



Research Article

# Psychological health of healthcare workers and national vaccination programme: A conceptual study

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## ABSTRACT

Stress levels can be raised by psychosocial risks, which can lead to physical and mental health problems. Low motivation, exhaustion, anxiety, sadness, burnout, and suicidal ideation are all possible psychological responses. Malaysia has one of the highest COVID-19 immunisation rates in the world. Although this is a huge accomplishment, we must keep in mind that it adds to the taskforce's workload. Between January 2019 and May 2020, there were an average of two suicide deaths per day. The Royal Malaysia Police Force, on the other hand, reported that suicide rates had doubled in the first five months of 2021. A mass vaccination centre in Kuala Lumpur was closed on August 6, 2021, after over 200 medical staff and volunteers tested positive for the coronavirus. Fear is rising among healthcare workers as a result of a previous occurrence like this, and the current emergence of the Delta strain of the Virus, and now the Omicron, can only alarm the healthcare family. According to a study conducted by American International Assurance (AIA Vitality), majority of Malaysian workforce unable to get enough sleep. One out of every ten Malaysian representatives is nervous or discouraged, with the majority of them being in their twenties and thirties. As is the case during a pandemic, healthcare workers are overworked. They must deal with the effects of public misconception, face stress from relatives, fear of contracting the obscure illness and becoming a carrier of the illness, and now seek protection from the Personal Protective Equipment (PPE) and vaccinations to which they have adhered during vaccination programmes. Frontline workers' mental health issues, particularly burnout and fear, should be addressed by policymakers. Future national and organisational interventions must include providing adequate social support, building self-efficacy and resilience, and ensuring frontline work willingness.

**Keywords:** *Covid-19; National Immunization Programme; Vaccination; Social and Behavioral Epidemiology; Mental Health Status; Healthcare Workers*

## 1. INTRODUCTION

The coronavirus, also known as COVID-19, emerged from Wuhan, China in 2019. This virus spread around the globe in with few month and started infecting human respiratory system. World Health Organization (WHO) played an active role in controlling the spread of this deadly virus and said that "this disease causes respiratory illness (like the flu) with symptoms such as a cough, fever, and, in more severe instances, difficulty breathing". On the recommendations of WHO and local administration, every country enacted travel bans and lockdown measures in order to stop the spread of illness. More than 14700 people died



during the first wave of this virus and Italy was among the list of most infected country. In beginning of 2021, the vaccine for this virus played an important role. Many international organizations, including WHO provided the vaccine to majority countries. In Malaysia, the government is convincing every individual to get vaccinated, and each day about 72,237 people get their dose to prevent from this virus. The Malaysian government is making hard efforts to stop the spread of COVID-19; thus, every citizen or non-citizen of Malaysia is ordered by government for getting vaccination. In order to get all the people vaccinated, the COVID-19 vaccination programme, also known as National Immunization Program (NIP of PICK) is launched by Malaysian government. The PICK programme began on February 24, 2021, and numerous private healthcare facilities have since partnered with the government to help raise immunisation rates (Kiniguide, 2021). According to Camoens (2021) the Sydney Morning Herald report for COVID-19 vaccination highlighted that, in Malaysia the vaccination rate is higher in comparison to Australia, as the country is handling out more than 400000 doses per day on average. This figure include Malaysia among the list of countries with rapid and high immunisation rate. Although this is a tremendous accomplishment, we must keep in mind that it increases the workload of the programme's taskforce. Many studies emphasizing on the COVID-19 focused on the causes of virus and educational or organizational policies during pandemic but this research has examined the linkage between two important things, one is the mental health problems and other is the risky behaviours among healthcare workers during era of COVID-19. Therefore, the first aim of this research is to investigate that during COVID-19, how mental health problems are related with risky behaviours of healthcare workers. The COVID-19 pandemic has not only affected the general public, but it also put strain on the world's healthcare workforce. The COVID-19 declared as the global pandemic because it affected majority of countries in all seven continents of earth because there was no vaccine available, treatment is primarily symptomatic for those affected and preventative for those at risk. Pandemics place a tremendous psychological strain on healthcare workers as a result of a combination of workplace stressors and personal fears.

## 1.1. PROBLEM STATEMENT

There are different myths about the spread of COVID-19, Ting (2020) highlighted that the COVID-19 was first discovered in three Chinese citizens. These citizens caught the virus due to interaction with an infected person in Singapore. As of August 8, 2021, Malaysian health officials reported 20,596 new Covid-19 cases. The country currently has 1,203,706 people infected with COVID-19. Seremban in Negeri Sembilan, became one of Malaysia's top three districts with the most cases about three months after the Wuhan epidemic began. Almost every case has been epidemiologically linked to a single source of exposure. There were more than 41 COVID-19 cases in the red zone region, which could become a new epicentre if not adequately controlled. So far, only the Ampangan sub-district in Seremban has been designated a red zone (Zamzuri et al., 2020).

From February 22 to April 2, 2021, the Ministry of Health reported 314 Covid-19 clusters around the country, with factories accounting for 38.54 percent, communities (15.29 percent), construction sites (8.6%), educational sites (7.96%) and retail malls (7.96%) (L. Zoey,

2021). On August 6, 2021, a mass vaccination centre in Kuala Lumpur was closed after over 200 medical staff and volunteers tested positive for the coronavirus. According to (Eileen, 2021) formalized adverbial and working in a high-risk district like Ampangan, with a history of vaccination centre cluster outbreaks and the emergence of the Delta strain virus and now Omicron, only adds to the stress of the healthcare workers.

“If psychosocial risks are not properly identified and addressed, they can cause stress and lead to physical and mental health problems. Some of the psychological responses that can occur include low mood, low motivation, weariness, anxiety, sadness, burnout, and suicidal ideation. Working conditions that are safe and healthy are essential for decent work”.

~Adapted from the International Labour Organization's Centenary Declaration for the Future of Work, June 2019.

The Malaysian director general of health, Tan Sri Dr. Noor Hisham Abdullah discussed that some people are more likely to develop mental health problems such as depression when they are under a lot of stress or are isolated from their friends and family. The Royal Malaysia Police Force (PDRM) recorded a high number of suicides in starting four months of 2021 (i.e. 468), whereas the total number of suicides during whole year were 631 and 609 in 2020 and 2019 respectively. From 2019 to May 2020, they reported an average of two suicide deaths per day. The director of Bukit Aman Criminal Investigations Department, Abdul Jalil Hassan revealed that between 2019 and May 2021, at least 281 men and 1,427 women committed suicide, with 872 of them aged 15 to 18 (Code, 2021). Policymakers should pay attention to the mental health issues of frontline workers, particularly burnout and fear. Future national and organisational interventions must include adequate social support, self-efficacy and resilience building, and ensuring frontline work willingness.

## 1.2. RESEARCH OBJECTIVES

The research has highlighted the broad and latest area of mental health problems of healthcare workers. To gather the results, following research objectives are derived on the basis of problem statement:

RO1: To determine the prevalence of resilience, burnout, depression, anxiety, fear, self-efficacy, and social support among healthcare workers during the PICK programme.

RO2: To determine whether burnout, anxiety, fear, and depression affects healthcare workers from diverse socio-demographic backgrounds.

RO3: To determine if burnout, anxiety, depression, and fear affect self-efficacy.

## 2. LITERATURE REVIEW

The COVID-19 not only affected the general public, but the health care employees and particularly the doctors were also adversely affected by this pandemic. The pandemic affected the well-being of health care workers. Lamiani (2021) studied the well-being of hospital employees for the period of six month after the outbreak of COVID-19 pandemic. This research first evaluated the factors associated with psychology of employees and outcomes of those factors, secondly it explained the psychological screening programme

which was founded in University Hospital, Milan, Italy. Between July and October 2020, a survey of hospital employees was conducted electronically. The research collected the information of COVID-19 experiences and sociodemographics. Moreover, it collected information for three things, one is anxiety (STAI-Y1), second is post-traumatic stress disorder (PCL-5) and third, depression (HAM-D). The sample of study was based on total 308 employees, among which 80 % were female with mean age of 45 years. The demographics of sample highlighted that, among these employees, 68 % were professional of healthcare, administrative staff (16 %) and 16 % were physicians. Moreover, the sample of research highlighted that, 53 % employees were in depression, 40 % were in post-traumatic stress disorder and 23 % employees were having moderate or severe anxiety. To analyse the data gathered for study, Lamiani (2021) did multivariate logistic regression analysis which revealed that higher risk for anxiety is linked with personal less for COVID-19, woman feel more depression and this depression lead to anxiety when any family member got affected by virus. Lamiani (2021) also explained that "COVID-19 personal experience may have a significant impact on the mental health of hospital workers and should be considered in supportive interventions".

Lee (2021) did the quantitative research on the perception of COVID-19 exposure in work settings. The study gathered the data by using an online survey to avoid the physical contact. The main goal of his research was to investigate levels of anxiety, insomnia and depression, thus, he emphasized on insomnia severity index, patient health questionnaire scale with 9 items and general anxiety disorder scale with 7 items. To analyse the stress based on work burden, or work-related anxiety and stress because of pandemic, the SAVE-9 scale was used. The results of research revealed that, the anxiety and stress because of work burden (i.e. work-related stress) during pandemic is linked with gender (i.e. female), secondly the depressive symptoms and at last the perception of danger or harm at workplace. In young males, there are several behavioural habits that can lead to depression, particularly, the unhealthy coping behaviours including drinking or smoking is commonly linked to depression and caused insomnia during epidemic of COVID-19. Furthermore, Lee (2021) highlighted that during this epidemic of COVID-19, the proper monitoring and management of work-related stress can be cause of reduction in healthcare workers' burnout.

In the United Kingdom, Vindrola-Padros (2020) investigates healthcare workers' (HCWs) perspectives and experiences with COVID-19, as well as the care delivery models employed to battle the epidemic (UK). The research consisted of three parts: (1) a review of UK healthcare policies (n=35 policies), (2) an analysis of front-line staff experiences and perceptions in the media and on social media (n=101 newspaper articles, n=1 46 000 posts), and (3) in-depth (telephone) interviews with front-line staff (n=30 interviews). The findings from all streams were examined using framework analysis. Limited personal protective equipment (PPE) and a lack of routine testing generated worry and anguish in the workers, according to the findings. When personal protective equipment (PPE) was available, improper fit and overheating made regular work difficult. The failure to assess redeployed employees' talents for new areas, as well as a lack of redeployed employee training, were noted as issues. HCWs revealed that coworker camaraderie, the formation of well-being

support mechanisms, and a sense of being valued by society were all positive parts of their daily work. According to the study of Vindrola-Padros (2020), it is vital to examine the experiences and concerns of front-line workers during a pandemic. During the COVID-19 epidemic, UK personnel pushed for clear and uniform protocols, streamlined HCW testing, PPE administration, and understanding of PPE's effects on everyday practise.

Every country emphasized on the guidelines of WHO and many other local or international health care organizations to avoid the spread of deadly COVID-19. Some of the precautions include, lockdown (partial, smart or complete depending on spread), self-isolation (general and also when get infected by COVID-19) and most importantly the social distancing. The infecting intensity of virus and along with precautions, created a negative impact on mental health of people. Therefore, the pandemic caused the stress to people and added negative psychiatric effects. The general public, COVID-19 patients, their families and friends, people with pre-existing mental health conditions, and healthcare workers are likely to be affected (Haider et al., 2020). Sánchez-Sánchez et al., (2021) identified symptoms of depression and/or anxiety among nurses and Agence nationale de la cohésion des territoires (ANCTs) in Spain during the first wave (March–June) and second wave (September–November) of the COVID-19 pandemic. An observational cross-sectional study was conducted among Spanish nurses and ANCTs using an anonymous, self-administered questionnaire. Anxiety and depression were present in 68.3 percent and 49.6 percent of the subjects, respectively, during the first period, but decreased in the second period (49.5 percent for anxiety and 35.1 percent for depression). There were statistically significant differences ( $p = 0.001$ ) between the various categories and time periods. The COVID-19 pandemic has had a negative impact on nurses' and ANCTs' mental health.

### **3. RESEARCH METHODOLOGY**

This research design will enable researchers to devise solutions to problems and guides them through the various stages of the research. The study would be cross-sectional, descriptive, and correlational in nature. The quantitative method would be used to collect data, which would consist of a series of online questions sent to participants via a link on the Google Form platform. For the participants' convenience, the questions would be prepared in both the national language Bahasa Malaysia and English. The questions will be in the form of a survey and will be scored on a scale of one to ten. From July to August 2021, the link to the questions would be sent to a designated person in charge at the chosen hospital for distribution among healthcare workers. Participants under the age of 18 are barred from participating in this study. Forms will be only sent to potential participants upon invitation, to limit non-health workers' responses to the online survey. The inclusion criteria are health workers aged 18 and above who were currently working in the COVID-19 vaccination unit at the chosen hospital.

A questionnaire will be used to collect sociodemographic and other COVID-19-related background data. The Maslach Burnout Inventory: Human Services Survey (MBI-HSS) for Medical Personnel (MP) will be used to assess burnout. It contains 22 items with three dimensions: emotional exhaustion (EE, 9 items), depersonalization (DP, 5 items), and personal accomplishment (PA, 8 items). Anxiety will be measured using the Self-Rating

Anxiety Scale (SAS). The SAS consists of 20 items that assess emotional and physical symptoms of anxiety. A four-point Likert scale will be used to evaluate each item. Fear of COVID-19 was measured using the Fear of COVID-19 Scale: Development and Initial Validation by Ahorsu et al (2020). Self-efficacy will be measured using the General Self-Efficacy Scale (GSF) developed by Ralf Schwarzer and Matthias Jerusalem. Work-Life Balance will be measured using Hayman's 2005 Version of the Work-Life Balance Scale. The National Institute of Mental Health's Centre for Epidemiologic Studies Depression Scale (CES-D) will be used to assess depression.

#### **4. DISCUSSION**

Mala A person's life today appears to include a wide range of evaluations and issues that hamper his or her ordinary or extraordinary. At times, his or her pressing factor is difficult to deal with. People experience stress when they are likely to risk their jobs due to fluctuating demand. Nowadays, work environment pressure is a legitimate major issue and a source of distress for both employees and employers.

This project is intended to uncover the hidden factors that contribute to stress among healthcare workers. This project would provide tabulated data on how work stress affects employees silently from within. This project would assist employers in identifying and emphasising the importance of focusing on the overall well-being of their healthcare workers and providing assistance as needed. The findings would almost certainly reduce absenteeism and increase productivity at work. This would also likely reduce aggressive behaviour patterns among healthcare workers, resulting in a more "approachable" healthcare worker despite working with and handling infectious cases such as COVID-19 patients. This would also help reduce pessimism and anxiety among healthcare workers, allowing them to naturally instil positivity in the minds of patients.

A caring management or employer would also boost job satisfaction and prevent discouragement among healthcare workers. It would result in a more pleasant working environment and a positive employer-employee relationship. On the other hand, it could potentially help reduce the mental impact of the pandemic on the nation's heroes.

Since "a healthy worker is an effective worker," this project hopes to contribute to the betterment and improvement of the healthcare facility. More attention and concern should be paid to the mental health of healthcare workers. Mental healthcare status should not be a taboo subject that leads to being labelled as "unfit to practise." Suicidal thoughts can be avoided if mental health issues are addressed early on. Humans, as social beings, require a safe place to express our emotions, and heroes, such as healthcare workers, require love, care, and a mental rejuvenation session from time to time. It is the least we can do for those who risk their lives to keep us safe.

"There still are so many people suffering in silence. And there's still this stigma attached to this mental health which we've got to completely obliterate"

~Cited from speech by HRH Duke of Cambridge, World Mental Health Day 2020



## 5. CONCLUSION

Managing emerging mental health problems among health care workers during an epidemic is critical, and this is especially true during the current COVID-19 pandemic crisis. For this extremely vulnerable group, the psychological consequences can be profound and long-lasting. While some aspects of epidemic response are difficult to change, there are numerous preventable factors to consider. By disseminating accurate information and providing adequate training and resources, fear can be reduced. Stigma and discrimination can be reduced by educating healthcare workers, their families, and the general public. Furthermore, hospital and health policymakers must consider the importance of a preventative approach in preventing the development of psychological manifestations. To empower healthcare workers in their critical role in the fight against epidemics, psychosocial support and effective interventions must be readily available in a variety of modes and levels, as well as tailored to their unique characteristics. More high-quality, long-term research is needed, with a focus on measures to alleviate their mental health burden. Besides highlighting the importance of precautions during epidemic, the COVID-19 has also revealed the standards of mental health care which develop resistance towards stress, anxiety or depression. In addition, the pandemic has drawn attention to two important things, one is structural inequity and other is pervasive social inequity, these things have contribution in poor mental health.

The Asia-Pacific Economic Cooperation (APEC) is not only vast region but it's also diverse. The results and especially the findings from APEC can guide or provide the policies and practices in the region and beyond in the delivery of equitable mental health care. There are several obvious limitations to this qualitative review, and these limitations can serve as a useful starting point, or future research agenda for further research on this topic. Given the frequency with which viral pandemics emerge in the twenty-first century, a thorough understanding of their characteristics and modes of action is critical for dealing with the immediate and long-term health consequences.

The COVID-19 disaster sparked worldwide panic and anxiety due to its high pathogenicity and mortality. At the moment, diagnosis and treatment are major concerns. However, as time passes, the consequences of many other organ system complications and treatments will become more apparent, and psychosomatic symptoms are one of these significant changes. It is also suggested that during the pandemic, health care providers should keep an eye out for signs of worry and anxiety. Numerous individual and environmental factors associated with COVID-19 anxiety and general anxiety are being identified at present. The factors discovered in this study can be used to develop intervention programmes, supportive services, and government policy to alleviate fear and anxiety during the COVID-19 pandemic. Promoting psychological flexibility may aid in mitigating the negative mental effects of COVID-19 across regions. Regional differences exist in the roles of seeking social support, problem solving, and pro-sociality.

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