statistics were applied to view data distribution. Pearson Correlation is the type of inferential analysis used to examine the relationship between the variables studied. Pearson correlation or Pearson product-moment correlation coefficient is a parametric test that assesses whether there is a linear relationship between the variables in the study.

### Study Findings

#### *Demographic Background of Respondents*

Table 1 describes the frequencies and percentages for demographic information of the 2047 respondents who represented all walks of life in society. The table shows that most of the respondents are residing in Selangor (521, 27.1%), Malays (1889, 92.3%), Muslims (1947, 95.1%), aged between 18 to 39 years old (1395, 68.1%), employed (1620, 79.1%), and married (1274, 62.2%).

Table 2

#### *Distribution of respondents*

<b>Variables</b>	<b>Categories</b>	<b>N</b>	<b>%</b>
1. State/Federal Territory	Kuala Lumpur	252	13.1
	Putrajaya	54	2.8
	Labuan	0	0
	Selangor	521	27.1
	Negeri Sembilan	67	3.5
	Melaka	58	3
	Johor	111	5.8
	Pahang	160	8.3
	Terengganu	46	2.4
	Kelantan	252	13.1
	Perlis	4	0.2
	Kedah	55	2.9
	Pulau Pinang	60	3.1
	Perak	123	6.4
	Sabah	72	3.7
Sarawak	91	4.7	
2. Ethnicity	Malays	1889	92.3
	Chinese	30	1.5
	Indians	24	1.2
	Others	104	5.1
3. Religion	Islam	1947	95.1
	Buddha	18	9
	Christianity	61	3.0
	Hindu	19	0.9
	Others	2	0.1
4. Age	Young adults (18-39)	1395	68.1
	Middle age (40-59)	608	29.7

	Senior citizens (>60)	44	2.1
5. Employment status	Unemployed	427	20.9
	Employed	1620	79.1
6. Marital status	Single	721	36.2
	Married	1274	62.2
	Divorced	38	1.9
	Spouse passed away	14	0.7

### Descriptive Analysis

#### *Pandemic Fatigue among the Public During the Crisis of Covid-19*

The study results on 2047 people showed that 57.5% of them displayed moderate pandemic fatigue even though they had been living in a pandemic period and experiencing movement control order (MCO) for almost a year. Besides that, 37.5% of the general public showed a low level of pandemic fatigue, while 5% of them exhibited a high level.

Table 3

#### *The Level of Pandemic Fatigue among the General Public (n = 2047)*

Level	N	%	Mean
Low	767	37.5	
Moderate	1177	57.5	2.23
High	103	5.0	

Note: Low Level (<.20), Moderate (2.01-3.00), High (3.01-4.00)

### Inferential Analysis

#### Regression Results

The results of the regression analysis (Table 3) indicate that work-family conflict, emotional stress, physical risk and SOP compliance are the main predictors of pandemic fatigue. The most significant predictor is career-family conflict, with values of  $B = .456$ ,  $t = 36.64$ ,  $p < .05$ . This is followed by the emotional stress variable with values of  $B = .212$ ,  $t = 11.174$ ,  $p < .05$ , physical risk  $B = .211$ ,  $t = 12.569$ ,  $p < .05$ , and SOP compliance,  $B = .145$ ,  $t = 8.489$ ,  $p < .05$ . All these variables explain as much as 52% of the pandemic fatigue variance. The value of  $R^2$  (.521) is not significantly different from the value of Adjusted  $R^2$  (.520), indicating the variance obtained is not significantly different from the population variance. A value of  $R^2$  above .50 indicates a strong predictive value. The pandemic fatigue faced by the general public is influenced by work-family conflict, emotional stress, physical risk and compliance with SOP.

Pandemic fatigue syndrome can be reduced if society tries to control the level of work-family conflict, emotional stress and physical risk. SOP compliance is also an indicator of pandemic fatigue. However, it is the best measure to control the spread of the Covid-19 pandemic. The Beta value indicated by SOP compliance is lower compared to other variables. The analysis is shown in the table below.

Table 4

*Regression Analysis for Pandemic Fatigue Factors Experienced by the Public*

Variable	B	SE	t	p
Work-family conflict	.456	.012	36.646	.000
Emotional stress	.212	.019	11.174	.000
Physical risk	.211	.017	12.569	.000
SOP compliance	.145	.017	8.489	.000

DV: Pandemic fatigue

R<sup>2</sup> = .521**Discussion**

The findings of the study indicate that the level of pandemic fatigue is moderate. Even so, do not underestimate the medium level of pandemic fatigue. If the Covid-19 outbreak continues, we are worried it will escalate the pandemic fatigue. This finding agrees with a study conducted by Nicola et al (2020), who stated that pandemic outbreaks should be handled well to avoid the problem of more serious pandemic fatigue that could affect human physical and mental health.

The results of this study also show that compliance with standard operating procedures (SOP) is an indicator of pandemic fatigue faced by Malaysians. In reality, Malaysians have made sacrifices for more than a year to comply with SOP, for example, wearing face masks and practising social distancing. It is one of the efforts taken to curb the spread of the Covid-19 virus. Nevertheless, we are worried that long-term compliance with SOP could trigger a pandemic fatigue scenario. The findings of this study demonstrated this fact. Adherence to the SOP is still the best effort and measure to curb the spread of the virus because the Malaysian public has not yet achieved herd immunity through vaccination (Zakaria et al., 2021). This finding is in line with a study conducted by (Adam and Walls, 2020). They showed that limited social mobility and adherence to SOP are the main contributors to pandemic fatigue. Habersaat et al (2020) also asserted that compliance with SOP is the cause of the loss of motivation, thus leading to pandemic fatigue.

A study by Sohrabi et al (2020); Wang et al (2020) also revealed that emotional stress is an indicator of pandemic fatigue. Moreover, Taylor (2019) found, individuals who experience anxiety, restlessness, isolation, and physical movement restrictions are at risk of experiencing pandemic fatigue. The study on pandemic fatigue conducted by Morgul et al (2020) discovered that about 64.1% of the total participants in that study participated by the general public in Istanbul experienced physical and mental fatigue. On average, they were prone to get tired, experiencing mental and physical fatigue, lack of energy and desire to do things, unable to start and perform daily activities, and having difficulties thinking clearly and focusing on work.

The findings of this study also indicate that physical risk is another significant indicator of pandemic fatigue. It also suggests that pandemic fatigue is caused by the physical fatigue mainly endured by those who work and study from home. Unergonomic conditions that are not conducive for working, such as having to work at the dining table, on the floor or in the living room. This has caused strain on their physical health (Rahman & Selamat, 2020). In the long run, they are at risk of having health problems such as back pain, stooping, and others



(Mohd et al., 2021). An uncondusive work environment leads to pandemic fatigue as workers must face these constraints every day. It results in a lack of motivation, declining productivity, and hopelessness (Zakaria et al., 2021). Besides, Koohsari et al (2021) asserted that the Covid-19 pandemic had caused physical inactivity among workers. Moreover, the Movement Control Order declared by the government has also compelled many workers to adopt a sedentary lifestyle (Koohsari et al., 2021). This situation can lead to pandemic fatigue if it keeps going on (Smirmaul & Arena, 2020).

Finally, this study also shows that work-family conflict is the strongest and most significant indicator of pandemic fatigue. Working from home (WFH) is one of the measures to reduce the rate of Covid-19 infection. However, WFH is beginning to show negative effects such as long work periods, the burden of diverse roles (as an employee, wife and mother) and barrages of work-related messages (Waizenegger et al., 2020). This situation has led to weariness and fatigue (Hecht & Allen, 2009; Abdullah et al., 2021). The state of tiredness occurs not only in female workers who are more synonymous with dual roles but also in male employees who experience difficulty balancing the demands of work and responsibilities to the family (McLaren et al., 2020; Zakaria et al., 2019). Therefore, this study supports the findings of previous studies that stated work-family conflict is the major indicator of pandemic fatigue among Malaysians.

### **Conclusion**

To conclude, the study found that the level of pandemic fatigue among the general public is moderate. Nonetheless, the issue should be given immediate attention by the government. Effective strategies are needed to alleviate risks that can affect health and trigger confusion, stress and anxiety in society. If pandemic fatigue is not addressed effectively, it can affect the morale and motivation of the society to continue following the directives and SOP set by the government.

Results of this study also found that emotional stress, work-family conflict, SOP compliance and physical risk are the factors that caused pandemic fatigue among the general public in Malaysia. The results of this study can provide valuable input to the Ministry of Health Malaysia (MOH) and the National Security Council (NSC) in their efforts to address the spread of Covid-19. In managing pandemic fatigue, we recommend that all parties unite and work together to break the chain of COVID-19 infection so that the pandemic can be better addressed thus allowing the community to live more prosperously.

Proactive measures need to be taken immediately to reduce emotional stress, work-family conflict and physical risks contributing to pandemic fatigue. Spiritual programmes and psychological interventions during the Covid-19 pandemic need to be mobilised more systematically in every state and district to reduce pandemic fatigue that affects work routines, social interactions and psychological stress in the community. The media also needs to play an important role in channelling information that can help catalyse an optimistic mindset in the society so they can stay healthy and always comply with the SOP set by the government. The public also plays a vital role because they are the frontliners to break the chain of the COVID-19 pandemic. At the same time, they can also help to alleviate pandemic fatigue in the community.



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