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Letter to the Editor

Useful tools in post-COVID syndrome evaluation

*Escalas de utilidad para la evaluación del síndrome post-COVID*

Dear Editor:

We have read with interest the article by Boix et al.¹ in which they put the focus on the need for a precise definition of post-COVID syndrome enabling an adequate care of patients who need it.

Our team also felt the necessity to assess and quantify the dimension of this syndrome, in order to stratify the impact and healthcare needs of patients. To that end, we administered a telephone survey with two scales, EuroQoL 5D-5L and C19-YRS, to patients infected with SARS-CoV-2 during the first pandemic wave, 10 months after the acute infection (November 2020–February 2021). EuroQoL 5D-5L is a validated tool for the assessment of health-related quality of life, which has its population data available for consultation, thus making it possible to compare samples against the baseline status.² C19-YRS was developed in 2020 specifically to evaluate symptoms after acute COVID-19, and also explores the job status and caregiver role of individuals.³

All ambulatory and hospitalized patients with a positive molecular diagnostic test were included.⁴ From 745 infected people, 44 died and 93 had dementia and were excluded since information could not be retrieved; a total of 443 answers were obtained (answer rate 72.9%). Mean age was 54+/- 16 years, 38.4% of patients were male, and 42.9% of them had some prior condition. The hospitalization rate was 19.6% and 2.3% of patients required admission to an ICU.

Differences were found when comparing the results of both tools. Some symptom was reported by 36.8% of patients using EQ-5D-5L, while 63.2% of patients had some complaint according to C19-YRS. The domains with a higher proportion of impairment in

EQ-5D-5L were anxiety/depression (23.9%) and mobility (16.5%), whereas in C19-YRS fatigue (23.0%) and exercise breathlessness (17.2%) were the most affected.

When the items shared by the two tools were compared, similar rates of impairment were observed, perhaps subtly higher when EQ-5D-5L was used. Global symptom detection was higher using C19-YRS, probably due to a higher number of items being explored. This is however difficult to interpret, since a higher number of symptoms does not necessarily imply a worse quality of life with respect to the same population before the infection.

A good agreement was found in the evaluation of mobility, self-care and anxiety/depression, which was only moderate in basic activities of daily living and pain/discomfort (Table 1). Diverging scores were found in severity grading for each item, which were higher in the domain of pain/discomfort. This could be explained regarding the highly subjective experience of pain.

C19-YRS has some additional advantages like the assessment of work status impairment after SARS-CoV-2 infection. In our sample, 8.9% of patients were on a medical leave when they were interviewed, 3.5% were unemployed, and 7.7% reported difficulties performing the usual tasks at work, results in agreement with what Boix et al. remark in terms of inability of returning to working life.⁵ Meanwhile, EQ-5D-5L overall scores are similar to the scores of the same population before the pandemic, which opposes a worsening in current self-health perception.⁴

In conclusion, a proper selection of tools which allow for screening and comparing the impact of post-COVID syndrome is critical through the development and enforcement of post-COVID programs. Agreement between the featured scales is in general terms moderate to good and both, although probably not exchangeable, can be used to assess and establish comparisons in results. More, wider studies are needed to definitely choose one over the several others in the evaluation of post-COVID patients.

Table 1

Rates of impairment and agreement between EQ-5D-5L and C19-YRS in shared domains.

	EQ-5D-5L	C19-YRS	Kappa (% agreement)	p-value
Mobility	73 (16.5%)	45 (10.2%)	0.681 (83.5)	<0.001
Self-care	10 (2.3%)	4 (0.9%)	0.763 (98.6)	<0.001
BADL	52 (11.7%)	60 (13.5%)	0.597 (88.7)	<0.001
Pain	59 (13.3%)	75 (16.9%)	0.601 (87.4)	<0.001
Anxiety/depression	106 (23.6%)	71 (16.0%)/63 (14.2%)	0.724 (88.3)	<0.001

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References

1. Boix V, Merino E. Post-COVID syndrome. The never ending challenge. *Med Clin (Barc)*. 2022;158:178–80, <http://dx.doi.org/10.1016/j.medcle.2021.10.005>.
2. EuroQol Research Foundation. EQ-5D-5L user guide; 2019. Available from: <https://euroqol.org/publications/user-guides> [accessed 17.10.21].
3. Sivan M, Halpin S, Gee J. Assessing long-term rehabilitation needs in COVID-19 survivors using a telephone screening tool (C19-YRS tool). *Adv Clin Neurosci Rehabil*. 2020. Available from: <https://acnr.co.uk/articles/c19-yrs-2/> [accessed 25.10.21].
4. Ayuso García B, Pérez López A, Besteiro Balado Y, Romay Lema E, García País MJ, Marchán-López Á, et al. Calidad de vida relacionada con la salud en pacientes recuperados de COVID-19 [Health-related quality of life in patients recovered from COVID-19]. *J Healthc Qual Res*. 2022, <http://dx.doi.org/10.1016/j.jhqr.2022.01.001>. S2603-6479(22)00001-X.
5. Bouza E, Cantón Moreno R, De Lucas Ramos P, García-Botella A, García-Lledó A, Gómez-Pavón J, et al. Síndrome post-COVID: un documento de reflexión y opinión [Post-COVID syndrome: a reflection and opinion paper]. *Rev Esp Quimioter*. 2021;34:269–79, <http://dx.doi.org/10.37201/req/023.2021>.

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