Data to guide the application of the new WHO criteria for releasing COVID-19 patients from isolation

Andrea Foppiani

PII: \$1043-6618(20)31371-2

DOI: https://doi.org/10.1016/j.phrs.2020.105063

Reference: YPHRS 105063

To appear in: Pharmacological Research

Simona Bertoli

PII: \$1043-6618(20)31371-2

DOI: https://doi.org/10.1016/j.phrs.2020.105063

Reference: YPHRS 105063

To appear in: Pharmacological Research

Alberto Battezzati

PII: S1043-6618(20)31371-2

DOI: https://doi.org/10.1016/j.phrs.2020.105063

Reference: YPHRS 105063

To appear in: Pharmacological Research

Gianvincenzo Zuccotti

PII: \$1043-6618(20)31371-2

DOI: https://doi.org/10.1016/j.phrs.2020.105063

Reference: YPHRS 105063

To appear in: Pharmacological Research

Received Date: 2 July 2020

Please cite this article as: Foppiani A, Bertoli S, Battezzati A, Zuccotti G, Data to guide the application of the new WHO criteria for releasing COVID-19 patients from isolation, *Pharmacological Research* (2020), doi: https://doi.org/10.1016/j.phrs.2020.105063

This is a PDF file of an article that has undergone enhancements after acceptance, such as the addition of a cover page and metadata, and formatting for readability, but it is not yet the definitive version of record. This version will undergo additional copyediting, typesetting and review before it is published in its final form, but we are providing this version to give early visibility of the article. Please note that, during the production process, errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

© 2020 Published by Elsevier.

Letter to the Editor

Data to guide the application of the new WHO criteria for releasing COVID-19 patients from isolation

Andrea Foppiani¹, Simona Bertoli^{1,2}, Alberto Battezzati¹, Gianvincenzo Zuccotti³

Affilations:

- ¹ International Center for the Assessment of Nutritional Status, Department of Food Environmental and Nutritional Sciences, University of Milan, Milan, Italy.
- ² IRCCS Istituto Auxologico Italiano, Obesity Unit and Laboratory of Nutrition and Obesity Research, Department of Endocrine and Metabolic Diseases, Milan, Italy.
- ³ Department of Pediatrics, V. Buzzi Childrens' Hospital, University of Milan, Milan, Italy.

*Corresponding author: Gianvincenzo Zuccotti, gianvincenzo.zuccotti@unimi.it, Children's Hospital "Vittore Buzzi", Via Lodovico Castelvetro, 32, 20154 Milano MI

Keywords: covid-19, surveillance, swab

On 17 June 2020, the World Health Organization released an update on their recommendations on the criteria for releasing COVID-19 patients from isolations (1). In the new update, the criteria required to release a symptomatic patients are 3 days without symptoms after 10 days from symptom onset (symptoms include fever and respiratory symptoms). The authors acknowledge the possibility that patients released from isolation with these criteria may still test positive for the COVID-19 virus (SARS-CoV-2) by RT-PCR, but they consider unlikely that they would be able to transmit the virus to another person.

Since 23 March 2020, we have monitored and are still monitoring patients discharged from the Luigi Sacco Hospital of Milan during their home isolation through the Operations Center for Discharged Patients (COD19). COD19 is an active surveillance service for homecare patients operated by resident doctors via phone calls. At discharge, patients are provided with hydroxychloroquine and lopinavir/ritonavir therapy, and a thermometer and a pulse oximeter for parameter monitoring. Parameters are collected once or twice a day, and include body temperature, oxygen saturation at rest and after 6-minute walk test, respiratory rate, and COVID-19 related symptoms. The service also serves as the reporting

Letter to the Editor

service for patients ready to be tested for release. The criteria currently enforced require all confirmed COVID-19 diagnosis 2 negative swab tests after 14 days without symptoms.

To put in context the updated WHO recommendations, we share the results of swab test performed after an accurate assessment of 14 days without symptoms on patients with a confirmed COVID-19 diagnosis. Of 314 confirmed diagnosis, 226 (72.0%) tested negative after 14 days without symptoms, 54 (17.2%) tested weak positive, and 34 (10.8%) tested positive for the COVID-19 virus. Figure 1 shows after how many days from symptom onset those swab were performed. Positive tests were obtained with a minimum of 14 days from symptom onset to a maximum of 73 days, with a median of 33 days. While most patients tested negative or weak positive, the markedly positive results found in almost 11% of our sample may cause some concern, also considering that stricter criteria (14 days vs. 3 days) were applied in this case.

These data can guide countries who may choose to continue to use testing as part of the release criteria of patients with confirmed COVID-19 diagnosis.

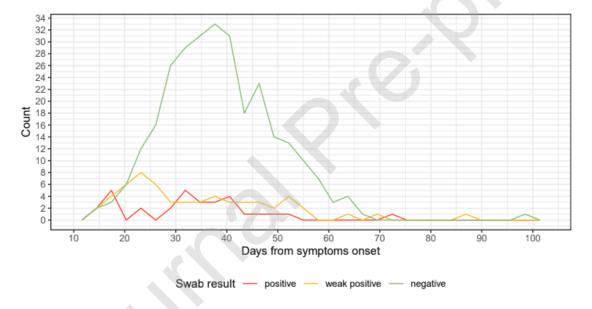


Figure 1: Frequency of swab results (binwidth = 5 days)

Conflict of interest statements: all authors declare no conflict of interest.

Funding statement: the surveillance was funded by Fondazione Romeo ed Enrica Invernizzi. The funding agency had no influence in the publication of this letter.

Letter to the Editor

Bibliography

1. World Health Organization. Criteria for releasing covid-19 patients from isolation [Internet]. 2020. Available from: https://www.who.int/news-room/commentaries/detail/criteria-for-releasing-covid-19-patients-from-isolation