



The effect of coronavirus on panic, obsession and depression

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Abstract

The corona virus was first discovered in Wuhan, China. Recently, however, the virus has spread widely in many parts of the world, causing an epidemic. The virus has symptoms similar to pneumonia, which affects the human respiratory system, and symptoms of coronary heart disease include fever, fatigue, and a dry cough. Today, all countries are working to control coronary heart disease, which is diagnosed using clinical analysis of chest CT scans and blood test results. Also, this disease has a high prevalence and lethality, and for this reason, it has caused psychological problems in the community. Studies have shown that the corona virus can also affect some mental illnesses. The aim of this study was to investigate coronary heart disease on panic, depression and obsession. Research has shown that epidemics such as coronary disease affect mental disorders such as panic, depression and obsessive-compulsive disorder.

Keywords: Corona virus, panic, depression and obsession

10th International conference ON PSYCHOLOGY OF EDUCATION SCIENCES AND LIFESTYLE

Tbilisi - Georgia

September 21 ,2022



Introduction

The first case of coronavirus as a cold was reported in 1960. Until 2002, Corona was considered a simple non-lethal virus. In 2003, various reports were published with evidence of corona release to many countries, including the United States, Hong Kong, Singapore, Thailand, Vietnam, and Taiwan (Kumar et al. 2020). In December 2019, a new strain of coronavirus called COVID-19 was first identified in Wuhan, Hubei Province, China. The World Health Organization (WHO) says the virus can cause respiratory illness with overt cough, fever and pneumonia. On January 30, 2020, the World Health Organization Emergency Committee declared the virus to be a pandemic because it spreads rapidly from person to person and most people are not immune to it. COVID-19 Common in humans and many different species of animals including camels, cows, cats and bats (Moghadd et al. 2020). They are classified into four genera: Alpha, Beta, Gamma, and Delta. Seven coronaviruses(CoVs) have been isolated from humans from beta to date(DOS 2020). The incubation period in most people varies from 1 to 14 days with an average of 5 to 6 days, but the incubation period may be up to 24 days. Reproductive numbers for SARS-CoV-2 are estimated to be between 2 and 3 days, indicating a higher epidemic potential than SARS. Fever or cough may be the main symptom, but asymptomatic individuals have also been identified as potential sources of infection(Hugh et al. 2020).

The effect of coronavirus on mental illness

Since the new coronavirus(COVID-19) emerged from China in late 2019, it has spread rapidly around the world, leading to significant deaths. This was followed by an increase in epidemic related psychological stress and unprecedented quarantine, which increased the risk of mental health problems due to separation from loved ones, loss of liberty, uncertainty about illness, boredom, food and home appliances, and inadequate information (Moroganandam Et al. 2020). The outbreak of the new coronavirus 2019(COVID-19) has also caused widespread panic and anxiety around the world(Yang et al. 2021). Previous research has shown a wide and profound range of psychological effects that the outbreak of the disease can have on individuals. At the individual level, it can create new psychiatric symptoms in people without mental illness, exacerbate the condition of people with pre-existing mental illness, and upset caregivers(Hu et al. 2020). Fear of developing SARS-CoV-2 may help to increase obsessive thoughts, which can lead to poorer functional dysfunction in daily life(Hamada and Fan 2020). People with depressive, anxiety, or obsessive-compulsive disorder also have a devastating effect on their mental health from the COVID-19 epidemic, which requires close monitoring in clinical practice (Pan et al. 2021). Large epidemics are predicted to have many negative effects on individuals and society. COVID-19 May affect the mental health of many people. In addition to patients with COVID-19 induced pneumonia, close contacts, isolated isolated cases at home, patients in clinics, family and friends of the injured, and health professionals caring for patients, the general public may also experience high mental health concerns(Islam et al. 2020).

The effect of coronavirus on mental illness

On the other hand, with the rapid spread of the global epidemic of coronavirus 2019, people around the world are showing different fear behaviors. One of the reasons for this panic is that the information of the experts has not been published enough to reach the society at the right time.

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Likewise, the lack of information and misinformation, often reinforced by exaggerated popular media headlines and media outlets, reinforces health-related fears and phobias. Panic attack is a definite period of anxiety that is usually accompanied by palpitations, sweating, tremors, shortness of breath, suffocation, chest pain, nausea, stomach pain, dizziness, unrealism, depersonalization, loss of control, extreme fear. It is characterized by death, tingling and chills. Living in this time of epidemic is a new experience for the majority of the population around the world. Covid-19 may not be the deadliest, but it is one of the epidemics that paralyzes not only society but also our mental health. Upon hearing news such as the spread of misinformation throughout the place, people experience a catastrophic misinterpretation of the body's emotions, which is a hallmark of panic disorder. Previous studies have identified a wide range of factors that contribute to health anxiety, including dysfunctional disease beliefs, catastrophic misinterpretation, sensory-physical reinforcement, and neuropsychology (Nicomedes and Avila 2020). On the other hand, the risk of onset or exacerbation of panic disorder, especially a subtype with prominent respiratory symptoms, characterized by a fear response characterized by interstitial emotions (e.g, respiratory), and excessive alertness to these intermittent signals, Is expected in the current situation. In fact, respiratory symptoms, such as cough and shortness of breath, are the most common symptoms associated with SARS-CoV-2, and respiratory symptoms are associated with a poor prognosis. Thus, given that some of the etiologic and maintenance factors associated with panic disorder for example, the conditioning of fear on abnormal or abnormal breathing patterns attributed to Cronavirus 2019, as well as excessive awareness of respiratory abnormalities - appear to be More commonly, one can expect an increased risk of the onset or exacerbation of panic disorder following the Covid-19 pandemic in people who have been infected with the virus, but also in those who have not. The importance of the respiratory component in anxiety in general and in panic disorder in particular is well known. The association between the severity of air conditioning, shortness of breath and anxiety, and the fear of suffocation has also been established. In 1985, Ronald Lee proposed a theory of hyperventilation of panic attacks (the "theory of fear of shortness of breath") and was the first to propose a "subgroup" classification of these clinical phenomena. Type 1 "classic or respiratory" was characterized by fear, shortness of breath, and palpitations. Subtypes of panic disorder were proposed by Briggs et al. In 1993, and for the first time made it possible to identify the "respiratory" subtype of this disorder. Dickin and Graf (1991) have proposed a neurobiological hypothesis, and several experiments have shown that serotonergic neurons in the dorsal and lateral ventricular trophies nucleus and the lateral ventricular peripheral gray matter act as central chemical receptors and respond to behavioral and cardiorespiratory responses to pain. They adjust As sodium lactate and CO₂. Neuroimaging studies have identified the hippocampus, middle forehead cortex, amygdala, and its protrusions to the brainstem as an abnormal sensitivity in panic disorder. In addition, certain structures of the brainstem that are least or preferably involved in the respiratory forms of panic disorder have been identified: (1) Gray matter around the aqueduct as a central suffocation warning system. (2) The parabrachial nucleus, connected to the "fear network", especially through the amygdala, which controls the number of breaths. Physical conditions that cause shortness of breath, such as asthma, can also shed light on the relationship between anxiety and respiratory problems that patients are likely to experience during COVID-19. Panic disorder is significantly higher in patients with chronic obstructive pulmonary disease (COPD; mainly chronic bronchitis and emphysema). In the context of SARS-

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CoV-2 infection, the respiratory symptoms reported by patients are both recurrent and experienced as severe anxiety. A recent study on the consequences of the COVID-19 pandemic among 1,210 people in China found that sore throats, coughs and respiratory problems over the past 14 days were significantly associated with higher scores on the anxiety and depression subscales. These results indicate two major potential outcomes of the epidemic: (1) an emphasis on catastrophic interpretations focusing on impaired breathing and exacerbation of panic attacks in patients with "respiratory" panic disorder. Or more psychological consequences in these patients if they have COVID-19; (B) Possible secondary consequences of the epidemic include an increase in the proportion of "respiratory" panic disorders, especially due to over-care of respiratory symptoms (Jawlot & Wiener 2021).

The effect of coronavirus on obsession

Infectious diseases affect mental health in addition to causing serious damage to the human body. The same is true for COVID-19. Since the outbreak of this unprecedented pandemic, a myriad of studies across countries have shown an increase in the prevalence of mental disorders (Zheng et al. 2020). After the outbreak of coronary heart disease was declared a pandemic by the World Health Organization, this led to extraordinary public health measures to control the infection, such as quarantine of all countries. The consequences of epidemiological and quarantine psychopathology are predicted to be of particular importance, especially in patients with psychiatric disorders such as obsessive-compulsive disorder (OCD). Obsessive-compulsive disorder (OCD) is characterized by repetitive and disturbing thoughts or images (ie, obsessions) associated with behavioral efforts aimed at counteracting obsessive-compulsive disorder (ie, compulsion). Given the high impact of OCD on patients' quality of life and the high rate of psychiatric illness, the prevalence of COVID-19 present is a unique challenge for OCD patients, due to higher disability due to potential increase in the frequency of obsessions and compulsions, and for psychiatrists "Reasonable behaviors" can be challenging compared to excessive anxiety. As hand washing is considered a major precaution against infection, the demand for disinfectants, soaps, and gloves has increased, with insistence on the importance of hygiene, washing, and pollution prevention standards. Following the rules may seem easy, it may be difficult for patients with OCD who already have insecurities about health practices or need mandatory cleaning. In addition, among the various domains of OCD symptoms, obsessions with hygiene and pollution and forced washing / cleaning are the most common (Benati et al. 2020). Hand washing is currently considered one of the best safety measures to prevent COVID-19 infection. From the beginning of the epidemic, a number of recommendations were made by health agencies. For example, social distancing, masked respiratory hygiene, and hand hygiene. Washing hands with soap or alcohol-based disinfectant has been widely practiced from the beginning as a precaution against contamination, and almost all people follow these recommendations. Although hand washing is certainly helpful in preventing the spread of COVID-19, it is also questionable how this can be done for people with obsessive-compulsive disorder (OCD), especially those with obsessive-compulsive disorder and forced washing. Have, affect. OCD is characterized by obsessions in which thoughts, desires, or images are unwanted, repetitive, disturbing, and unwanted, leading to distress that compels the temporary relief of anxiety. The presentation of symptoms in OCD is heterogeneous. Factor analysis studies have shown that obsessive-compulsive disorder and forced washing are a distinct cluster of symptoms. These



symptoms respond well to treatment. Obsessive-compulsive disorder is the most common form of obsession and washing is the most common compulsion. These symptoms may be exacerbated if there is stress or external symptoms. There are several factors involved in this current Covid epidemic that may worsen symptoms in patients who have previously been affected by OCD. On the other hand, due to quarantine, many patients may not be able to collect their medication properly. Therefore, there may be a recurrence of the disease. This is true of all mental illnesses, including OCD (Chakraborty and Karmacar 2020). Anxiety and compensatory behaviors in the context of epidemics have already been studied in healthy volunteers. One of these samples showed high levels of anxiety during the H1N1 epidemic in 2009-2010. In this study, health anxiety, fear of infection, susceptibility to disgust, and obsessive-compulsive symptoms were predicted by H1N1-related anxiety. Another study of healthy volunteers during the 2015-2016 Zika virus outbreak found that infection-related threat assessments significantly predicted Zika virus-related anxiety. The only study of the course of OCD during this epidemic has been conducted in Italy. There was a worsening of OCD after the epidemic. Exacerbation of the disease was associated with inability to work from home, living with elderly parents, and the presence of symptoms associated with infection (Sharma et al. 2021). Patients may also experience worsening of OCD symptoms in a variety of dimensions, including, but not limited to, the dimensions of contamination / cleansing, aggression, and hoarding. Patients who have never had such symptoms may experience the onset of this major environmental change. Higher levels of avoidance behavior are also expected. In addition, OCD patients can experience an exacerbation of depressive and anxiety symptoms during important life events, including the current epidemic (Silva et al. 2020). In the face of ongoing quarantine, patients are more likely to resort to horrific purchases and excessive hoarding of essential items, even if the states guarantee a continuous supply of essential items. For patients with recurrent depressive disorder, quarantine is a major stressor that interferes with normal daily routines and social rhythms, thereby increasing stress levels, which increase cortisol levels and lead to worsening of depressive symptoms (Chatterjee and Partners 2020).

The effect of coronavirus on depression

Studies have shown that staying home from quarantine for long periods of time affects the risk factors for anxiety disorders and stress. Recent research also shows that people held in isolation and quarantine experience significant distress in the form of anxiety, frustration, uncertainty, and post-traumatic stress symptoms. In general, it has been found that as a result of COVID-19, individuals experience significant psychological pathology. Early in the epidemic, one of the contributing factors to these mental health outcomes was fear. Studies have repeated that COVID-19 related concerns and fears are associated with increased general anxiety, depression, and lower mental well-being (Faisal et al. 2021). A recent study found that the prevalence of depressive symptoms in the Chinese population in the first month of widespread quarantine due to COVID-19 is much higher than previous reports on the longevity of depressive symptoms in the country. In particular, decreased income, increased inactivity, poor sleep quality, and anxiety about COVID-19 infection have been reported as risk factors for increased anxiety or depressive symptoms (Guo et al. 2020). Several studies focusing on the current situation have shown that epidemics and quarantine have increased anxiety and depression in the general population. Various factors that may increase anxiety, stress, and depression include: duration of quarantine and social

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distancing, lack of coping or physical coping strategies, coping with major changes, financial issues, changes in sleep and diet patterns, and disturbances in Daily plans (Suleh et al. 2021). A crisis such as the 2019 coronavirus epidemic may increase the current prevalence of these diseases. Countries have launched a series of measures to break the chain of infection and control the epidemic, including banning local and international travel, banning large gatherings, suspending public transportation, closing schools and universities and jobs, social distancing, curfews, and so on. These limitations and the uncertain course of the disease can significantly affect mental health (Al-Awmari et al. 2020). Increasing evidence of the epidemic effects of COVID-19 on mental health is also leading to the identification of a number of clinical and demographic factors that predict the risk of depression (Bukiarli et al. 2021). This unprecedented situation related to the COVID-19 outbreak clearly shows that people are largely and emotionally unprepared for the devastating effects of biological disasters, which directly show how vulnerable everyone may be (Sarafini et al. 2020).

Conclusion

In the period of epidemic diseases such as coronary heart disease, the situation goes against the usual routine of life and a fundamental change occurs in people's lives; These changes affect different people in different ways. In some people, these changes have little effect on the normal course of their lives, but in some people, these changes caused by the epidemic, can cause many changes in life and, of course, many problems in various fields. Among these problems, we can mention mental and psychological problems. Based on the above, it can be said that coronary heart disease affects panic disorder, obsessive-compulsive disorder and depression. Therefore, in the period of epidemic diseases, basic decisions must be made to prevent these diseases. These decisions can include the following:

- Public Awareness: Providing appropriate health information is critical in this time of crisis. (1) attention to hand hygiene and safe physical distance, (2) reduce the horrific purchase and hoarding of medical equipment (such as masks, hand sanitizers, antibiotics), (3) follow national quarantine to prevent widespread community transmission, (4) maintain Adequate mental and physical well-being and (5) limiting misinformation to avoid chaotic and stressful environments in the country. One possible solution would be to reach out to the general public through local leaders and influential celebrities using social media.
- Medical preparation: Quarantine is a relative measure to buy time for medical preparation. Establishing designated hospitals, providing personal protective equipment, and life-saving drugs is critical, but providing psychological support and trauma preparedness training to emergency care providers can reduce their anxiety and significantly reduce future trauma in these workgroups.
- Resource allocation: During an epidemic, one of the most important things to do is test suspects, track calls, and isolate suspects. Allocating both manpower and budget for this activity is essential. Mental health care providers here may need to act as a primary health care provider if needed and in accordance with their training rules.
- Mental health of vulnerable groups: Most vulnerable groups need care. We should take steps to provide psychiatric distance counseling to people who may not be physically following for various reasons.

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Continuation of psychiatric follow-up services: It is very important to provide ongoing services to pre-registered mental patients to replenish or adjust their medication without having to go to the hospital. This is especially important because quarantines have made travel difficult, and continued social distancing measures could force hospitals to limit the number of non-emergency patient visits in the future.

Closure, quarantine and forced quarantine: Long-term quarantines are likely to occur during the progression of the epidemic. Ensuring that our daily needs are met is one aspect, while at the same time, the real challenge is maintaining one's mental health. Digital media can be used as a resource to educate people and promote ways to: (1) maintain a healthy lifestyle, (2) maintain an almost normal daily routine, (3) relaxing exercises to deal with stress, and (4) other ways to deal with it.

Social distancing versus physical distancing: "Social" distancing seems to be a misnomer nowadays. In these difficult times, it is important to maintain social relationships with friends and family while maintaining a safe physical distance. Psychiatrists can strengthen social bonding through the use of telecommunications to minimize feelings of loneliness during this frightening time.

Stigma: The public health emergency associated with Covid-19 transmissibility can lead to fear and anxiety and may also lead to stigma. It is also important to avoid "labeling" the affected person or community as a "victim". It is essential to support emergency service providers and prevent the spread of rumors. If someone is upset about being diagnosed with the disease or being marginalized in the community, they should seek adequate help. Studies have shown that stigma is directly related to the long-term consequences of poor mental health (Dos et al. 2020).

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