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## **Covid-19 and the New Normal of Mental Health Challenges for Nurses at the Frontline**

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### **Abstract**

The Covid-19 pandemic poses new unprecedented challenges for the Canadian health care system, including its protracted duration and high risk of mortality. Frontline health professionals functioning in high-pressure work environments are experiencing psychological distress. Nurses, the largest group of professionals, are reporting difficulties in balancing their responsibilities to patients, their families and society alongside their own physical and mental health needs. Like military war veterans, who experience varying levels of psychological trauma, nurses are now becoming ‘pandemic veterans’. Although previous experiences with the SARS pandemic provided some important lessons, more attention to protecting the physical and psychological safety of the health workforce is needed. The provision of holistic, psychological support to promote mental health resilience and prevention of post traumatic stress syndrome must be accessible to health professionals at the frontline throughout and following the pandemic. Further research exploring the effectiveness of evidence-based psychological interventions for nurses, alongside its application to other health professionals would assist in reducing the negative impact of the pandemic.

**Keywords:** Covid-19, Mental health, Nurse.

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In 2003, a highly contagious, novel disease, Severe Acute Respiratory Syndrome (SARS), created a global public health crisis. No other infectious disease, other than HIV/AIDS, had reached epidemic proportions within the past two decades. According to the World Health Organization (2003), SARS infected over 8,000 people worldwide and caused more than 900 deaths. The Covid-19 pandemic, however, has far exceeded previous recent epidemics in terms of its relentless infection rates in over 200 countries and territories (Yang et al., 2020). Mortality and morbidity rates continue unabated in many of the infected populations. Despite intense efforts at developing a 'cure' or vaccine, no immediate resolution to the pandemic is imminent, creating unprecedented medical and economic crises well beyond the scope of SARS. The likelihood of prolonged exposure to critically ill patients for health professionals is extremely high, since the projected duration of the disease is unknown and the current mortality rates already exceed those associated with SARS. Health professionals must also consider indirect risks to their social network such as family, friends and the community at large.

During a pandemic, health professionals are a major component of the frontline response, continuously working in physically and psychologically challenging conditions to ensure the health and safety of the public. Although health care workers, by nature of their professional roles, are generally capable of responding to increased demands for patient care, this pandemic brings new, potentially catastrophic challenges. Viral pandemics, which spread at exponential rates, can cause enough acute illness and death to overwhelm existing health care infrastructure (Emanuel et al., 2020). While much attention has been directed towards ensuring adequate equipment and effective health care delivery,

there is less focus on systematically supporting the mental health of healthcare professionals. Increased workload and stress while caring for Covid-19 patients exacerbates existing levels of physical, psychosocial, ethical and emotional exhaustion. Health professionals are becoming increasingly vulnerable, thus reducing the availability of adequate staff long term. Unless effective psychosocial support is available, there is a strong likelihood of long-term mental health issues amongst this population (Khanlou & Oraziatti, 2020).

Mental health challenges unique to pandemic conditions were identified following the SARS outbreak in Taiwan (Lung, Chang & Shu, 2009). Health professionals felt intense pressure due to heavy workloads and the burden of being on the frontline. This was exacerbated by concerns over social isolation, risk to family and daily life-stressful events during the later stages of the pandemic (Lung et al. 2009). They also experienced stigma, fear and frustration which negatively impacted psychological well-being. Taiwanese healthcare workers (physicians, nurses, technicians and respiratory therapists) also experienced a variety of psychological symptoms such as depression during and immediately after the pandemic, however, most of these symptoms disappeared within a short time. Lung et al., (2009) recommended future longitudinal studies using initial and multiple measurements over time to document changes in mental health functioning.

Similar pandemic threats were reported by Canadian nurses during the SARS outbreak in 2003. Nurses experienced burnout, a condition of fatigue and loss of desire for work as a result of extended periods of emotionally, physically, and psychologically demanding work situations (Schaufeli & Greenglass, 2001). Negative

effects of burnout include increased symptoms of personal distress, somatization, and anxiety, as well as job related issues such as increased absenteeism and turnover, reduced job performance and organizational commitment (Fiksenbaum et al., 2006). Increased fear and uncertainty over safety, partially due to lack of information, were noted to be common reactions.

In order to promote effective policy decision-making at all levels of government and the healthcare system, there has been a heavy reliance on epidemiological data, trends and modelling to better understand the progression of infection and mortality rates. A similar evidence-based approach to addressing the psychological needs of health professionals is not clearly evident and needs to be developed. In the absence of current research on the effects of Covid-19 on mental health, existing literature reporting on healthcare workers' prior experiences with SARS can provide new insights on the current pandemic.

SARS was Canada's introduction to the challenges of responding to a new public health crisis of major proportions. The Canadian health care system had to quickly develop infrastructure and expertise to respond to a highly infectious and potentially fatal disease. Despite these efforts, in Canada, as a result of prolonged occupational exposure to SARS, forty-three per cent of those infected were health professionals, some of whom subsequently died (O'Sullivan & Amaratunga, 2003). Frontline nurses the largest group of health professionals in constant direct contact with Covid-19 patients in acute care settings. They risk illness, short and long-term psychological distress, and death. These types of mental health challenges need to be explored and appropriate interventions to be implemented.

### **The new normal for health professionals**

Nurses, like other health professionals are accustomed to safety risks when caring for patients with highly infectious diseases. Kisley et al. (2020) identified nurses, especially younger, less experienced female nurses, as being at greater risk for psychological distress. Although a vaccine may bring some relief from this pandemic, the prolonged nature and uncertainty of its duration exceeds normal levels of risk exposure. The new normal for Canadian nurses is appearing to be 'abnormal'. Unlike SARS, this pandemic presents unprecedented, unique physical and emotional challenges. Health professionals such as nurses are now considered to be working in 'wartime' conditions, at an extreme risk of harm for themselves and their patients and families (Brooks et al., 2019). For example, nurses would not be expected to care for patients without the adequate availability of personal protective equipment (PPE). Yet the global shortage of adequate PPE and other equipment, and lack of adherence to strict infection control procedures has led to the death of significant numbers of nurses and other health professionals in countries such as Italy and the United Kingdom. Reports of nurses feeling scared, unprotected and vulnerable are heard throughout Canadian nursing circles (Khanlou & Oriazetti, 2020). Prolonged, high stress situations not only cause moral distress, but may potentially result in the development of post-traumatic stress disorders (PTSD) when repeatedly experienced. Nurses on the front line may develop mental health symptoms similar to military 'war veterans'.

Covid-19 has also heightened the intensity of ethical challenges in providing healthcare. The current pandemic, with its unpredictable progression and higher levels of morbidity and mortality intensifies psychological distress, resulting from a potential scarcity of medical resources and

the need to ration based upon subjective criteria. Shortages of hospital beds, ICU beds, ventilators and PPE is well known to health care organizations worldwide. Difficult questions arise such as who should be ventilated and who should be allowed to die and self-protection for myself and family while performing my duties. While rationing in times of scarcity is not new to healthcare organizations, the lack of clear guidelines concerning how to respond to a crisis of this scope poses a new threat to mental health (Biddison et al., 2014; Greenberg et al., 2020). The intense global competition to access sufficient medical supplies is the new normal for most healthcare systems (Emanuel et al., 2020). In addition, the potential shortage of skilled health professionals and support staff continues to be a major concern should the pandemic persist or reoccur at a future date.

Pandemics place extraordinary and sustained demands on public health and health care systems. In Canada, prior experience with SARS has provided some insights for health care administration and policy makers on how to respond effectively. Despite this, Covid-19 has far exceeded any anticipated amount of specialized equipment and resources needed to effectively respond to the disease, leading to rationing of existing supplies. Medical decision-making, ensuring efficient resource utilization is challenging under routine, non-crisis conditions, therefore, the scope of the associated ethical dilemma throughout a pandemic can lead to prolonged moral distress (Emanuel et al., 2020). This type of moral distress could eventually lead to burnout and a resulting overall reduction of available health professionals. Although nurses do not have sole responsibility for these types of decisions, they are members of interprofessional teams responsible for determining who will benefit from essential resources and who will not. The rapidly

growing imbalance between supply and demand for equipment in many affected countries has raised questions about fair allocation of scarce resources while recognizing that there will be negative consequences for non-recipients.

The need for resource rationing policies/guidelines is acute but these have yet to be developed. Maximizing benefits as a key guiding ethical value and principle has been recommended as a priority strategy (Emanuel et al., 2020). By operationalizing this approach, patients with a high probability of recovery if provided treatment would be given priority. On a similar note, frontline health care workers should be given priority in receiving critical interventions, testing, and access to supplies such as PPE, ventilators and pharmaceuticals. This prioritization is based upon the effort to effectively equip a viable workforce that is necessary in maintaining a sustainable pandemic response (Roseblum et al., 2011). If the healthcare work force becomes incapacitated, a greater mortality rate and prolonging of the pandemic may occur.

Another potential contributor to mental distress, moral injury, normally identified in military personnel, is occurring during the Covid-19 pandemic (Greenberg et al., 2020). Moral injury is not a mental illness, but is a form of psychological distress associated with actions that may contradict professional or personal codes of conduct (Williamson et al., 2018). Clinical decision-making that would normally contradict ethical guidelines, such as withholding treatment of high-risk patients, can create moral dilemmas. In a pandemic context, rationing scarce resources such as having to choose which of two equally sick patients is provided with specific care, one of whom may not survive because of the non-availability of healthcare equipment, is traumatic. Negative feelings of guilt, anger and hopelessness can lead to the development

of mental health problems such as depression, post-traumatic stress syndrome and suicide. However, some individuals will experience the positive benefits of the moral challenges related to triaging, further enhancing their overall resilience and psychological strength.

### **Enhancing Current Covid-19 Responses**

Strategic effort needs to be directed to mitigate the negative psychosocial effects of the pandemic on all frontline workers. The World Health Organization recommends incorporating psychosocial supports into daily work (WHO, 2020). Mental health strategies that promote resilience- the capacity to cope with traumatic or stressful events, such as a pandemic-is a necessary practice for health professionals to maintain psychological endurance (Cheng & Cheng, 2005). Resilience is enhanced by providing psychosocial support which addresses the relationships between risk and protective factors, and the interdependency between individuals and social systems (Khanlou & Wray, 2014). Promoting the psychosocial resilience of health professionals during the acute and latter stages of a pandemic is also necessary. This is particularly important when considering that poor mental health may increase safety risks for both health professionals and their patients.

The combined effects of the physical, psychological and moral challenges of caring for acutely ill patients throughout a pandemic can be reduced when health professionals are provided access to effective support (Brooks, 2019; Brooks et al., 2020). Health care organizations can contribute to sustaining staff's mental health by implementing specific actions targeted at reducing psychological trauma. Kisley et al. (2020) identified effective preventive strategies common to previous and current pandemics, including: clear communication, training and education around infectious diseases,

enforcement of infection control procedures, adequate supply of PPE, and ready access to psychological interventions. Informational support, provided in a timely and contextually relevant manner, consisting of disseminating information as well as emotional support such as listening and having empathy for staff are required. Both had positive benefits to staff during SARS and remain essential practice throughout the present pandemic (Fiksenbaum et al., 2006). Support from colleagues, immediate supervisors or trained mental health professionals have been proven to be effective in promoting psychosocial resilience. Early and ongoing support assists health care workers address moral dilemmas that they will face can reduce potential feelings of guilt, anger and burnout (Greenberg, 2020). An evidence-based self-help intervention (Self-Help Plus, WHO 2020), which can be rapidly implemented and adaptable to a variety of cultures, languages and settings has been shown to have promising results for managing post traumatic stress disorders (Tol et al., 2020).

Over the course of this pandemic, profession-specific initiatives are emerging to help support the mental wellbeing of frontline health care providers. A plethora of information sources exist, such as webinars and social media forums, through which rapid information sharing is taking place. Despite the availability of a variety of support mechanisms, key questions about the quality and effectiveness of these supports need to be considered. Since the majority of these 'services' are voluntary, the question remains as to whether those in most need of support are accessing and benefitting from them. Perhaps we are merely using old strategies to address new unique challenges such as value-based moral injury as well as burnout symptoms.

The current pandemic response would benefit from a more empirical approach to an

understanding of the mental health challenges faced by nurses and other health professions. Scientific data identifying health care workers currently most susceptible to post traumatic disorder as well as effective strategies promoting resilience is necessary to adequately prepare for future pandemics. This type of evidence is essential to develop and evaluate the effectiveness of current and future strategies to mitigate burnout and threats to human health resources (Yang et al., 2020). Significant effort in tracking the disease trajectory is occurring, and a similar approach is needed to identify the sources, types and impact of mental health stressors on the health care workforce, especially nurse and medical staff. Examination of how workload pressures, resource shortages, ethical dilemmas and safety issues influence mental health during a pandemic crisis is recommended. Such empirical data would provide unique insights into the emotional exhaustion and psychosocial distress of frontline health professionals during the pandemic and potential symptoms of PTSD following its resolution.

The health care system needs to be proactive, rather than reactive, in preventing acute and long-term mental health problems. Maintaining a sustainable nursing workforce, alongside other health professions, is a vital component of an effective pandemic response. The psychophysical distress of working throughout a pandemic therefore be reduced, enhancing individuals' resilience and preventing burnout. A more precise understanding of how current working conditions affect mental health during the pandemic would benefit health service organizations in the future. Providing sufficient physical protective equipment is not sufficient to maintaining a safe work environment. Psychosocial protection is also essential. A more holistic view of protective safety mechanisms is urgently needed. There

is recognition of the possibility of post-traumatic stress amongst military war veterans. The need to identify those at risk and prevent this happening among the nursing population is urgently needed in order to protect 'pandemic veteran nurses' at this new frontline.

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