

^a Servicio de Medicina Intensiva, Hospital Universitario Ramón y Cajal, Madrid, España

^b Universidad de Alcalá de Henares, Alcalá de Henares, Madrid, España

^c Facultad de Medicina y Ciencias de la Salud, Universidad de Alcalá de Henares, Alcalá de Henares, Madrid, España

* Autor para correspondencia.

Correo electrónico: ablandinoortiz@gmail.com
(A. Blandino Ortiz).

<https://doi.org/10.1016/j.medin.2021.08.001>

0210-5691/ © 2021 Elsevier España, S.L.U. y SEMICYUC. Todos los derechos reservados.

Post-COVID-19 syndrome: A call for continuity of multidisciplinary care



Síndrome post-COVID-19: Un llamado a la continuidad de la atención multidisciplinaria

Dear Editor,

The pandemic caused by the new SARS-CoV2 was responsible for the death of more than 579,010 Brazilians and 4,470,969 people worldwide until August 28, 2021, despite the lack of adequate reporting of deaths in some countries. Additionally, thousands of people died without confirmed diagnosis of COVID-19, and part of the population still feels discouraged to seek hospital treatment due to precarious health care conditions and reduced access.¹ Besides impacts caused by mortality, the period of hospitalization due to the disease and complications four to twelve weeks (on average) after infection led to thousands of individuals with physical, functional, emotional, and cognitive impairments. This condition is called post-COVID-19 syndrome, persistent post-COVID-19 syndrome (PPCS), or long COVID.^{2,3}

This syndrome represents a grey area of scientific knowledge regarding COVID-19. If, on the one hand, attention is given to prevention and elimination of the disease, on the other hand, thousands of people face its sequelae after overcoming the infectious phase. These people must also adapt to a "new health condition", which may aggravate underlying chronic diseases.^{2,3}

In this scenario, the World Health Organization created a guideline on how cities should include strategies for rehabilitation of these patients in the national emergency health planning for COVID-19. Thus, this letter to the editor aims to alert the scientific community, health managers, and society about the need for early screening and continuity of multidisciplinary care in post-COVID-19 syndrome, especially in patients with high risk factors for developing long COVID, such as those who required hospitalization.⁴

Although hospital discharge is a reason to celebrate, few services provide de-hospitalization or guidance regarding next steps and further health care. This generates a false expectation that everything has been overcome. To date, more than 50 different types of post-COVID-19 sequelae were already confirmed, despite mortality due to these sequelae when patients are not well managed or treated.³

Below, we propose an initial model to maintain a line of multidisciplinary care based on previous studies³⁻⁵:

1. Identify patients with higher risk factors for developing post-COVID-19 syndrome. Priority should be directed to patients who were hospitalized in intensive care units or had prolonged hospital length of stay;
2. Clinical, functional, nutritional, and psychological check-up before hospital discharge, guidance for reassessment within the first 30 days after discharge, and periodic reassessments at least in the first year;
3. Create public and private reference services for rehabilitation of these patients (whether individual or group face-to-face care), home care, or teleconsultation/telerehabilitation, and refer patients to these locations at hospital discharge;
4. Implement screening and treatment for all levels of health care.

Continuity of care, especially rehabilitation, is essential and urgent for individuals with post-COVID-19 syndrome. In the same way that an international task force rapidly searched for disease prevention, the time has come to join efforts to mitigate sequelae and restore functionality and quality of life of those affected.

Authors' contributions

Conceptualization, methodology, formal analysis, writing-review: Bárbara R.A.F Barros-Leite and Livia Barboza de Andrade. All authors have read and agreed to the published version of the manuscript.

Funding

Funding agencies did not finance this study.

Conflicts of interest

The authors declare no conflict of interest.

Acknowledgments

We thank patients and their families, the professionals at the IMIP Rehabilitation Center, and all the teams at the Recife Provisional Hospital 2, Recife, Brazil.

Bibliografía

1. Ministério da Saúde [homepage on the Internet]. Boletim epidemiológico especial. Doença pelo Coronavírus

COVID-19. Semana Epidemiológica 33. Available from: <http://portal.saude.pe.gov.br/boletim-epidemiologico-covid-19> [updated 19.8.20, cited 14.9.21].

2. Lopez-Leon S, Wegman-Ostrosky T, Perelman C, Sepulveda R, Rebolledo PA, Cuapio A, et al. More than 50 Long-term effects of COVID-19: a systematic review and meta-analysis. medRxiv. 2021, <http://dx.doi.org/10.1038/s41598-021-95565-8>.

3. Oronsky B, Larson C, Hammond TC, Oronsky A, Kesari S, Lybeck M, et al. A review of persistent post-COVID syndrome (PPCS). Clin Rev Allergy Immunol. 2021, <http://dx.doi.org/10.1007/s12016-021-08848-3>.

4. World Health Organization [homepage on the Internet]. Expandir nosso entendimento da síndrome pós-COVID-19. Relatório de um webinar da OMS. Available from: <https://iris.paho.org/handle/10665.2/54313> [updated 9.2.21, cited 14.9.21].

5. Gemelli Against COVID-19 Post-Acute Care Study Group. Post-COVID-19 global health strategies: the need for an interdisciplinary approach. Aging Clin Exp Res. 2020;32:1613–20, <http://dx.doi.org/10.1007/s40520-020-01616-x>.

B.R.A.F. Barros-Leite, L.B.d. Andrade*

Instituto de Medicina Integral Professor Fernando Figueira (IMIP), Recife, Brazil

* Corresponding author.
E-mail address: ftliviabandrade@gmail.com (L.B.d. Andrade).

<https://doi.org/10.1016/j.medin.2021.12.001>
0210-5691/ © 2021 Elsevier España, S.L.U. y SEMICYUC. All rights reserved.

Las drogas de abuso como causa de ingreso en las unidades de cuidados intensivos en España



Drugs of abuse as a cause of admission to intensive care units in Spain

Sr. Editor:

Hemos leído el artículo de Socías Mir et al. en el que analizan la evolución temporal de los ingresos por intoxicación en las unidades de cuidados intensivos españolas (UCI)¹. Llama la atención que entre los 10 tóxicos más frecuentes haya varias drogas (descontando etanol y benzodiazepinas) en el periodo 2002-2006 que suman el 26,7% de los casos (cocaína 9% casos, análogos opioides 9%, heroína 5% y metadona 3%), y que dicha prevalencia haya disminuido a menos de la mitad (13,2%) en el periodo 2013-2014, con un cambio en la representación de las drogas más prevalentes (análogos opioides 6%, *cannabis* 4% y cocaína 4%). Aunque con un porcentaje pequeño, también es destacable en el segundo periodo, la presencia del *cannabis* como droga de ingreso en la UCI, lo

cual probablemente se relaciona con su progresivo aumento de potencia agonista sobre receptores CB1 y CB2, su mayor prevalencia de consumo y el incremento de efectos secundarios a ello².

Dado que los servicios de urgencias hospitalarios (SUH) constituyen una buena atalaya para monitorizar estos cambios, pues la mayoría de pacientes con eventos adversos de relevancia clínica que ocurren en relación al consumo de drogas consultan a dichos servicios^{2,3}, deseáramos comentar 2 registros multicéntricos en los que participamos, donde se incluyeron prospectivamente pacientes intoxicados por drogas.

En la red europea EuroDEN-Plus, participan 2 hospitales españoles (Hospital Clínic de Barcelona y Hospital Son Espases de Palma de Mallorca)⁴. Durante el periodo 2014-2018 se recogieron 43.633 casos, de los que 2.982 procedían de estos centros. Sesenta y un pacientes (2,0%) ingresaron en la UCI y 13 pacientes (0,44%) fallecieron. Por otro lado, la red REDUrHE es una red española formada por 11 SUH de 6 comunidades autónomas, la cual registró 4.526 pacientes atendidos por una urgencia generada por drogas entre 2017 y 2019³, de los que 90 (2,0%) ingresaron en la UCI y 12 (0,27%) fallecieron en el hospital. En la [tabla 1](#) figuran

Tabla 1 Frecuencias absolutas y relativas, detalladas por grupos de drogas, de pacientes que requirieron ingreso en unidad de cuidados intensivos y que fallecieron en los dos registros revisados

	EuroDEN-Plus 2014-2019 (2 hospitales españoles)					REDUrHE 2017-2019 (11 hospitales españoles)				
	N.º total	N.º ingreso UCI	Porcentaje ingreso UCI	N.º exitus	Porcentaje exitus	N.º total	N.º ingreso UCI	Porcentaje ingreso UCI	N.º exitus	Porcentaje exitus
Cocaína	1.358	34	2,5	8	0,59	2.164	37	1,7	8	0,37
<i>Cannabis</i>	968	13	1,3	4	0,41	2.011	24	1,2	3	0,15
Anfetamínicos	745	11	1,5	2	0,27	1.296	32	2,5	3	0,23
Opioides	294	10	3,4	1	0,34	348	8	2,3	0	0
GHB	292	6	2,1	0	0	210	7	3,3	1	0,48
Benzodiazepinas	220	3	1,4	0	0	403	7	1,7	0	0

GHB: gamma-hidroxibutirato y derivados; UCI: unidad de cuidados intensivos.