



## Psychological consequences of the Coronavirus Disease 2019 (COVID-19) pandemic on doctors

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### Abstract

The COVID-19 pandemic has changed the world. The pandemic has had several impacts on healthcare workers who are at the frontline of screening, triaging and caring for both suspected and confirmed cases, no matter if they are asymptomatic or symptomatic. This has therefore affected the mental health of doctors. Several studies have found that mental health issues such as anxiety, depression, post-traumatic distress syndrome, and insomnia just to mention a few are on a rise among healthcare workers including doctors. This is a review article on the psychological consequences of the COVID-19 pandemic.

### Introduction

The novel coronavirus disease 2019 (COVID-19) was declared a pandemic in 2020. This viral illness has ravaged many countries including developing countries with their poor healthcare indices and the healthcare system. Healthcare professionals especially doctors may go through stress while providing care for these patients when working under pressure and taking critical decisions, with the possible fear of contracting the infection and infecting household members.<sup>1,2</sup> COVID-19 has a lot of physical and psychological impacts.<sup>3</sup>

An outbreak of COVID-19 caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) started in China and was traced to a seafood market in Wuhan in the Hubei province of China. This disease was caused by a new strain of the beta-coronavirus; it was declared a public health emergency in January 2020 and a pandemic in March 2020 by the World Health Organization (WHO).<sup>4</sup>

There is an increase in the literature on COVID-19 due to the several kinds of research that are ongoing on the disease.<sup>5</sup> There are many negative impacts of

the COVID-19 pandemic, some of which are due to the measures put in place to contain the virus such as lockdown, curfew, closure of educational institutions and religious worship centres, ban on public transportation in some countries, closure of neighbourhood markets, social and physical distancing, quarantine, travel restrictions and several others. All these have had social, psychological, economic and several other impacts on the populace including doctors.<sup>5,6</sup>

Some scholars have opined that the COVID-19 pandemic does not only affect physical health but also has a psychological impact and presents a threat to mental health.<sup>7-11</sup> These psychological and mental health problems lead to distress, anxiety, depression, insomnia, denial anger and fear.<sup>11</sup> Wen-Rui et al in their study on the mental health and psychosocial problems of healthcare professionals during the COVID-19 epidemic in China showed that the study participants had a high prevalence of severe insomnia, anxiety, depression, somatization and obsessive-compulsive symptoms.<sup>12</sup>

Adverse psychological effects and emotional traumas may be the aftermath of disasters and pandemics<sup>13</sup> and outbreaks of infectious diseases.<sup>14</sup> The COVID-19 pandemic has had a massive impact on the Nigerian populace, both healthcare workers and non-healthcare workers. Even among healthcare workers, the impact is felt by both those at the frontline and those who are not at the frontline. Frontline workers are staff that must take the risk of

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going to work irrespective of the pandemic as they cannot execute their job description by working from home. Frontline workers are essential workers but not all essential workers are frontline workers.<sup>15</sup> The impact of the pandemic is not limited to Nigeria as there is a global impact of the pandemic. Healthcare workers who are the ones at the frontline including doctors are under physical and psychological pressure and they are also having traumatic experiences and challenges at this time in their career.<sup>16-20</sup> The mental health of doctors is affected by the psychological consequences of COVID-19.<sup>14,21-24</sup>

### Psychological consequences of the COVID-19 pandemic

The COVID-19 pandemic has negative psychological consequences.<sup>20,25-27</sup> The general populace is less likely to experience negative psychological consequences due to the COVID-19 pandemic than healthcare workers<sup>14,28</sup> One of the neglected aspects of health is mental health.<sup>20</sup> In China, 20 nurses managing COVID-19 patients were interviewed and they all showed a significant amount of negative emotions and felt some level of anxiety.<sup>29</sup> Zhang et al studied the impact of the COVID-19 pandemic on mental health using the Impact Event Scale (IES) with 400 subjects participating in the study.<sup>10</sup> Horrified and apprehensive emotions were experienced by 52.1% of the study participants. As a result of this, 64.6% received support from friends, 63.9% from family members and 67.7% paid more attention to their mental health.

In another study conducted in Singapore among 470 healthcare workers on the psychological impact of the COVID-19 pandemic 68 (14.5%) had anxiety, 42 (8.9%) had depression, 31 (6.6%) stress and 36 (7.7%) had post-traumatic distress syndrome.<sup>20</sup>

Dong et al studied the socio-psychological impact of the COVID-19 pandemic on 4618 healthcare professionals in China. In this study, 24.2% of the respondents had experienced anxiety and or depression during the COVID-19 pandemic and about a quarter of the respondents in this study had psychological problems.

Jianbo et al in a cross-sectional study conducted in China on the factors associated with mental health outcomes among 1257 healthcare workers exposed

to COVID-19 showed that 50.4% had depression, 44.6% anxiety, 34.0% insomnia and 71.5% distress.<sup>30</sup> Zhu et al. studied the immediate psychological impact of the COVID-19 pandemic on 5062 healthcare workers in Wuhan, China and showed that 28% were stressed, 13.5% had depression and 24.1% had anxiety.<sup>17</sup> Si et al also studied the psychological impact of COVID-19 among 863 healthcare professionals and found out that 40.2% had post-traumatic syndrome.<sup>14</sup> Giusti et al studied the psychological impact of the COVID-19 outbreak among 330 healthcare professionals in northern Italy.<sup>23</sup> The respondents in the study exhibited a wide range of mental health problems; 26.8% had depression, 31.3% had anxiety, 34.3% had stress, 36.7% had post-traumatic stress, 35.7% had moderate exhaustion, 31.9% had severe exhaustion due to burnout, 12.1% severe levels of depersonalization, 40.1% moderate personal accomplishment and 34.3% severe level of personal accomplishment.<sup>23</sup> Thapacet et al conducted a systematic review on the impact of COVID-19 on the mental health of society and healthcare workers.<sup>31</sup> From their analysis, 50.4% of the healthcare workers had depression, 44.6% anxiety and 34.0% sleep problems.

Some scholars have opined that the cause of mental health risks and psychological problems in healthcare professionals including doctors during the COVID-19 pandemic are shortages of personal protective equipment (PPE), high workload, caring for COVID-19 infected patients, working for long hours, exposure to the coronavirus at work, fatigue, burnout at the workplace, stigma, physical and mental fatigue that follows wearing the personal protective equipment for a longtime.<sup>32-37</sup> The overall impact of this pandemic will be clearer when the pandemic comes to an end.<sup>5</sup>

During this COVID-19 pandemic, healthcare professionals including doctors have exhibited a variety of mental challenges and psychological problems such as insomnia, anxiety, depression, somatization fear of worthlessness, guilt, overwhelming work pressure, burnouts, uncertainty, post-traumatic stress syndrome, and frustration.<sup>38-41</sup>

Some of the causes of the impact of COVID-19 on the mental health of healthcare workers including doctors are stigmatization, fear, providing direct care to infected patients, uncertainty on when the

pandemic will end, and short supplies of personal protective equipment and other medical supplies.<sup>4,42</sup> Healthcare workers including doctors have been on the frontline caring for those infected with the SARS-CoV-2 virus. This can affect the emotions and psychology of the doctors due to the possibility of contracting the coronavirus from their patients. The psychological impact of COVID-19 on healthcare workers and the attendant negative consequences on healthcare delivery cannot be overlooked.<sup>14,16,20,42,44-46</sup> Some of these psychological consequences of the COVID-19 pandemic can have long-term effects such as depression and post-traumatic stress disorder (PTSD).<sup>47</sup> It is necessary to support the mental health of doctors in the fight against the SARS-CoV-2 virus by the development of policies and interventions for the maintenance of psychological wellbeing.<sup>18,20,30,45,48,49</sup> Though the psychological impact of the COVID-19 pandemic is worst among doctors working on the frontline,<sup>20,31,48,50</sup> it is necessary to study all doctors whether or not they are working on the frontline in the fight against the pandemic. Healthcare workers are known to be at risk for COVID-19 with some losing their lives from the illness.

Healthcare professionals are at risk of contracting the coronavirus infection as they come in contact with patients since the virus is transmitted through close contact and droplets.<sup>41</sup> This is because doctors conduct a physical examination on their patients including those who do not present with the classical symptoms suggestive of COVID-19. This means a doctor can also contract the infection from a patient and infect members of his or her household, other healthcare workers and other patients. The COVID-19 pandemic has put a lot of pressure on physicians worldwide as they have had to work under pressure and sometimes have to make difficult decisions with available resources.<sup>51</sup> This and other factors affect the mental health and psychology of the doctors. The COVID-19 pandemic has changed the world and healthcare services have been affected as it is now faced with challenges it was not prepared for.<sup>52-54</sup>

The World Health Organization advises all healthcare workers including physicians to manage their mental health as they would to their physical bodies.<sup>4</sup> Medical errors and incidents which are detrimental to patients may be the result of mental

health problems caused by the COVID-19.<sup>17</sup> Hence it is necessary to protect and promote psychological well-being amongst doctors.<sup>16</sup> It is necessary to study in-depth the psychological impact of the COVID-19 pandemic to equip physicians no matter their specialty.

### Conclusion

The COVID-19 pandemic has caused a lot of changes and a new normal. There are several impacts of the COVID-19 pandemic on different aspects of life including psychological well-being. The COVID-19 pandemic has led to the poor psychological well-being of physicians with its consequences.

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