#### **Open Peer Review on Qeios**

# Role of Social Networks and Media during the Pandemic in Stress Levels and Development of Post-traumatic Stress Disorder (TSD) in Healthcare Workers

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#### Abstract

The COVID-19 pandemic has subjected healthcare workers to unprecedented challenges, exacerbated by the overflow of information and misinformation spread through social media and the media. This has triggered high stress levels and the development of disorders such as post-traumatic stress disorder (PTSD). The analysis reveals a paradox in the role of social media and digital media: on the one hand, they are crucial tools for rapidly disseminating vital information; on the other, they are sources of stress and anxiety due to information overload and misinformation. This pandemic fatigue compromises the mental health of healthcare workers, leading them to avoid information or make suboptimal decisions at critical moments. Conversely, social media and digital media offer a space for emotional and professional support, fostering resilience and collaboration among professionals. However, reliance on these platforms also poses challenges related to information privacy and the accuracy of shared content. Adopting effective information management and self-care strategies to mitigate the risks and maximise the benefits of these digital tools is essential. Institutional support is also crucial to provide mental health resources and foster a culture that prioritises the well-being of these professionals. Collaboration between health organisations, social media platforms, and mental health professionals is critical to developing targeted interventions and support programs tailored to the needs of health workers during and after the pandemic. In this way, health and safety and the quality and effectiveness of care provided to the population in these challenging times can be ensured.

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#### Introduction

The COVID-19 epidemic has presented severe difficulties for medical practitioners worldwide. These stress and anxiety levels have increased rapidly due to the worry of caring for a large number of patients with a highly contagious and potentially fatal disease, as well as the uncertainty and fear that accompany it. As a result, disorders like Post-Traumatic Stress Disorder have developed (PTSD). The abundance of false information readily available on social media and in the media has influenced their work and made it more challenging.

The prevailing climate of dread and uncertainty exacerbates the psychological effects of the pandemic on medical personnel. A degree of uncertainty that can be quite uncomfortable is introduced by the unique nature of the virus, changing treatment procedures, and the erratic course of the illness in patients. Under these unpredictable circumstances, healthcare professionals must make essential decisions frequently with little knowledge and resources, which can cause severe emotional and mental strain.

In addition, the abundance of false material that permeates social networking sites and the media in general has made matters more difficult for healthcare professionals. While news, research findings, and public health guidelines are rapidly disseminated and crucial for making educated decisions, they can often be overwhelming. Because there is so much information available and not all is trustworthy or accurate, healthcare professionals must constantly sift through a wide range of sources to separate fact from fiction. The constant need to analyse and assess data increases stress and cognitive burden.

The combined impact of these variables has significant ramifications for healthcare professionals' mental health, highlighting the necessity of all-encompassing support networks to handle the complex issues they encounter during this worldwide health emergency.

## The Double-Edged of Information

During the pandemic, social media and digital media have played a dual role: they have been vital for distributing important information, but they could also cause tension and anxiety, particularly among healthcare personnel.

Information overload, sometimes known as "pandemic fatigue," can have a negative impact on people's mental health, especially for those who are responding firsthand, including healthcare professionals <sup>[1]</sup>.

The requirement for healthcare workers to separate fact from fiction in order to implement best practices in their day-today work adds to this exhaustion. In light of the pandemic, the significance of accurate information is highlighted since well-informed decisions can have a substantial impact on patient health outcomes and healthcare providers' safety.

People may experience cognitive overload as a result of this information overload, which could cause them to make poor decisions or even ignore certain information <sup>[2]</sup>. This is especially important for healthcare professionals, who have to manage the demands of their jobs under extraordinarily stressful circumstances while also navigating an ongoing stream of new research, recommendations, and standards.

Misinformation and disinformation are yet another serious obstacle. A susceptibility to misinformation can weaken the public's confidence in health authorities and attempts to contain diseases <sup>[3]</sup>. Fighting erroneous information not only makes healthcare professionals' jobs more difficult, but it can also have an impact on how they deal with patients and the general public, whom incorrect or misleading notions might sway.

In order to address health disinformation on social media and safeguard the public's health and the safety of healthcare professionals, it has been recommended that information management strategies and the development of media and digital education skills be implemented in response to these challenges <sup>[4]</sup>. Developing digital resilience, or the capacity to handle the difficulties of information overload and misinformation in digital contexts, and teaching students how to assess material found online critically are two examples of these tactics <sup>[5]</sup>.

#### Online Connection and Community

During the COVID-19 pandemic, social media has become a vital tool for healthcare professionals, offering a place for professional and emotional support and a quick way to share information. These internet platforms have given medical workers a sense of community and camaraderie amidst the tremendous obstacles the pandemic has created.

These social media communities have provided a platform for healthcare professionals to exchange insights, counsel, and coping mechanisms, thereby promoting group resilience <sup>[6]</sup>. This engagement has been critical mainly during periods when social separation and limitations have restricted interpersonal contacts.

These virtual communities provide emotional support and have made unprecedented collaboration possible in medical history. Social media collaboration and knowledge sharing have allowed medical practitioners to quickly adapt to new COVID-19 best practices and therapies by learning from one another in real-time <sup>[7]</sup>.

Social media is helpful for health professionals in terms of training and education during the pandemic. Social media platforms have been used to provide webinars, case discussions, and online instructional tools for continuing medical education <sup>[8]</sup>.

However, there are drawbacks to depending solely on social media for emotional and professional assistance. There are serious worries over the veracity of shared content and the privacy of information. Information must always be validated, and posting sensitive or unconfirmed data in these forums raises ethical concerns that must be considered <sup>[9]</sup>.

## Stress, Anxiety and PTSD

Constant exposure to updates on the pandemic, including alarming statistics, new research, and ever-evolving guidelines, has contributed to an ongoing state of alert among healthcare workers. The proliferation of misinformation on social media during the COVID-19 pandemic has presented unique challenges for healthcare workers, exacerbating their stress load and complicating their efforts to provide evidence-based care. Misinformation related to COVID-19 can lead to errors and confusion, negatively impacting clinical decision-making and patient communication <sup>[10]</sup>. This phenomenon not only undermines trust in legitimate sources of information but also contributes to uncertainty and fear, which can exacerbate stress and anxiety among healthcare professionals.

Furthermore, the highly demanding and frequently traumatising work environment that healthcare professionals have experienced throughout the epidemic puts them at a higher risk of long-term mental health issues such as post-traumatic stress disorder (PTSD). In the context of the pandemic, one study discovered evidence of a considerably high prevalence of anxiety, sadness, and PTSD symptoms among healthcare personnel, underscoring the critical need for efficient psychological support and mental health strategies<sup>[11]</sup>.

The emotional toll of the epidemic and the prevalence of false information highlight the significance of fact-checking services and professional psychological support for healthcare professionals. Collaboration between healthcare facilities, associations for professionals, and social media platforms is crucial in reducing the impact of false information and offering robust support systems that cater to the mental health requirements of this vital population.

## **Resilience and Information Management Strategies**

Healthcare professionals must use efficient information management and self-care techniques to address the problems caused by information overload and false information on social media and digital media. To restrict exposure to potentially upsetting or inaccurate content, clear guidelines should be established for media usage. It is advised to set aside regular times of the day to keep yourself informed about pandemic news and guidelines rather than constantly checking for changes, which can exacerbate anxiety and tension <sup>[12]</sup>.

Furthermore, it is said that self-care is the cornerstone of maintaining mental health. This covers routines like breathing exercises, working out, eating a healthy diet, and getting enough sleep. Engaging in these activities not only reduces stress levels but also enhances emotional toughness against the demands of the workplace.

The institutional support for these measures must go hand in hand with their implementation. Health organisations can be vital by arranging support groups, giving resilience and stress management workshops, and granting access to mental health services. Encouraging a culture that puts healthcare professionals' mental health first is essential to overcoming the obstacles the epidemic and other issues provide.

### Conclusion

Healthcare personnel are facing new problems as a result of the COVID-19 epidemic, including a heavy workload and the widespread influence of social media and the media. These vital professionals are more susceptible to mental diseases like PTSD and have experienced heightened stress due to their constant exposure to information and misinformation. Despite these difficulties, digital platforms have provided invaluable forums for cooperation and support between medical professionals, highlighting the dual purpose of these instruments in the context of the pandemic.

Implementing efficient information management techniques and promoting self-care among healthcare professionals is critical to lessen the drawbacks and enhance the benefits of social media and media during public health emergencies. Furthermore, to give these professionals the tools they need to handle stress and stop the onset of chronic mental illnesses, institutional support is essential.

Mental health specialists, social media platforms, and health organisations must collaborate to create focused interventions and support programs catering to healthcare workers' unique needs during and after the pandemic. By prioritising these professionals' mental health, we can guarantee their physical and mental well-being and the calibre and efficacy of the treatment they offer the public during these trying times.

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