

Novel Coronavirus (COVID-19) Epidemic: What Are the Risks for Older Patients?

The World Health Organization confirmed 93,090 cases of novel coronavirus SARS-CoV-2 infections (COVID-19) worldwide on March 04, 2020. 3,198 deaths were declared (3%). In the United States, 108 cases were confirmed.¹ Coronavirus family members are known to be responsible for severe acute respiratory syndrome (SARS-CoV) and Middle East respiratory syndrome (MERS-CoV), associated with severe complications, such as acute respiratory distress syndrome, multiorgan failure, and death, especially in individuals with underlying comorbidities and old age.^{2,3}

In a recently published large case series of 138 hospitalized patients with COVID-19 infected pneumonia, the 36 patients (26.1%) transferred to an intensive care unit were older and had more comorbidities (median age = 66 years; comorbidities in 72.2% of cases) than patients who did not receive intensive care unit care (median age = 51 years; comorbidities in 37.3% of cases).⁴ Comorbidities associated with severe clinical features were hypertension, diabetes, cardiovascular disease, and cerebrovascular disease, which we know are highly prevalent in older adults. Previously, the China National Health Commission reported that death mainly affects older adults, since the median age of the first 17 deaths up to January 22, 2020, was 75 years (range = 48-89 years).⁵ Moreover, people aged 70 years or older had shorter median days (11.5 days) from the first symptom to death than younger adults (20 days), suggesting a faster disease progression in older adults.⁵

Since COVID-19 seems to have a similar pathogenic potential as SARS-CoV and MERS-CoV,⁶ older adults are likely to be at increased risk of severe infections, cascade of complications, disability, and death, as observed with influenza and respiratory syncytial virus infections.^{7,8}

The consequences of possible epidemics in long-term care facilities could be severe on a population of older adults who are by definition frail and immunologically naïve towards this virus, even if the risk is of course for the moment mainly theoretical. Therefore, it seems essential to limit the risk of spreading the virus in facilities caring for older patients at all costs. This could mean drastic quarantine measures for staff members who have stayed in high-risk areas or have been in close contact with possible cases. If any suspected case of COVID-19 infection occurs, transfer to a specialized facility as soon as possible is crucial

since long-term care facilities are not adequately equipped to effectively manage case containment. While waiting for the transfer, placing the patient in a single room, wearing a mask (N95 or FFP2 respirators for healthcare practitioners), and careful hand hygiene using alcohol-based hand rub (or soap and water when hands are visibly soiled) are the key prevention measures to limit spread of COVID-19. They must also be combined with eye protection and systematic use of disposable blouses and gloves to provide the optimal level of protection.

Clinical management of COVID-19 should be guided by the World Health Organization and the Centers for Disease Control and Prevention.^{9,10} There is no specific recommendation for older adults. The Centers for Disease Control and Prevention state that there is no specific antiviral treatment recommended, and patients should receive supportive care to help relieve symptoms. For severe cases, treatment should include care to support vital organ functions.¹⁰ Secondary prevention and care of general complications could also be a major issue in older patients. Indeed, in seasonal influenza, for example, a large proportion of deaths are related to decompensation of comorbidities and complications occurring after the infection.⁷ Particularly, reducing incidence of venous thromboembolism, catheter-related bloodstream infection, pressure ulcers, falls, and delirium is recommended. These measures should be adapted to comorbidities, polypharmacy, and frailty of older patients.^{9,10} We assume that they could also be crucial in case of COVID-19 in older adults.

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DOI: 10.1111/jgs.16407

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ACKNOWLEDGMENTS

Conflict of Interest: No conflicts of interest.

Author Contributions: All authors drafted and revised the article for intellectual content.

Sponsor's Role: Not applicable.

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