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DEPARTMENTS

Letters to the Editor

Challenge for Rehabilitation After Hospitalization for COVID-19



We read with interest the article by Koh and Hoenig¹ published in a recent issue describing the challenge for the rehabilitation community with respect to the coronavirus disease 2019 (COVID-19) pandemic. Despite efforts, as of April 4, 2020, a total of 1,051,635 confirmed cases of COVID-19 have been reported in 205 countries and territories.² Early epidemiological reports showed that 8.2% (95% confidence interval, 7.07-9.47) of the total cases presented with rapid and progressive respiratory failure, similar to acute respiratory distress syndrome (ARDS), and that its treatment methods range from mechanical ventilation to extracorporeal membrane oxygenation in the most severe cases.³

The literature states that patients recovering from ARDS frequently develop significant long-term morbidity related to extrapulmonary complications.⁴ Thus, both young and old survivors have physical and psychological long-term sequelae affecting their quality of life for up to 5 years from the time of their critical illness.³ The literature states that 48% of patients do not return to work 1 year postdischarge and that 32% of patients die within 5 years.⁴

A recent meta-analysis suggests that arterial hypertension, diabetes, and cardiovascular diseases increase the risk that COVID-19 patients will require critical care.⁵ These findings indicate the target group on which rehabilitation should focus because physical and functional consequences are more pronounced when comorbidities are present.⁴

Unfortunately, the first patients who are already being discharged will not be able to access rehabilitation because hospitals are being forced to convert all units and health teams into units of respiratory management for COVID-19 patients. Moreover, the number of COVID-19 cases continues to increase. Therefore, the rehabilitation of these patients will be included in the agenda of everyone who works in rehabilitation.

The large number of patients with ARDS should lead the rehabilitation community to ask: what comes next? In addition to long-term sequelae, increased costs and use of health care services are important consequences of severe lung injury. Moreover, cumulative costs after hospitalization are more pronounced in older patients with comorbidities, the group most affected by COVID-19.³ Trained multidisciplinary rehabilitation teams must be prepared and able to implement best practices to improve the long-term functionality and quality of life of these patients.

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COVID-19: We All Have a Role

Thank you for publishing the article “How Should the Rehabilitation Community Prepare for 2019-nCoV?” in a recent issue.¹ The coronavirus disease 2019 (COVID-19) crisis has been daunting! For many of us, the pace at which we have been receiving, interpreting, and applying the most current clinical knowledge to our settings of practice has been unprecedented. Day by day and hour by hour, experts in the areas of infection prevention and control continue to adjust recommendations in an attempt to protect the public, patients, and providers. However, as social distancing and infection control measure have become our new normal,² rehabilitation professionals from all disciplines have been asked to reconsider the framework by which they deliver care and to adjust their modes of care, which previously relied on close personal and physical contact, in an attempt to maximize functioning and quality of life.

In August 2005, I was a postgraduate year 3 resident in Houston when Hurricane Katrina made landfall in New Orleans. I experienced first-hand the effect of a catastrophe on a community and its health care system. Approximately 250,000 people were relocated to Houston in a matter of days, with the Astrodome becoming one of many makeshift shelters for individuals and their families. The scene was overwhelming, and throughout the early stages there was anxiety, confusion, and fear from the entire public. However, as a community we found a way to persevere. One of the first actions to help ground me was watching several of my attending physicians volunteer to immediately assess the situation and provide care for evacuees in the locations where it was most needed.^{3,4} This was a call to action, and our attending physicians showed us how we as rehabilitation professionals could still have a positive effect during the most dire of circumstances.

Now, COVID-19 has intimidated even the best of us. However, if the past is any indication, we will endure. I have been so impressed not only with our own teammates, who have risen to meet this challenge, but also with the rehabilitation providers across the country who are making contributions and recommendations to help our clinicians, educators, researchers, and administrators address the immediate and long-term needs of our communities and patients. We have been forced to think about the role of rehabilitation in a far different manner, whether it be the ability to integrate new virtual technologies to meet the needs of

patients in the safety of their environments, development of protocols helping to convert inpatient postacute care settings to medical and surgical acute care units, or collaboration among multiple medical specialties, including physical medicine and rehabilitation, to provide truly interdisciplinary care to those who are currently most vulnerable.

I am so thankful to all of you who are have taken on the responsibility of addressing the needs of our patients and communities by meeting this crisis head on. The experiences we have today will put all of us, and everyone we encounter moving forward, in a better place tomorrow. We will make it through this together.

Until we can see each other again in person, stay safe, stay strong, and stay sanguine.

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Response to Letter Regarding “How Should the Rehabilitation Community Prepare for 2019-nCoV?”

We agree with Dr Rivera-Lillo¹ on the likely importance of rehabilitation for both the acute and postacute care of coronavirus disease 2019 (COVID-19) survivors.

Existing data on clinical outcomes after COVID-19 infection are limited. A recent cohort study of 5700 patients admitted to the hospital over a 1-month period with confirmed severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) reported on 2081 of those who were discharged alive by April 4, 2020. Among those persons, the vast majority were discharged home, but that differed substantially by age: 98.0% of those younger than 65 years were discharged home, compared to 86.1% of those older than 65 years.² While reassuring, it is likely that a substantial proportion of persons discharged home after hospitalization for COVID-19 will have rehabilitation needs. Moreover, it is likely that rehabilitation during hospitalization (despite the challenges of infection control and patient hypoxia) can mitigate some of the potential sequelae from COVID-19.