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CORRESPONDENCE

# Personal hygiene care in persons with spinal cord injury during the COVID-19 pandemic and lockdown: an Indian perspective

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## To the Editor:

Globally 2.1 billion people lack safe water at home [1], yet it is indispensable to maintain health and hygiene. In a developing country, basic hygiene with soap and clean water is the most effective and economical way to prevent many respiratory, gastrointestinal and skin infections. Coronavirus Disease 2019 (COVID-19) is an infectious disease caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SAR-CoV-2). This pandemic has reinforced the need for basic hygiene. From frequent handwashing to wearing masks, COVID-19 has set our life-style to a new normal.

We would like to highlight the barriers to personal hygiene in persons with Spinal Cord Injury (SCI) during this pandemic and lockdown in India. We would also like to point out how these barriers may influence rehabilitation in similar developing country settings and ways to overcome them.

In India, COVID-19 cases have crossed half a million [2]. In conjunction with this pandemic, we emphasize that people with SCI are susceptible to infection [3, 4] and can present with atypical symptoms of a SAR-CoV-2 infection [5]. Hence, optimum hygienic practice is of utmost importance to prevent infections in these individuals, and hand hygiene remains the most important measure to prevent SARS-CoV-2 infection [2]. Soap-water use for hygiene is the most economical measure compared to alcohol-based sanitizer for persons with SCI, as they usually belong to lower economic groups, and identifying physical, environmental, resource-related, educational and psychological barriers (lack of availability of caregivers for cleaning, washing, lack of education and information on personal hygiene maintenance, anxiety, panic, lack of resources such as toilets, etc) to hygiene will help in sustaining optimum health and functioning. In sum, we must not forget that providing customized socioeconomic solutions to the problem is an important step of rehabilitation during the pandemic.

Regarding hygienic practice, the story of the individuals with SCI has turned out to be different from that of able-bodied individuals. Until this pandemic, people with SCI have learned to live within their functional abilities. However, the impact of COVID-19 has restricted the attainment of optimal functional ability medically, psychologically, and socioeconomically. As susceptibility to infections increases in individuals with SCI [3, 4], removing restrictions and maintaining proper hygienic practices are important. Specific studies in people with SCI during this pandemic are lacking, but it is conspicuous that mobility restriction and environmental barriers are two important hindrances to optimal hygienic practice among people with SCI.

A study conducted in developing countries showed that people with disabilities 'may have poorer quality of access' to adequate water, sanitation, and hygiene within their households [6]. A recently published survey on COVID-19 and SCI also highlighted the need for studies regarding the concerns among people with SCI during this pandemic [7].

Common issues with hygiene in India and other developing countries are lack of access to safe water, water constraints, difficulty getting access to soap [8], lack of enough flooring and overcrowding in homes, and problems with open defecation and waste and excreta disposal, amongst other issues. An increasing population and socioeconomic differences also affect health and hygiene in India [9]. COVID-19 has aggravated these pre-existing issues, in particular among people with SCI. Furthermore, in the view of an increasing number of COVID-19 cases, and

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considering the population of disabled and susceptible individuals, we would recommend to increase health education at the community level regarding personal hygiene.

In conjunction with COVID-19, we have noticed different impacts in individuals with SCI. First, mobility restrictions directly hinder hand hygiene. Furthermore, people with pre-existing contagious skin infections like scabies, need more vigorous hygienic practice but this is more difficult with SCI, and thus makes people more dependent. Second, COVID-19 has made people with SCI more dependent on care providers and related fear (fear of transmission, sense of insecurity regarding the adequacy of own hand-hygiene due to functional restriction, etc.) has resulted in a need for increased assistance in clean intermittent catheterizations. Mobility restrictions and greater isolation at home have increased the duration of bed time and sitting time, and decreased the frequency of exercises, outdoor activities, and wheelchair mobility that individuals with SCI would previously perform. This hampers adequate pressure relief techniques and pressure injury hygiene. Proper menstrual hygiene is a concern in females with SCI and a lack of awareness and knowledge regarding the hygiene of assistive aids is another issue. Finally, in the financial crisis, worldwide COVID-19 has had a negative impact on employment and income. This leads to a vicious cycle where a financial crisis leads to a constraint on materials essential for personal hygiene and subsequent poorer hygiene, making people more vulnerable to infections, especially for people from a low socioeconomic group. People with SCI are in particular vulnerable in this situation which eventually, results in increased expenditure on health and a deeper financial crisis.

Further studies are needed to address the concerns of individuals with SCI during pandemics in developing countries. In times of pandemics, vulnerable individuals are particularly in need of good education regarding the importance of proper health hygiene. Telerehabilitation approaches (using telephonic calls, stored customized videos, messages etc.,) would be applicable in an Indian setting [10] and to other low to medium-income countries during pandemics, and also in situations where travel distances and travel costs would be a hindrance to proper follow-up. Considering the current scenario of social distancing, various telerehabilitation initiatives [11, 12] would be an optimal solution for people with SCI, so that they can stay home, stay functional, and stay safe.

## Compliance with ethical standards

**Conflict of interest** The authors declare that they have no conflict of interest.

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