

# Psychology of Health Quarantine Officers after a Year of the Covid-19 Pandemic

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## Abstract

*The COVID-19 pandemic has an impact on the psychology of health quarantine officers if it cannot be handled, there is a chance for psychological distress to affect performance when carrying out their duties. This study aims to determine the psychological distress of health quarantine officers during the COVID-19 pandemic. This study uses a quantitative descriptive design. The research sample consisted of 111 respondents who were selected based on inclusion criteria using a total sampling technique. The data collection tool used is the Self Reporting Questionnaire (SRQ). Data were analyzed using univariate test. From research on 111 health quarantine officers, 104 people (93.7%) did not experience psychological distress. SRQ components in 7 respondents who indicated psychological distress showed symptoms of decreased energy 7 people (100%), cognitive symptoms 7 people (100%), anxiety symptoms 6 people (85.7%), somatic symptoms 6 people (85.7%) and depression symptoms 3 people (42.9%). The majority of health quarantine officers are not indicated to be experiencing psychological distress. A person may have one or more types of indicators of psychological distress symptoms, the majority of the symptoms experienced by respondents are feeling a decrease in energy and cognitive symptoms*

## Keywords

COVID-19; psychological distress; health quarantine officers; SRQ



## I. Introduction

COVID-19 is a global health problem including Indonesia. This was initiated from the information of the World Health Organization (WHO) on 31 December 2019 there was a case of a cluster of pneumonia with a new etiology in Wuhan City, Hubei Province, China and later expanded beyond China. On 30 January 2020, COVID-19 was set to become the public health Emergency of International Concern (PHEIC). (Susilawati, et al. 2020)

The world is currently experiencing an outbreak of COVID-19 as stated by the world health agency or WHO in 2019 on December 31 that there was an infectious outbreak caused by the latest species of pneumonia virus originating from the city of Wuhan, China. (WHO, 2020a). The virus has been identified as a new type of corona virus that infects the respiratory system named Novel Coronavirus (2019-nCov) (She et al., 2020). The number of patients infected with COVID-19 in areas outside China has increased by 13 times and the number of affected countries has increased by 3 times in the last two weeks, therefore WHO held another meeting on March 11, 2020 to decide on the statement if the case of COVID -19 becomes a world pandemic (WHO, 2020b).

The number of COVID-19 sufferers in Riau City based on data recapitulation for 2020 from March 3 to August 4 confirmed 577 cases, the total number of suspects was 6,264 people. (Riau Provincial Health Office, 2020). Based on 577 cases that have been confirmed positive for COVID-19, there are 78 people with the status of health workers in 10 regencies

and cities in Riau Province.(Compass, 2020b). In Indragiri Hilir Regency, there are 6 health workers who have been confirmed positive for COVID-19.(Compass, 2020a)The Pekanbaru area is the area that has the most cases of health workers infected with COVID-19, while the Dumai area has only one employee of the Port Health Office who is confirmed to be infected with COVID-19. (Bulkiah, 2020).

From the data that has been described, the emergence of COVID-19 cases that have infected these health workers also affects the psychology of their co-workers around them. Other health workers may experience psychological pressure such as feelings of worry, depression, fear or stress (Pferferrbaum & North, 2020).

The results of a research study on 500 respondents who are health workers in Singapore obtained data of 14.5% of respondents showing anxiety, 6.6% stress, 8.9% showing depression, and 7.7% experiencing Post Traumatic Syndrome Disorder (PTSD). ). The prevalence of anxiety shown by non-health workers compared to health workers was higher at 20.7%, with a ratio of 1.85 [95% CI, 1.15 - 2.99] P= 0.011(Tan et al., 2020).

The occurrence of psychological pressure on medical officers has an influence on mental health, especially officers who carry out work in the field, including medical quarantine officers at the Port Health Office, this condition is because officers carry out work dealing with so many passengers every day, so the risk of being infected or infected from the virus can increase occurs to officers or can become an asymptomatic person (OTG) who one day can infect those closest to him. In addition to the lack of rest time, the number of officers in the field is usually not proportional to the number of passengers. While there is a possibility that quarantine officers have co-morbidities that can have an impact on decreasing the body's resistance or immunity against the attack of COVID-19 infection.

## **II. Research Method**

The research that will be conducted uses a quantitative approach with a descriptive design. The research location was carried out at the Tembilahan Port Health Office, Dumai and Pekanbaru. This research stage begins with preparing research including submitting a proposal in August 2020 until the results seminar in February 2021. This research data collection tool uses a Self Reporting Questionnaire (SRQ-20) questionnaire distributed via google form. The sample under study was selected using the total sampling technique so that the total sample was 111 respondents.

### III. Result and Discussion

#### 3.1. Characteristics of Respondents

**Table 1.** Frequency distribution of respondent characteristics: age, gender, education level, years of service and comorbidities

<b>Karakteristik Responden</b>	<b>Jumlah</b>	<b>%</b>	
<b>Usia</b>	17-25 tahun	2	1,80
	26-35 tahun	47	42,34
	36-45 tahun	30	27,03
	46-55 tahun	29	26,12
	56-65 tahun	3	2,71
<b>Jenis Kelamin</b>	Laki-laki	45	40,54
	Perempuan	66	59,56
<b>Tingkat Pendidikan</b>	SMA	2	1,80
	D3	35	31,53
	S1	61	54,96
	S2	13	11,71
<b>Masa Kerja</b>	<6 tahun	21	18,92
	6-10 tahun	36	32,43
	>10 tahun	54	48,65
<b>Penyakit Penyerta</b>	Ada	38	34,23
	Tidak ada	73	65,77

Of the 111 respondents studied, most were dominated by people aged 26-35 years, namely 42.3% or 47 respondents. The majority of respondents consisted of 59.5% women or 66 people. Based on the level of education, respondents are dominated by undergraduate strata 1 (S1) graduates by 55% or 61 respondents, in terms of the length of service the respondents are dominated by officers who have worked for more than 10 years, namely 48.6% or 54 respondents, while for respondents who have comorbidities by 34.2% or 38 respondents.

#### 3.2. Overview of Psychological Distress of Health Quarantine Officers

**Table 2.** Distribution of the frequency of psychological distress of health quarantine officers

<b>Karakteristik Responden</b>	<b>Jumlah</b>	<b>Persentase</b>
	<b>N</b>	<b>%</b>
tidak terindikasi distress psikologis	104	93,7
ada indikasi distress psikologis	7	6,3
<b>Total</b>	<b>111</b>	<b>100</b>

Based on data from a total of 111 respondents in this study, there were 104 respondents or 93.7% who had no indication of experiencing psychological distress.

The dominant symptom experienced by respondents was feeling tired quickly as many as 28.8% or 32 respondents, while the number of respondents who experienced indications of psychological distress and felt tired quickly were 7 people.

**Table 3.** Frequency distribution based on symptoms of psychological distress according to SRQ20

SRQ-20		Keseluruhan petugas				Ada terindikasi distress psikologis			
		Ya		Tidak		Ya		Tidak	
		N	%	N	%	N	%	N	%
Gejala Depresi	Tangan gemetar	1	0.9	110	99.1	0	0	7	100
	Tidak bahagia	7	6.3	104	93.7	2	28.6	5	71.4
	Sering menangis	1	0.9	110	99.1	0	0	7	100
	Tidak mampu melakukan hal bermanfaat	2	1.8	109	98.2	1	14.3	6	85.7
	Kurang minat	6	5.4	105	94.6	2	28.6	5	71.4
	Merasa tidak bahagia	1	0.9	110	99.1	0	0	7	100
	Ide bunuh diri	0	0	110	100	0	0	7	100
Gejala Cemas	Sulit tidur	25	22.5	86	77.5	5	71.4	2	28.6
	Mudah takut	13	11.7	98	88.3	3	42.9	4	57.1
	Merasa cemas	14	12.6	97	87.4	6	85.7	1	14.3
Gejala Somatik	Sakit kepala	21	18.9	90	81.1	2	28.6	5	71.4
	Hilang nafsu makan	5	4.5	106	95.5	4	57.1	3	42.9
	Gangguan cerna	19	17.1	92	82.9	3	42.9	4	57.1
	Tidak enak diperut	14	12.6	97	87.4	4	57.1	3	42.9
Gejala Kognitif	Sulit berpikir	9	8.1	102	91.9	4	57.1	3	42.9
	Sulit ambil keputusan	14	12.6	97	87.4	6	85.7	1	14.3
Gejala Penurunan Energi	Sulit aktivitas	5	4.5	106	95.5	2	28.6	5	71.4
	Tugas terbengkalai	4	3.6	107	96.4	1	14.3	6	85.7
	Lelah sepanjang waktu	7	6.3	104	93.7	3	42.9	4	57.1
	Mudah lelah	32	28.8	79	71.2	7	100	0	0

**Table 4.** Distribution of the frequency of symptoms in officers who are indicated to have psychological distress disorders

SRQ	Jawaban			
	Ya		Tidak	
	N	%	N	%
Gejala Penurunan Energi	7	100	0	0
Gejala Kognitif	7	100	0	0
Gejala Cemas	6	85,7	1	14,3
Gejala Somatik	6	85,7	1	14,3
Gejala Depresi	3	42,9	4	57,1

In the study, 7 respondents indicated that psychological distress had cognitive symptoms as many as 7 people (100%), symptoms of decreased energy 7 people (100%), anxiety symptoms 6 people (85.7%), somatic symptoms 6 people (85.7% ) and symptoms of depression as many as 3 people (42.9%).

**Table 5.** Distribution of characteristics of respondents who experience psychological distress

karakteristik responden		SRQ 20	
		Terindikasi	Tidak terindikasi
usia	17 - 25 tahun	0	2
	26-35 tahun	5	42
	36-45 tahun	0	30
	46-55 tahun	2	27
	56-65 tahun	0	3
jenis kelamin	Laki-laki	2	43
	P perempuan	5	61
pendidikan	SMA	0	2
	D3	1	34
	S1	5	56
	S2	1	12
Masa kerja	< 6 tahun	2	19
	6 - 10 tahun	3	33
	> 10 tahun	2	52
Penyakit penyerta	Ada	3	35
	Tidak ada	4	69

In Table 5, it is known that respondents who experience indications of psychological distress are dominated by people whose age range is 26 to 35 years, as many as 5 respondents. In terms of gender, the respondents who experienced the most psychological distress were women, as many as 5 respondents. Based on the level of education, the respondents who experienced the most psychological distress were graduates of the undergraduate level, namely 5 respondents. Judging from the length of service of the respondents, those who experience the most psychological distress are officers who have worked 6 to 10 years, as many as 3 respondents. While regarding the elements of comorbidities in respondents, as many as 4 respondents did not have comorbidities.

### **3.3. Characteristics of Respondents**

#### **a. Age**

The results of the study used 111 health quarantine officers respondents with the most dominant age range being in the age range of 26 to 35 years, with a percentage of 42.3% or a total of 47 respondents. Of the respondents with this age range, 5 people experienced indications of psychological distress.

This finding is corroborated by the results of a study from (Fadli et al (2020) who revealed that age is a factor that can affect the emergence of anxiety from health workers when carrying out their duties to prevent the spread of COVID-19.

#### **b. Gender**

From the total sample data obtained that the most dominant gender is female with a total percentage of 59.5% or 66 respondents. Based on the research data obtained as many as 7 respondents have potential indications of psychological distress. Of the 7 people, respondents with female gender were the most, namely 5 people.

These findings corroborate the results of previous studies of Pappa et al (2020) , which revealed that from 6 studies on feelings of anxiety in health care workers, it was found that the most dominant gender for experiencing anxiety was women with a percentage of 29.06%, 5 results of other studies on depression obtained data that the female sex experienced the most depression, namely 26.87%.

#### **c. Education**

From all respondents, the data obtained in terms of education level, health quarantine officers are dominated by Strara 1 or S1 graduates, namely 55% or 61 respondents. Based on the data obtained from the research that has been done, it is known that the health quarantine officers who have indications of psychological distress are 7 respondents with an undergraduate education level of 5 respondents. These findings are different from the results of previous studies fromFebriandini, Ma'rufi, & Hartanti (2016)which states, nurses who have an indication of medium-level stress are 75.7% with a D3 nursing education level. This study also reveals that a person's level of education will have an influence on managing or processing the feelings of stress they face.

#### **d. Years of service**

The total respondents in this study were reviewed for length of service, the most dominant were health quarantine officers with more than 10 years of service, namely 48.6% or 54 respondents. In all 7 respondents who experienced indications of psychological distress, there were 3 respondents who had a working period of 6 to 10 years.

The findings of this study corroborate previous studies ofManabung, Suoth, & Warouw (2018)Manabung, Suoth & Warouw (2018) which states, from 62 samples obtained if work

stress is experienced as many as 26 workers or 41.9% with a working period of 5 to 15 years compared to workers with a working period of more than 15 years. Workers with longer tenure have a tendency to be able to endure the pressures received longer than new workers because they require more adaptation to the workplace.

#### **e. co-morbidities**

Of the total samples studied, 34.2% or 38 respondents were quarantine officers who had congenital diseases. Of the 7 respondents who are quarantine officers who are indicated to be experiencing psychological distress, there are 3 respondents who have comorbidities. The rapid spread of COVID-19 is a threat to all groups, indications that appear can be in the form of various complaints such as cough, weakness, fever, diarrhea or myalgia. The severity of this virus can vary, starting with no symptoms or complaints (asymptomatic), mild to more severe levels.(Andreas, Romansyah, & Zuandra, 2020).

### **3.4. Characteristics of Respondents**

Based on the results of research conducted on 111 respondents, it was found that most of the health quarantine officers did not experience indications of psychological distress as indicated by the percentage of 93.7% or 104 respondents. The most common indications were fatigue by 28.8%, difficulty sleeping by 22.5%, headaches 18.9%, digestive problems 17.1%, feelings of anxiety 12.6%. Of the total respondents, quarantine officers who have indications of facing psychological distress are 7 respondents or 6.3%. Of the 7 people, the dominant symptoms that emerged were fatigue experienced by a number of 7 respondents, difficulty making decisions and feelings of anxiety experienced by a number of 6 respondents.

Individuals who have good adaptability can solve the problems they face. This adaptability is one of the factors that can affect a person's level of stress or anxiety(Basith, 2020). The findings of this study support the results of previous studies ofBasith, Novikayati, & Santi (2020) which states that if the level of resilience of an individual increases, it can reduce the level of stress experienced by that person, this is indicated by the correlation coefficient -0.530, and the value of  $p = 0.000$  ( $p < 0.05$ ).

#### **a. Symptoms of depression**

Based on data obtained from 111 respondents, quarantine officers who experienced indications of feeling unhappy were 7 respondents (6.3%). From these data, it can be seen that most of the respondents have no indication of depression, there are only 7 respondents who indicated psychological distress experiencing depression with very common symptoms, namely feeling unhappy and lack of interest in many things as many as 2 people (28.6 %).

These complaints can arise because respondents do their work by dealing directly with many passengers entering or leaving airports and ports who are very at risk of being infected with COVID-19, as well as the factor of not having enough rest time when working with passengers during the current COVID-19 pandemic.

#### **b. Symptoms of anxiety**

Based on the data obtained, 111 quarantine officers who became respondents experienced various disorders including difficulty sleeping as many as 25 respondents or 22.5%, easily frightened by 13 respondents or 11.7%, anxiety by 14 respondents or 12.6%. The findings of this study corroborate previous studies ofTemsah et al (2020) who examined 582 health workers found that 41.1% of the total respondents were very worried about COVID-19.

This study found that 7 respondents indicated that the majority of psychological distress experienced symptoms of feeling anxious as many as 6 people (85.7%). Anxiety symptoms can occur because: fear of infecting family or those themselves who are infected This virus is a problem for health workers on the front line, in accordance with the main tasks of health quarantine in Law No. 6 of 2018 and guidelines for handling COVID-19 by Indonesian Ministry of Health (2020) for the supervision of people and transportation equipment, especially during the COVID-19 pandemic who are dealing directly with passengers from various regions whose passengers are not known to be carrying the virus without symptoms.

### **c. Somatic symptoms**

The results showed that out of 111 respondents, 21 people (18.9%) had headache symptoms, 19 people (17.1%) indigestion, and 5 people (4.5%) lost their appetite. Symptoms experienced by 7 respondents indicated psychological distress in this study in the form of loss of appetite and stomach discomfort as many as 4 people (57.1%). This could be because health quarantine officers have to deal directly with passengers at the ports of arrival and departure, either through international routes or domestic routes in accordance with the main tasks and functions of health quarantine. (Ministry of State Secretariat of the Republic of Indonesia, 2018).

### **d. Cognitive symptoms**

The results of this study were 111 respondents from health quarantine officers, the majority had symptoms of difficulty making decisions as many as 14 people (12.6%). The 7 respondents in this study who indicated psychological distress were also dominated by symptoms of difficulty making decisions as many as 6 people (85.7%).

This is also in line with research by Basit (2020) it is found that the lower a person's stress, the value of positive thinking is higher, the value of  $p = 0.000$  ( $p < 0.005$ ) with a correlation coefficient of  $-0.483$ . People who think positively in any situation and condition will always try and be persistent in finding new hopes for the future.

### **e. Symptoms of decreased energy**

The most symptoms experienced by 111 respondents from health quarantine officers showed the most dominant symptom, namely feeling tired easily in 32 people (28.8%).

Respondents of this study who indicated psychological distress all experienced symptoms of decreased energy as many as 7 people (100%). Symptoms of this decrease in energy can occur, one of which is because respondents during this pandemic worked more extra than usual, such as checking e-Hacs or early alert cards for travelers, validating rapid test letters or swabs for travelers who meet the requirements to travel in or out. city. If this condition continues, it can cause burnout, causing disruption to the activities and work of the health quarantine officers.

## **IV. Conclusion**

The majority of the 111 respondents who took part in this study did not indicate psychological distress, but there were 7 (6.3%) respondents who indicated psychological distress by showing the 5 most symptoms, namely easily tired 28.8%, difficulty sleeping 22.5%, 18.9% headache, 17.1% indigestion and 12.6% anxiety. Symptoms of psychological distress from this study were 7 respondents who indicated psychological distress had symptoms of depression as many as 3 people (42.9%), anxiety symptoms as many as 6 people (85.7%), somatic symptoms as many as 6 people (85.7%), cognitive symptoms as

many as 7 people (100%), symptoms of decreased energy as many as 7 people (100%). A respondent can have more than one kind of psychological distress indicator symptom, the highest symptom in this research respondent is a symptom of decreased energy and cognitive symptoms.

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