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**ABSTRACT TEMPLATE**

**To contrast and reverse skeletal muscle weakness by Full-Body In-Bed Gym**

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Mobility-impaired persons, either very old or younger but suffering with systemic neuromuscular disorders or chronic organ failures, spend small amounts of time for daily physical activity, contributing to aggravate their poor mobility by resting muscle atrophy. Sooner or later the limitations to their mobility enforce them to bed. We include among these patients at risk those suffering with COVID-19 pandemic syndrome. Beside managements of psychological symptoms, it is mandatory to offer to those groups of patients physical rehabilitation approaches easy to learn and self-managed at home. Inspired by the proven capability to recover skeletal muscle contractility and strength by home-based volitional exercises and functional electrical stimulation, we suggest a 10-20 min long daily routine of easy and safe physical exercises that can activate, and recover from weakness, the main 400 skeletal muscles used for every-day mobility activities. Persons can do many of them in bed (Full-Body in-Bed Gym), and hospitalized patients can learn this light training before leaving the hospital. It is, indeed, an extension of cardiovascular-respiratory rehabilitation training. Blood pressure readings demonstrate a transient decrease in peripheral resistance due to increased blood flow of the many activated muscles. Continued regularly, Full-Body in-Bed Gym may help maintaining independence of frail people, including those of COVID-19 pandemic syndrome.

Key Words (Up to five): Skeletal muscle weakness; home-based Full-Body in-Bed Gym; older olds; borderline mobility impaired persons, COVID-19 pandemic syndrome.

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