

Patient Trying to Tell Something Else: Severe Stress During COVID-19 Pandemic☀

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ABSTRACT

Identifying mental health illness poses a dilemma, particularly the distinction between heart disease and severe stress. Without early intervention, it can escalate into psychiatric disorder and suicide. A 44-year-old man sought cardiologist consultation for the "heart disease" symptoms. As a medical laboratory technician in charge, his commitments and extensive responsibility during the COVID-19 pandemic add to his hypertension and dyslipidaemia comorbidities. Despite non-significant investigations related to heart disease, he returned with the same intense unresolved symptoms. His Depression Anxiety Stress Scales 21-item assessment revealed severe stress. Stress management counselling includes detecting the underlying stress impacted by the COVID-19 pandemic, behavioural changes, and stress coping skills was done in 4 sessions. The 1st one-hour session was to instil positive thinking and behavioural changes of the severe underlying stress and to counsel the stress coping skills. Stress coping skill includes relaxation techniques (Deep Breathing Technique and Progressive Relaxation Method) and spiritual empowerment (Islamic Integrated Meditation). The next three counselling sessions of thirty minutes duration to heighten the stress management counselling (positive thinking, stress coping skills, spiritual empowerment) as well as to review his wellbeing and physical diseases control were done at two-week interval. At twelve-week follow-up, reassessment of stress level showed significant improvement with no similar symptoms. This case highlights the clinical complexity and diagnostic challenges in detecting mental health illness. Diagnostic acronym PROMPT with the 'PT' refers to 'Patient Trying to Tell Something Else' demonstrated; without a high index of suspicion, mental health ailment may be overlooked. This case also underlined the integration of behavioural changes, stress coping skills, and spiritual empowerment in stress management counselling.

Keywords: Mental health; COVID-19 pandemic; Severe stress; Heart disease; Stress management

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INTRODUCTION

The COVID-19 pandemic and the resulting economic recession have negatively affected many people's mental health due to isolation, burnout, or economic crisis resulting in job loss linked to poor mental health outcomes (1). While social distancing may make people feel safe, it can also increase feelings of isolation, stress, and frustration, causing difficulties in many life situations (2). The following case study illustrates primary care physicians' clinical role in considering whether the patient has a 'hidden agenda' when presenting with signs or symptoms of undifferentiated illness investigated to be normal. However, the symptoms were persistent, representing a plea for help of underlying stress, worry, and concerns. Cardiovascular Disease (CVD) can present with ischemic heart disease, myocardial infarction, or angina, often observed as symptoms which is difficult to discriminate from other mental illnesses especially stress and anxiety. Murtagh Diagnostic Approach at primary care using acronym PROMPT as a working diagnosis includes Probability diagnosis, Red flag diseases, Often missed conditions, 'Masquerades' illnesses and 'PT' – Patient trying to Tell me something else (3). This approach can be applied universally in the primary care or hospital setting as a holistic diagnostic approach. It requires a physician to have soft skills such as good listening skills and being more sensitive and empathetic in providing an opportunity for the patient to communicate their psychological stress without difficulty. This case described a young working adult man who suffered from severe stress during pandemic COVID-19 presented with heart disease symptoms. He has extensive responsibility during the COVID-19 pandemic and on follow-up for hypertension and dyslipidaemia. He was referred to a cardiologist, and all investigations related to cardiovascular disease were normal. He came back with worsening symptoms. Depression Anxiety Stress Scales 21-item (DASS-21) (4) revealed a very high score for stress and anxiety. Stress management counselling includes detecting the underlying stress, mainly contributed by the impact of the COVID-19 pandemic, behavioural changes, and stress coping skills. The risk of suicide was assessed, and the patient was followed up

every fortnight. Reassessment of stress and anxiety after four weeks showed an improvement of the score, and by twelve weeks follow-up, the symptoms subsided, and he adapted to the stress in his working environment with an adequate coping mechanism. This case highlights the clinical complexity and diagnostic challenges in picking up a mental illness. In our case, the diagnostic approach of PROMPT with the last 'PT' refers to 'Patient is trying to tell you something' demonstrated that; without a high index of suspicion, mental health illness, especially during the COVID-19 pandemic, may be overlooked for early intervention to prevent inevitable consequences.

METHODS

Case Report

A 44-year-old gentleman with underlying hypertension and dyslipidaemia diagnosed five years ago presented with recurrent chest tightness, left upper arm discomfort, and difficulty in breathing for one day. He described the symptoms as so severe, making this episode filled with a sense of having a heart attack. He denied any chest pain, sweating, or syncope attack. Given his comorbidities, an immediate plan was to refer him to the emergency department to rule out acute coronary syndrome. On further questioning, the patient mentioned that he experienced these non-specific symptoms: easy fatigue, intermittent chest tightness, palpitation, and left upper limb cramps that disturbed his sleep for the past year at the beginning of the COVID-19 pandemic. As the patient was obese, hypertensive, had high cholesterol, and had a strong family history of cardiovascular disease (his father and mother had the disease at 40 years old), he was referred to the cardiology clinic to investigate cardiovascular disease (CVD) further. Cardiac enzymes and electrocardiograph yielded non-significant results. He underwent a cardiac stress test and echocardiography. Both investigations showed normal cardiac function with no acute ischemic changes, and he was discharged from the cardio clinic.

This history further raised a suspicion concerning the current presentations, which may not be cardiovascular in origin. Following

this, he was screened for stress and anxiety using the available DASS-21 questionnaire, and the results revealed significant severe anxiety and stress. Subsequently, history taking has changed towards handling mental illness conditions. After asking about anxiety and stress symptoms, he admitted to developing worry, anxiety, or edge started a year ago when the COVID-19 pandemic started. The conditions subsequently developed as somatic symptoms such as palpitation, difficulty breathing, and chest tightness. The predisposing factor was excessive stress at the workplace, where he works as a medical laboratory technician in charge of secondary school, which he has to cover a task beyond his responsibility during the COVID-19 pandemic extensively. A day before the current presentation, there was a new active case of COVID-19 among the staff members, and all closed contact was required to be quarantined at home. Although not a close contact, he was as well affected due to the added workload as sanitization at the school area must be completed. He felt he was accountable for all the additional tasks at school if it goes wrong. His emotion was mixed with worry, fear of COVID-19 infection, intense stress, and eventually feeling burnt out, worsening the somatic symptoms. Otherwise, there was no history of obsessive-compulsive disorder, depressed mood, or suicidal thoughts. He is a non-smoker and does not practice any high-risk behaviour.

General examination revealed his body mass index 31kg/m², BP 150/95 mmHg, pulse rate 74 bpm regular. Other systems were unremarkable. He has good eye contact and established rapport. However, he looked restless, stressed, and anxious. There was no sign of self-neglect. There was no abnormal behaviour seen, such as threatening or violent. The speech appeared distracted and preoccupied, which was difficult to interrupt. However, the rate, tone, and volume were normal, and the content was appropriate to the situation.

Relevant blood investigations include renal function test, thyroid function test, fasting blood sugar were normal. Lipid profile was safe net advice was given appropriately to ensure the safety of the patient. If self-help methods are not working and he feels

within target. The summation of the DASS-21 scoring was as Table I.

He participated in four stress management counselling sessions consisting of behavioural changes, stress coping skills, and spiritual empowerment in view of the DASS-21 finding. The 1st session of one-hour duration was to instil positive thinking and behavioural changes towards severe stress and educate the stress coping skills. In this session, it is found that he has been severely affected by the outbreak of coronavirus disease 2019 (COVID-19). The most stress came from the psychosocial stress impacted mainly by the COVID-19 pandemic. The feeling of fear, anxiety, stress and increased workload in his working environment escalated to somatic symptoms mimicking cardiovascular symptoms. Behavioural changes sessions identified the stressor that creates the most stress and develops a positive response (5). The outbreak brought misery to the individual and globally. Positive perception counselling includes taking responsibility steadily, discussing with the superior and colleague for assistance, and looking at the additional responsibilities as a way to help others. This practice of giving help to others may also reduce his anxiety (6). Aside from positive thinking, he was encouraged to be assertive, get organized, and divert to a healthy lifestyle such as a daily balanced diet, exercise suited to his daily schedule, good sleep pattern, and leisure. Stress coping skill includes relaxation techniques such as Deep Breathing Technique (7) and Progressive Relaxation Method (8); and spiritual empowerment, which in this context was Islamic Integrated Meditation (9) have been counselled to help melt away stress. Islamic integrated meditation method, which was being taught are the zikir, prayer, recitations of Qur'an or listening to the Qur'anic verses, are helpful and effectively help him to confront the current life challenges. Before ending the session (the session was running about 60 minutes), a reassessment of alarm signs was done to identify symptoms such as persistent insomnia and other major mental illness symptoms (all were negative in this patient). Though he has a good insight (acknowledging the precipitating factor came from the COVID-19 issue at his workplace), overwhelmed, he was asked to immediately contact the clinic number or to directly call the

helpline. Outlines of stress coping skill were as Table II.

He was followed up regularly with good progress of cardiovascular symptoms. In addition, the home blood pressure monitoring (HBPM) turned normal range (120-130/70-80 mmHg). His motivation at work increased; he

became more confident to negotiate and assertively discuss problems with the superior. Reassessment of stress level at twelve weeks followed up showed significant improvement (normal range score level for depression, anxiety, and stress). He continued his chronic disease follow up as scheduled.

Table I: DASS-21 Level According to the Mental Illness.

Mental Health Illnesses/DASS-21 Level	Depression	Anxiety	Stress
Normal	0 - 4	0 - 3	0 - 7
Mild	5 - 6	4 - 5	8 - 9
Moderate	7 - 10	6 - 7	10 - 12
Severe	11 - 13	8 - 9	13 - 16
Extremely Severe	≥ 14	≥ 10	≥ 17

Table II: Outlines of Stress Coping Skills.

Stress Coping Skills	
Relaxation Techniques	
1. Deep breathing method-diaphragmatic breathing (7)	<ul style="list-style-type: none"> ➤ Sit or lying back in a comfortable and quiet area. ➤ Take a usual breath. ➤ Take a deep breath (breath in slowly through the nose; the chests and lower belly rise as air fill the lungs). Let the abdomen expand fully. ➤ Breath out gently through the mouth or nose. ➤ Do not force hard to practice as it raises tension but not too passive. Instead, focus on the calmer rhythms as focal points. ➤ Practice 5-10 minutes per session about 2-5 sessions per day.
2. Progressive relaxation method (8)	<ul style="list-style-type: none"> ➤ Stay in a comfortable position. ➤ Choose a muscle group at once (e.g., lower leg muscle) ➤ Inhale (breath in) while contracting the muscle for five to 10 seconds. ➤ Exhale to release the muscle completely and abruptly. ➤ Rest for ten or more seconds before moving to other muscle groups. ➤ Practice 5-10 minutes per session about 2-5 sessions per day.
Spiritual Empowerment	
1. Islamic integrated meditation (9)	<ul style="list-style-type: none"> ➤ Five times per day for 5 to 10 minutes, sit in a relaxed position, eyes closed, and repeat a word (zikir) with each breath. ➤ If thoughts stray, recognize them and then let them go- refocus on the word (Zikir) repetitions. ➤ Recite or listen to Qur'anic verses blend with controlled breathing.

DISCUSSION

World Health Organization (WHO) definition of health, formulated in 1948, describes health as “a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity” (10). Stress is a physical, mental, or emotional factor that causes bodily or mental tension in a medical context which can be external (from the environment or social situations) or internal (illness or from a medical procedure) (11). Catecholamine hormones, such as adrenaline or noradrenaline is released during stress to facilitate physical reactions, such as cardiovascular, respiratory, or neuromuscular symptoms. Stress can cause or influence the course of many medical and psychological conditions such as high blood pressure, irritable bowel, depression, and anxiety (11). The COVID-19 pandemic and the resulting economic recession have negatively affected many people’s mental health and wellbeings, such as difficulty sleeping, worsening chronic disease, and increases in alcohol consumption or substance abuse due to worry and stress of the coronavirus (1). Unrecognized of these symptoms may worsen the illness and make it at a level out of control (12). Without early detection and intervention, it can be escalating into psychiatric disorders and suicide.

This case illustrated that an initial presenting cardiac symptom could be somatic symptoms due to underlying chronic diseases. However, a high index of suspicion should be on the list after initial cardiovascular disease tests were normal while having a stressful event at the workplace instigated by the COVID-19 pandemic. Consultation skills in primary care are vital to achieving a timely mental health diagnosis. A thorough consultation must obtain accurate and comprehensive history consisting of interview skills, communication skills, good diagnostic approach, management, and counselling skills. In addition, rapport or an excellent doctor-patient relationship is another key to effective consultations. An accurate diagnosis enables the healthcare provider to do effective management (3). Good history taking will prevent physicians from proceeding with unnecessary procedures, usually expensive and time-consuming. Most of the time, the physician depends on the patient's entire history of presenting illness and

other essential components in the history taking such as past medical history, family history, and psychosocial history in achieving an accurate diagnosis primarily related to the mental illness (13). Identifying mental health illness poses a dilemma at the primary care level as it is not easy to discriminate symptoms of cardiovascular disease from psychiatric illnesses like anxiety and severe stress. Although stress and anxiety usually present with a psychological response, certain patients may present with other physical symptoms relating to autonomic hyperactivity and muscle tension (11). Apart from the chief complaints of chest tightness, left upper arm discomfort, and difficulty breathing, he also had a strong family history of cardiovascular disease. This made ‘Red flag’ disease the most probable diagnosis. The clue for mental health illness appears after eliciting normal cardiovascular disease investigations results; and a DASS-21 score of severe anxiety and stress level. Further history taking revealed the causing factor of extensive responsibility during the COVID-19 pandemic as a significant stressor for the current complaint.

The COVID-19 pandemic put the greater risk of inducing overwhelming symptoms and causing extremely stressful conditions worldwide. It predisposes vulnerable people to loneliness, boredom, anxiety, fear, and stress; induces mental illnesses such as anxiety and stress (14). According to the Malaysian minister of health’s parliamentary reply dated 18th November 2020, from 37,009 total phone calls to helplines, 53.3% were those who sought psychological support. The majority are aged 20-39 years old (55.3%), followed by 40-59 years old (31%). Another data from the American Psychiatric Association (APA), more than half (62%) of Americans are having symptoms of anxiety, and 59% believe that the pandemic of COVID-19 significantly causing a severe impact on their day-to-day lives (15).

Unrecognized mental health issues might lead to late intervention. As in this patient, it affects his quality of life and his social dysfunction. His medical problems seem to have been worsened due to the escalating of somatic symptoms, and his blood pressure became uncontrolled. This patient might develop stress or anxiety disorders, leading to inevitable complications if not detected. A psychological mediation of

stress management for this patient consists of behavioural changes, stress coping skills, and spiritual empowerment session. As mentioned in the case report, behavioural changes are to identify the stressor which creates the most stress and to develop a positive response to this negative stressor. Without a doubt, a healthy lifestyle can change the person's motivation, attitude, and self-confidence. Physical activities and good sleep patterns can improve blood circulation, lower blood pressure, clear the mind of worrying thoughts, and boost the self-image. Relaxation therapy is part of stress coping skills. It helps in reducing stress, decreases mental worries, improves concentration, and subsequently increases productivity (16).

A biopsychosocial and spiritual has been known as a modern and holistic approach in medical management (17). Moreover, this holistic method will certainly facilitate coping with negative stress in life, especially during the COVID-19 outbreak. The Islamic concept of stress management can be practised by integrating meditation and mindfulness practice (muraqabah) with the trust in God, prayer, recitations of the Qur'an, remembrance of Allah, and thankfulness; all were found to be effective methods for a Muslim to face life stressors (9,18). Apart from conventional intervention, the Islamic approach of stress management is also seen to improve this patient's anxiety and stress. Hence, applying the integrated Islamic stress management method as a spiritual empowerment in the medical practice is found to be helpful and effectively assist him to adapt the current life challenges.

CONCLUSION

Mental health illness, especially during the COVID-19 pandemic, may be overlooked for medical disease, particularly the distinction between cardiovascular disease and severe stress. Early detection and intervention of severe stress are essential to prevent the consequences of psychiatric disorders and suicide. The psychological intervention of stress management is best done by integrating behavioural changes, stress coping skills, and spiritual empowerment.

CONFLICT OF INTEREST

The authors reported no potential conflict of interest.

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