

Journal Pre-proof

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PII: S0033-3182(20)30214-0

DOI: <https://doi.org/10.1016/j.psym.2020.07.005>

Reference: PSYM 1156

To appear in: *Psychosomatics*

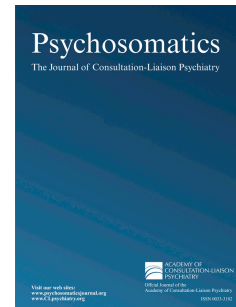
Received Date: 24 July 2020

Accepted Date: 24 July 2020

Please cite this article as: Giacalone A, Rocco G, Ruberti E, Physical health and psychosocial considerations during the COVID-19 outbreak, *Psychosomatics* (2020), doi: <https://doi.org/10.1016/j.psym.2020.07.005>.

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Physical Health and Psychosocial Considerations During The COVID-19 Outbreak

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Enzo Ruberti conducted the research, drafting of the manuscript.

Declaration of interests:

We declare no competing interests

Physical health and psychosocial considerations during the COVID-19 outbreak

In December 2019, a cluster of pneumonia cases, caused by a newly identified β -coronavirus, occurred in Wuhan, China. This coronavirus, was initially named as the 2019- novel coronavirus (2019-nCoV) on 12 January 2020 by World Health Organization (WHO). WHO officially named the disease as coronavirus disease 2019 (COVID- 19) and Coronavirus Study Group (CSG) of the International Committee proposed to name the new coronavirus as SARS-CoV-2, both issued on 11 February 2020. The Chinese scientists rapidly isolated a SARS-CoV-2 from a patient within a short time on 7 January 2020 and came out to genome sequencing of the SARS-CoV-2 [1]. As of 7 July 2020, there have been 11.425.209 confirmed cases of COVID-19, including 534.062 deaths [2]. Most of the study have focused on how the coronavirus attacks the respiratory system due the typical symptoms manifested by most patients. A recent study by sampling 1099 laboratory-confirmed cases found that the common clinical manifestations included fever (88.7%), cough (67.8%), fatigue (38.1%), sputum production (33.4%), shortness of breath (18.6%), sore throat (13.9%), and headache (13.6%) [3]. Almost all COVID-19-related serious consequences feature pneumonia [3]. Available data indicate that about 40% of patients with COVID-19 develop ARDS, and 20% of ARDS cases are severe [4]. Progressive, fibrotic irreversible interstitial lung disease, which is characterised by declining lung function, increasing extent of fibrosis on CT, worsening symptoms and quality of life, and early mortality [5]. COVID-19 pneumonia tends to manifest on lung CT scans as bilateral, subpleural, ground-glass opacities with air bronchograms, ill-defined margins, and a slight predominance in the right lower lobe. Abnormal lung CT findings can be present even in asymptomatic patients, and lesions can rapidly evolve into a diffuse ground-glass opacity predominance or consolidation pattern within 1–3 weeks after onset of symptoms, peaking at around 2 weeks after onset. Old age, male sex, underlying comorbidities and progressive radiographic deterioration on follow-up CT might be risk factors for poor prognosis in

patients with COVID-19 pneumonia [6]. Although the virus is eradicated in patients who have recovered from COVID-19, the removal of the cause of lung damage does not, in itself, preclude the development of progressive, fibrotic irreversible interstitial lung disease. Furthermore, even a relatively small degree of residual but non-progressive fibrosis could result in considerable morbidity and mortality in an older population of patients who had COVID-19, many of whom will have pre-existing pulmonary conditions [7]. Preliminary data suggest patients with COVID-19 might experience delirium, confusion, agitation, and altered consciousness, as well as symptoms of depression, anxiety, and insomnia. [8] Also health care workers (HCWs) involved in the coronavirus disease 2019 (COVID-19) pandemic are exposed to high levels of stressful or traumatic events and express substantial negative mental health outcomes [9]. In addition to the respiratory damage caused by pulmonary fibrosis, patients will face psychiatric and neuropsychiatric symptoms. Having said this, respiratory rehabilitation for post-covid19 patients will also and above all have to take into account psychological well-being issues. To date, there are no standard rehabilitation protocols, but given the large number of patients, it will be necessary to integrate and modulate the new respiratory rehabilitation protocols together with a psychological treatment programme that should not be underestimated for the success of the therapy. In addition, healthcare professionals are put to the test during these situations of great health emergencies, thus developing the probability of being subject to psychosocial disorders due to accumulated stress in the workplace. One of the most significant and little investigated aspects is the psychological stress related to the emergency. Often health care workers have to face intensive shifts with the adoption of personal protective equipment that put the subject's physical and psychological endurance to the test. In order to face this problem and guarantee the psychophysical well-being of employees, healthcare facilities must guarantee the adoption of preventive and protective measures, including psychological support through dedicated pathways.

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