

Anxiety Related to Health among Medical Doctors in Aceh during COVID-19 Outbreak

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Abstract

During pandemic of *COVID-19*, the incidence of anxiety is high among medical doctors, especially the anxiety related to health. Therefore, this study aimed to investigate the health anxiety among doctors. The study was conducted in Aceh Province and there were 308 doctors who participated. The snowball sampling was used in order to gain the participants. The health anxiety was carried out through The Short Health Anxiety Inventory (Abramowitz, Deacon, & Valentiner, 2007) which consist of 3 dimensions, including Illness Likelihood, Illness Severity, and Body Vigilance. "Illness Likelihood" assesses the perceived likelihood of acquiring a serious illness and intrusive thoughts about health, "Illness Severity" assesses the anticipated burden or awfulness of having a serious illness, and "Body Vigilance" assesses attention to bodily sensations or changes. The results found that most of the medical doctors experienced high level of health anxiety. The incidence of severe anxiety, moderate anxiety, and mild anxiety were 56.17% (173/308), 37.66% (116/308), and 6.17% (19/308), respectively. There is no difference of health anxiety in female (M=55.06; SD=9.34) and male doctors (M=54.57; SD=10.68) with Z-score=-0.433, (p=0.665). Based on each dimension, as much as 99.35% (306/308) had high score in Illness Likelihood, 60.39% (186/308) had high score in Illness Severity, and 95.79% (295/308) had high score in Body Vigilance. From three dimensions assessed by SHAI, Illness Likelihood is the highest health anxiety perceived by doctors. It is suggested that medical institutions should strengthen the training of psychological skills for medical doctors in order to maintain their mental health, as they are the front-line professional who directly deal with patients during this *COVID-19* outbreak.

Keywords: Health Anxiety, Medical Doctor, COVID-19

Introduction

During the *COVID-19* pandemic, medical professionals, especially doctors, experienced a high prevalence of health anxiety. Their presence at the forefront in dealing with patients exposed to the corona virus, makes the vigilance of doctors now at critical alarm. It is undeniable that this health anxiety affects their psychological well-being, which if it does not get serious attention it will affect their

capacity to treat patients (Asmundson, & Taylor, 2020). In terminology, health anxiety is defined as a person's tendency to feel alert to all stimuli related to illness (Taylor, 2019). In addition, individuals with health anxiety consider themselves unable to cope with or prevent the perceived threat (in this case the presence of a serious medical illness) (Özdin & Bayrak-Özdin, 2020).

According to the biopsychosocial approach, health anxiety arises from normal physiological, psychological, and environmental processes. When people acquire certain maladaptive beliefs about health and illness, they begin to routinely misinterpret harmless bodily sensations as indicative of serious illness (Olatunji, 2009). The biopsychosocial approach also states that health anxiety begins with the fact that the human body is always changing, receptive, responsive to various external and internal stimuli, and has many interrelated systems. Sometimes we may pay attention to "body sounds" or listen very carefully to changes in body sensations, such as stomach rumbling or the sound of muscles being stretched. These body sounds are also called body noises and we all experience them (Abramowitz, Olatunji, & Deacon, 2007).

The cognitive-behavioral approach says that health anxiety arises because it is triggered by a number of misinterpretations of stimuli related to illness (Taylor, 2019). A number of scientific evidence shows that changes in sensation in the body can lead to emotional reactions (fear and anxiety) as well as behavior (coping strategies). Individuals with excessive health anxiety symptoms will view these changes in sensation as a potentially dangerous sign that can threaten their lives. Then why do some people hold maladaptive and dysfunctional beliefs about health, illness, death, and medication. Perhaps certain types of stressful or traumatic events, such as suffering from an illness or even witnessing a relative suffer, can lead a person to overestimate health risks. Many people with severe health anxiety report experiencing one or more medical problems in the past (Krautwurst, Gerlach, & Witthöft, 2016). These dysfunctional health-related beliefs may also be formed by observing loved ones and authority figures dealing with illness. For example, children learn attitudes about health and illness by observing their parents

managing these situations (Thorgaard, Frostholm, & Rask, 2018). Overreaction to minor injuries, overuse of health care, and frequent complaining can also convey to the child that any kind of pain or injury is a serious problem that should not be ignored (Taylor, Asmundson, & Hyprochondria, 2004).

Based on those explanation mentioned above, therefore this study aimed to measure the health anxiety experienced by medical doctors during *COVID-19* pandemic and perhaps the results can benefit in developing the psychological skills training for medical doctors in order to maintain their mental health, as they are the front-line professional who directly deal with patients during this *COVID-19* outbreak.

Methods

This research utilized a quantitative research design. The number of participants recruited through accidental sampling techniques was 308 medical doctors in Aceh Province who have minimum length of treating patients with *COVID-19* at least one month, either in private or public hospital. The health anxiety was carried out through The Short Health Anxiety Inventory (SHAI) which consist of 3 dimensions, including Illness Likelihood, Illness Severity, and Body Vigilance. "Illness Likelihood" assesses the perceived likelihood of acquiring a serious illness and intrusive thoughts about health, "Illness Severity" assesses the anticipated burden or awfulness of having a serious illness, and "Body Vigilance" assesses attention to bodily sensations or changes. SHAI was developed by Abramowitz, Deacon, and Valentiner (2007) with 17 items and has been tested with a high reliability of 0.850. The data was collected through Google Form, then it was tabulated and analyzed with descriptive statistics. SPSS version 20.0 for Windows was operated to simplify all the statistical calculation processes within this study.

Results

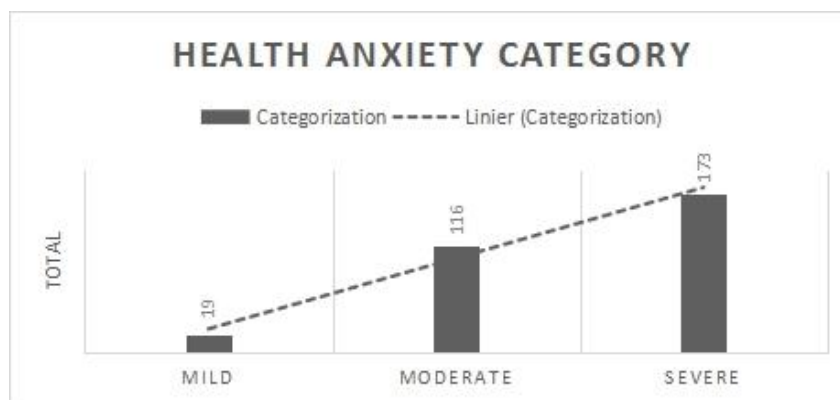
The data analysis gained from 308 doctors working in a number of health facilities in Aceh Province showed that more than 50% of them experienced high level of health anxiety, where there was no difference in health anxiety among female doctors ($M=55.06$; $SD=9.34$) and male doctors ($M=54.57$; $SD=10.68$) with $Z\text{-score}=-0.433$, ($p=0.665$). Below is the result of descriptive analysis.

Table 1. Descriptive results

NO	CATEGORY	N	%	
1	Gender			
	Male	97	31.49	
	Female	211	68.51	
2	Health Anxiety			
	Mild	19	6.17	
	Moderate	116	37.66	
	Severe	173*	56.17	
3	Health Anxiety Dimensions			
		Illness Likelihood		
		Mild 0	0	0
		Moderate 2	0.65	
		Severe 306*	99.35	
	Illness Severity	Mild 22	7.14	
		Moderate 100	32.47	
		Severe 186*	60.39	
	Body Vigilance	Mild 4	1.29	
Moderate 9		2.92		
Severe 295*		95.79		

The graph below shows the linier trend line. This indicated an increase in each category, which proved that most doctors experienced severe anxiety and only a small number of them experienced mild anxiety.

Graph 1. Categorization of health anxiety among doctors in Aceh



Note: Categorizations are based on SHAI score

Furthermore, when viewed more specifically on each dimension, as many as 99.35% (306/388) doctors had a high score in Illness Likelihood, 60.39% (186/308) got a high score in Illness Severity, and 95.79% (295/308) indicated a high score in Body Vigilance. This showed that the majority of doctors have high anxiety about contracting the Corona virus to them selves. This anxiety makes them continue to be aware of the possibility of being infected and try to prevent it by implementing strict health protocols while on duty. Body vigilance is also experienced by most doctors where they are always aware of unusual symptoms that are felt by their bodies.

Discussion

Health anxiety is defined as a person's tendency to feel alert to all stimuli related to illness (Taylor, 2019). In addition, individuals with health anxiety consider themselves unable to cope with or prevent the perceived threat (in this case the presence of a serious medical illness) (Özdin & Bayrak-Özdin, 2020). This study found that more than 50% medical doctors in Aceh Province experienced health anxiety. This *survey* utilized an inventory developed by Abramowitz, et al. (2007) called The Short Health Anxiety Inventory (SHAI) which has 3 dimensions, namely: Illness Likelihood, Illness Severity, and Body Vigilance. Based on the analysis, most of the doctors also had a high prevalence on each dimension.

In general, people with health anxiety tend to overestimate their chances of having a serious health problem and underestimate their ability to cope with the problem. They also tend to ignore other factors suggesting that things are not going to be as bad as they thought (for example, ignoring doctors' assurances that serious illness is unlikely and focusing on the most negative potential outcome rather than the possibility of a cure). Thus, all health-related experiences are viewed as 'disaster' or 'worst case' scenarios. Symptoms of health anxiety can persist if a person has the following 2 assumptions, namely: a catastrophic interpretation of body sensations and a catastrophic interpretation of health-related information (Abramowitz, Deacon, & Valentiner, 2007).

In a catastrophic interpretation of bodily sensations, one would assume that all bodily discomfort and changes are signs of serious illness. For example, if faced with a trigger such as joint pain, he would say things like, "This could be arthritis", "I may have bone cancer", "This problem will be the end of my life", or "This is going to be the end of my life". Whereas in the catastrophic interpretation of health-related information, a person may misinterpret health information as an indication that he or she is a vulnerable or high-risk individual. For example, when a doctor informs you of a blood test result that shows a low white blood cell count (which may only be caused by the common cold). If someone holds this assumption, then he or she will think that "Maybe it's actually leukemia" or "Doctors haven't tested for a very serious disease like HIV or Lupus, so there's a good chance that's what I actually have".

Therefore, it can be said that health anxiety experienced by doctors needs to be managed comprehensively. This *survey* provides recommendations for medical institutions to strengthen psychological skills training for doctors in maintaining their mental health, because they are frontline professionals who directly handle patients during this *COVID-19* outbreak. Various psychological approaches can be taken to deal with it. According to the Cognitive Behavioral Model, healing of excessive health anxiety symptoms can be achieved by targeting changes in dysfunctional beliefs and maladaptive behaviors (Axelsson & Hedman-Lagerlöf, 2019).

Conclusion

The results found that most of the medical doctors experienced high level of health anxiety. The incidence of severe anxiety, moderate anxiety, and mild anxiety were 56.17% (173/308), 37.66% (116/308), and 6.17% (19/308), respectively. There is no difference of health anxiety in female ($M=55.06$; $SD=9.34$) and male doctors ($M=54.57$; $SD=10.68$) with $Z\text{-score}=-0.433$, ($p=0.665$). Based on each dimension, as much as 99.35% (306/308) had high score in Illness Likelihood, 60.39% (186/308)

had high score in Illness Severity, and 95.79% (295/308) had high score in Body Vigilance.

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