

## Adapting to Uncertainty Nursing Responsiveness to COVID-19

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On social media and in quiet conversations, fear and anger are palpable: The raw humanity of nurses is fully on display for the world to see. We are currently watching colleagues, students, mentors, and public figures battle COVID-19 (also known as coronavirus or SARS-CoV-2) as both nurses and patients. We have even seen some succumb to the coronavirus. Normal life patterns are disrupted. People with illnesses, such as cardiovascular disease (CVD), find their regular clinics closed and interactions moved to video or phone. People with CVD are also at a greater risk for contracting COVID-19 and have a greater risk of mortality from the acute infection.<sup>1–3</sup> Although epidemiologic knowledge from previous viral pandemics can offer guidance to healthcare providers and researchers, COVID-19 has proven to be unique.<sup>4,5</sup> Complicating matters, COVID-19–specific prevention and treatment measures are difficult to implement

because of shortages in staffing, equipment, and treatments.<sup>6,7</sup> Uncertainty, turbulence, and vulnerability of this time are undeniable; however, they cannot be allowed to limit our effectiveness as nurses.

Scientists from a variety of disciplines are simultaneously working to understand, prevent, and treat COVID-19. Regardless of modeling projections, the trajectory and long-term sequelae of survival of this pandemic are unknown, even for those who were largely asymptomatic.<sup>2,3</sup> In the face of uncertainty, nursing science has an important and unique place in the clinical and scientific responses to COVID-19. As nurses, we are leaders in adapting to holistically meet evolving human needs through theory, research, and innovation. For instance, the theoretical work of Martha Rogers informed research and further innovation for supporting nursing in the space program.<sup>8</sup> Nurses continue to show ingenuity and persistence to improve health and ease human suffering. During this crisis, similar mobilization of nursing and nurse scientists is needed.

Beyond the immediate impact and mobilization of nursing, it is very likely that our perspectives on health, freedom, relationships, and healthcare will change as a result of this experience. Science is evolving rapidly with a plethora of new articles published daily. The science and art of nursing are steadfast,

enduring qualities of our profession, and they will continue to stand the tests of time, war, politics, economics, disease, and death. Nurses will continue adapting and translating the ever-evolving science into practice, all the while responding to human needs. We must continue to monitor and adjust to these changes and marshal our resources to focus on informing the immediate next steps and addressing the longer-term implications.

In our uncertain environment, we can use our expertise in a variety of topics to inform and support the prevention, treatment, and caring for people directly and indirectly affected by COVID-19.

### Biological, Behavioral, Psychological, and Social

Uncertain long-term biologic changes after recovery from COVID-19 are unknown but likely include worsening or new CVD.<sup>2,3</sup> Expertise in behavioral self-management is needed to support accessibility to care for patients, implications of physical distancing and delayed care, and the remote interactions with healthcare providers. Furthermore, physical distancing and other preventative measures may have both immediate and long-term implications for patients' psychological and social well-being. Across each of these areas, racial, sex, and gender differences, and

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the implications of socioeconomic status should be considered.<sup>9–11</sup>

## Policy and Systemic

Alterations in care provision through automated algorithms and telehealth may prompt promising changes for overburdened and remote care access but will have limitations that are critical to identify and address.

## Research and Interventions

Flexibility and efficiency to quickly adapt through the use of (1) unprecedented research protocols, (2) expanded and unique interventions, and (3) adapting or developing new measures, without the comfort of validation and reliability analysis, are likely necessary to adequately describe this unique situation. Maintaining rigor is important but must be taken in balance with the provision of timely information to support efforts directed at limiting the negative impact of COVID-19 on health and well-being.

Finally, it is important to note that the toll of adjusting our personal

and professional frames of reference affects each of us differently. Regardless of our levels of experience, areas of practice, or individual expertise, the long-term impact these challenging times will have on all of us should not be underestimated. In our current time, self-care is no longer a concept or a theory—it is one of the most important things we can do to sustain ourselves. Our physical, emotional, and spiritual reserves can be quickly depleted in times of adversity; as nurses, we must not forget to care for ourselves and each other as we too are vulnerable.

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