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COVID-19 pandemic and the burn survivor community: A call for action*

The worldwide COVID-19 pandemic and the necessary social isolation to mitigate its effects include drastic measures that have the potential to topple the underpinnings of successful burn recovery and to impact burn survivors beyond the shocking effects of the virus alone. Research efforts in the last several decades have laid the foundation of the pathway to successful burn recovery. Key components of improved quality of life of burn survivors are maintaining a long-term burn center connection [1] with follow-up in the community following discharge and participation in support systems including peer support [2]. Limited resources in this pandemic or any mass disaster may hamper the required inpatient and outpatient processes of care for burn survivors with and without COVID-19, or other highly contagious disease.

Suddenly with the rapid onset of this pandemic, access to outpatient medical care and elective reconstructive surgery is restricted, in-person therapy services are shut off, specialized care such as custom-made medical equipment including pressure garments and splints is limited, and medical personnel are directly impacted and often less available. The clinical efficacy of the necessary transition to virtual telehealth care is not yet proven in burn survivors. Can the chronic insidious physical symptoms of burns [3] be adequately assessed during virtual visits? Can scars be assessed for pliability and response to massage? Can contractures be adequately treated with virtual care and measured to assess if interventions are adequate? Furthermore, people who sustain burn injuries are often those who are vulnerable due to physical or psychological impairment or who were part of inequitable socioeconomic or culturally different populations. Do those disadvantaged groups have access to Internet, computers, phone or even housing resources or have the cognitive or language ability to set up and manage the necessary technology or even communicate symptoms?

John O'Leary, a burn survivor, in his "virtual plenary address" to the abbreviated American Burn Association Annual Meeting last month noted the fear and anxiety brought about by the COVID-19 pandemic was similar to the lack of control and life-disruption experienced by persons whose lives are transformed by burn injury. He commented that this experience might trigger these feelings in burn survivors. On top of that, burn survivors often experience social isolation related to their scars, body image, and depressive and posttraumatic stress symptoms [4]. State and federal guidelines recommending individuals stay at home compounds already existing challenges for some burn survivors. Increased isolation and limited ability for social contact may exacerbate post-traumatic stress disorder and depression and further hinder burn recovery [5]. Peer supporters and groups, who provide a major defense for burn survivors helping them cope with these feelings, are unable to give the needed warm inperson hug and support they are famous for. Meetings are relegated to the Internet or phone, again noting that there is a large disadvantaged minority of the population at increased risk, without the equipment or finances to participate.

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As a burn care community we have the responsibility to gather our people and resources close while social distancing during this pandemic. For medical care, extra effort to rapidly develop, test, and share standard templates for assessment of post-burn symptom complexes is needed. Efforts by clinic staff and therapists should be made to connect with those needing services such as phones, computers and Internet connections with proper technological support and translation services that are critically required. The development of technological solutions to measure garments and fit splints is essential. Development of new and gathering of existing on-line therapeutic maneuvers for burn care therapy and outpatient rehabilitation is necessary. Examples include resources from the American Burn Association [6], the Phoenix Society for Burn Survivors [7], and the Model Systems Knowledge Translation Center [8]. The use of health-related quality of life generic and burn-specific metrics such as PROMIS [9] and the Life Impact Burn Recovery Evaluation (LIBRE-Profile) [10,11] could help identify population and individual needs.

A number of persons with present or past burn injuries will contract COVID-19. Dealing equitably with disability is an important ethical foundation of "crisis standards of care" [12]. Breaking down barriers for burn un this process in a statement on their website developed in collaboration with the Phoenix Society of Burn Survivors. In their statement on interpreting burn triage during the COVID-19 pandemic, they emphasize that burn size, although an important determinant of mortality [13] should not be a consideration in triage related to quality of life determinations [14]. Finally, preparation for the post-COVID surge in reconstructive, rehabilitation and psychosocial needs of burn survivors must be underway.

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