

Medical Spa centres can be a suitable environment for recovery disability of discharged COVID-19 subjects? A challenge for the future

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Background

- ❑ The infection, characterized by the prevalence of respiratory symptoms, in 14,0 % of patients can evolve in severe pneumonia and in about 5,0 % can lead to Acute Respiratory Distress Syndrome and multi-organ failure, both requiring hospitalization.
- ❑ Italy has been early involved in the spreading of the infection.
- ❑ In a still unknown number of patients, the infection and the long hospitalization period can lead to medium or long-term outcomes, such as **muscle strength** and **cardiorespiratory performance reduction**, **residual immune imbalance** , **anxiety**, **depression** or **phobia** or **cognitive functions disorders**
 - These disorders require appropriate therapeutic intervention also after COVID-19 Hospital discharge.



Medical Spa Centre can be a suitable environment for recovery disability of discharged COVID-19 subjects? (1)

- **After COVID-19 Hospital discharge, the rehabilitation program will be focused on each impairment area specific for each patient:**
 - Aerobic exercise
 - Strength training for peripheral muscle weakness
 - Static and dynamic balance training for balance dysfunction
 - Bronchial clearance techniques: training in techniques favouring secretions removal is recommended
 - Evaluation of Basic Activities of Daily Life (BADL): evaluation of patients' ability to carry out daily activities and eventually improve recovery or adaptation to them, with the support of physiotherapists
 - Neuropsychological training: counselling sessions, psychological support, and cognitive training.

- ***Unfortunately, there are no specific structures designed to offer a comprehensive model to treat negative COVID-19 subjects (After COVID-19 Hospital discharge)***

Medical Spa Centre can be a suitable environment for recovery disability of discharged COVID-19 subjects? (2)

- ❑ We propose an innovative post-hospitalization rehabilitative treatment taking advantage of **medical Spa centres** as suitable environment to take care of discharged COVID-19 subjects
- ❑ Spas must strengthen their vocation to health and they can provide to these subjects various types of rehabilitation strategies combine with traditional thermal care
 - ❑ **For example**, Immersion in thermal water may be used also for respiratory rehabilitation, strengthening respiratory muscles, in particular weakened inspiratory muscles, through the combination of respiratory exercise and aerobic training

Medical Spa Centre can be a suitable environment for recovery disability of discharged COVID-19 subjects? (3)

▣ ACTIONS

- To include medical Spa centers as part of the national health system for rehabilitation treatment?
- To develop respiratory rehabilitation services for post-Covid-19 patients with appropriate staff member
- To develop a set of policies and effective plans in collaboration with primary care physicians and which must be online with the National Health Service to ensure therapeutic continuity and build spa networks between patients and spa facility
- To promote more scientific research projects exploring opportunities for collaboration with universities and other research institutions (by new research partnerships model)

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■ CONCLUSIONS

- Considering the high number of Spa centres in Europe and in the world, medical spas should be the ideal setting to perform Spa therapy as a comprehensive and personalized rehabilitative intervention program of discharged COVID-19 subjects
- It appears as an innovative, effective and cost-effective therapeutic paradigm that can better address the COVID-19 infection outcomes, which cannot be equally addressed in the hospital, representing a true challenge for the future.



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