

longtime paid caregiver to stay away. Another patient found that despite the effort her paid caregiver made to avoid infection as she took public transportation to work daily, she developed COVID-19. Without her caregiver, my patient had fallen twice in 1 week trying to get out of bed independently.

For my patients and their families, these caregiving changes were not simply logistical challenges but true health emergencies with clear medical consequences. Paid caregivers' work is often considered "unskilled," but patients cannot live safely in the community without it. Furthermore, paid caregivers often perform health-related tasks beyond providing functional support such as reporting changes in symptoms, enacting exercise recommendations, and providing emotional support.<sup>3</sup>

Yet paid caregivers are not routinely considered part of the healthcare team, and research suggests that communication between paid caregivers and healthcare providers is limited.<sup>4</sup> COVID-19 drove this point home. Although I have long considered my patients' paid caregivers partners in home-based care, I lacked the necessary information to contact their agencies (if they worked with one) and to help them procure and effectively use the personal protective equipment (PPE) they needed to safely care for patients with suspected COVID-19.

The medical system's response to COVID-19 exemplifies the problematic separation between medical and long-term care that currently exists within our healthcare system. The best health advice for older frail patients was to stay home, and healthcare providers offered televisits and telephonic symptom management to avoid unnecessary emergency department visits. Yet what this meant for paid caregivers working in the home was not considered. Early on in the COVID epidemic in New York City, home care agencies reported inadequate COVID-19 training, limited workforce capacity, and inadequate PPE.<sup>5</sup> This left both patients and paid caregivers vulnerable.

As COVID-19 accelerates existing trends to move long-term care from facilities into the community,<sup>6,7</sup> better integration of paid caregivers into the healthcare team will be necessary. One of the most important barriers to integration is a lack of standard training for paid caregivers.<sup>8</sup> Medicaid is the largest public funder of paid caregiving, yet training and supervision of the Medicaid-funded paid caregiver workforce varies considerably from state to state,<sup>9</sup> with very limited training in coordinating care with other health providers.<sup>8</sup> Physicians and other medical care providers must partner with advocacy groups and community-based long-term care providers to develop consistent, competency-based training for paid caregivers. This will ensure both that paid caregivers have the essential skills to participate meaningfully in team-based care and that healthcare providers can reliably count on this participation.

The COVID-19 pandemic makes clear that caring for our most vulnerable older adults in a time of crisis takes the coordinated efforts of the full healthcare team. This team must include the paid caregivers who support these patients at home every day.

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## Geriatric Skin Care in the Era of COVID-19

*To the Editor:* As one of the most vulnerable groups of patients during the era of coronavirus disease 2019 (COVID-19), the geriatric population must adhere to specific guidelines to reduce their chance of contracting this potentially fatal virus. Older patients who implement measures, such as frequent handwashing and sheltering in place, benefit most from the perspective of viral infectivity; however, paradoxically, this group is also the most vulnerable to dermatologic consequences associated with these preventative measures.



**Figure 1.** Cutaneous manifestations related to preventative measures of coronavirus disease 2019. (A) Xerosis (i.e., dull, flaky, rough skin) due to frequent handwashing and/or use of alcohol-based hand sanitizers. (B) Irritant contact dermatitis due to frequent handwashing and/or use of alcohol-based hand sanitizers. (C) Stasis dermatitis due to increased sedentary behavior and “shelter-in-place” mandates.

The use of hand sanitizer and handwashing have become particularly important during COVID-19.

Guidelines provided by the Centers for Disease Control and Prevention (CDC) recommend frequent handwashing multiple times a day and suggest the use of an alcohol-based hand sanitizer that contains at least 60% alcohol when soap and water are not readily available.<sup>1</sup> Frequent handwashing and alcohol-based hand sanitizers are a common cause of dry skin and irritation in the general population, and skin changes associated with the aging process further predisposes older patients to these conditions.

Barrier function and recovery in aged skin (aged >80 years) is more readily disrupted than is young skin (aged 20–30 years), resulting in transepidermal water loss and altered permeability to chemical substances.<sup>2</sup> Increased handwashing can further exacerbate this problem, leading to xerosis (i.e., skin dryness; Figure 1A) and increased susceptibility to irritant contact dermatitis (ICD) (Figure 1B). Xerosis is a common dermatologic problem in the older population, characterized by rough, flaky, and scaly skin, and is the most common cause of pruritus in older people.<sup>3</sup> ICD occurs on contact with an irritating chemical or physical substance to the skin, and patients present with a pruritic rash characterized by erythema, papules, fissures, and scaling. Pruritus characteristic of these dermatologic conditions is thought to occur secondary to abnormalities in cytokine levels, skin pH, keratinization, and surface lipid components.<sup>4</sup>

The mainstay of treatment for prevention of ICD is avoidance of the offending agent; however, this option is not feasible in the current climate, and emphasis should be placed on prevention. As a functional, protective cutaneous barrier exists at an acidic pH (4.0–6.0), prevention of barrier dysfunction characteristic of xerosis and ICD should include the use of low pH cleansers and moisturizers.<sup>5</sup> Alkaline bar soaps can be irritating to the skin and should be avoided. Other preventative measures include the use of barrier creams containing dimethicone and moisturizers rich in ceramides.<sup>6</sup> Treatment of ICD can be achieved through the use of topical corticosteroids; however, the clinician should be weary of increased risk for steroid-induced atrophy in the geriatric population, in whom the skin is thin. Itch relief can be obtained with use of cold compresses.

The CDC and federal government have also recommended that Americans “shelter in place” as an emergency preparedness and response measure to COVID-19. Individuals across the country are remaining inside their homes and being discouraged from engaging in outside activity due to risk for viral exposure. Older patients who are becoming more sedentary due to these measures are at risk for exacerbation of stasis dermatitis, a common condition seen in the geriatric population that results from aberrant venous drainage from the legs (Figure 1C).<sup>7</sup> Stasis dermatitis is a common cause of chronic pruritus in the lower extremities of older patients and can be extremely uncomfortable for patients.<sup>8</sup> To improve symptoms of this condition, geriatric patients should use elastic stockings

and frequently elevate the legs to improve venous circulation.

The stress of surrounding COVID-19 and social isolation can have significant negative effects on mental stress in older people. Psychological stress has an impact on many skin diseases and can play a substantial role in exacerbating disease activity.<sup>9</sup> One of the most common skin conditions in which psychological factors play a central role is seborrheic dermatitis (SD). SD is common in the older population, and especially in those with Parkinson's and Alzheimer's disease.<sup>10</sup> To help abate symptoms of SD, we recommend the use of topical antifungal shampoos, such as ketoconazole, as well as mild-to-moderate topical corticosteroids.

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## Peaceful Goodbyes: Providing End-of-Life Care to Patients with COVID-19

*To the Editor:* At the start of the coronavirus disease 2019 (COVID-19) pandemic, I had the privilege of providing care to many patients as a resident physician who triaged and admitted patients to the wards based on their care need, and later as a part of the critical care team.

When I reflect on my clinical experiences, I still feel pain over my patients' unique hardship during coronavirus restrictions. For example, I would tell my patients, "I will check on you later," after an initial evaluation and triage, only to shut the door and likely never return to their rooms the rest of the shift. Our hospital was flooded with COVID-19 patients, and I had to rush to see them. There was barely enough time to review charts and answer pages, let alone go back into the rooms to provide supportive care to the patients who were already admitted. I would feel guilty and uneasy because they would spend most of their time alone, with minimal staff interaction and no visitors. With these unique restrictions, I witnessed challenges in arranging appropriate end-of-life conversations and preparing the patients and their beloved families for a dignified death. We faced challenges, such as communicating with family members over telephone or video instead of in person and helping family come to terms with dying patients who deteriorated rapidly and unexpectedly. Here, I hope to share two different farewells that I arranged between the patients and their beloved families, with the insight I gained in the process.

Mr J was admitted for acute hypoxic respiratory failure due to COVID-19 and was intubated for weeks. He developed multiorgan failure, requiring dialysis and pressor support. I started building a relationship with his family early in his hospitalization, to lay the foundation for an end-of-life care discussion by keeping them updated over the telephone. There were some challenges in communicating with his family. They spoke limited English, and when I called via an interpreter, I sensed that subtle nuances in my message were sometimes lost. Furthermore, Mr J's family was unable to visit him and could not witness his clinical deterioration with their own eyes, which meant they struggled to understand the gravity of his illness. Despite these barriers, I tried to update his family frequently in a compassionate but honest way, and I gave them adequate time to discuss among themselves and ask questions. Our palliative care team provided invaluable support for Mr J's family as they