



ELSEVIER

## Vacunas

[www.elsevier.es/vac](http://www.elsevier.es/vac)


### Letter to the Editor

## The future role of pharmacists and pharmacovigilance after the advent of the COVID-19 pandemic

### Rol de farmacéuticos y farmacovigilancia tras la aparición de la pandemia de COVID-19



The unforeseen arrival of the coronavirus disease 2019 (COVID-19) has completely subverted our daily life.

Pharmacists have been representing a crucial role in the fight against SARS-CoV2 virus.

The importance of these figures has been extensively confirmed during this pandemic.<sup>1</sup>

This health crisis has created pandemic-related challenges and it has laid the foundations for a future massive change in this world.

First, when the vaccine against COVID-19 is released, pharmacists will be assigned the role of primary frontline health workers in order to provide immunization to people, as demonstrated by community pharmacists who have been well-placed to provide accessible coverage in the past.<sup>2</sup>

Second, as reported by John C. Hayden et al., social distancing has obliged pharmacists to reinvent the way by which they dispense advice and medications.<sup>3</sup>

For example, virtual consultations have become common, especially among fragile people. In addition, the implementation of systems to provide drugs to patients was necessary to reduce non-essential medical and pharmaceutical visits and to maintain a good quality of service.

Third, some innovations have been introduced in many countries and they may be preserved in the future, including the electronic prescriptions with primary care eliminating the legislative requirement for paper scripts.

Thus, pharmacists can provide a decisive help to health care system in this pandemic.

Not only has this pandemic conferred new opportunities among pharmacies and patients, but also it has opened new scenarios in the field of pharmacovigilance.

Monitoring the efficacy and safety profiles of medications constitutes a priority for healthcare professionals and

patients, especially during the COVID-19 period for drugs administered to treat this infection in 'off-label use'.

Unfortunately, there is not currently enough data to create worldwide guidelines for a controlled and safe use of all medications administrated for the treatment of COVID-19 infection, outlining the increasing need to promote scientific research.

It should be useful to control patient safety by rapid reporting of adverse drug reactions (ADRs).

This aspect, for example, may be achieved by drug information services that provide 24-h professional advice to patients and healthcare workers after being exposed to medications, as reported by Tuccori et al.<sup>4</sup>

Some hospitals have already commenced to evaluate the incidence, type and risk factors associate with ADRs among patients with COVID-19.

A retrospective study with two hundred seventeen patients with COVID-19 was conducted by the First Hospital of Changsha in China.<sup>5</sup>

It was demonstrated that the prevalence of ADRs was approximately 37% in patients treated with lopinavir, umifenovir and chloroquine, emphasizing the need of active monitoring of adverse reactions that can occur to patients with COVID-19.

Another increasing point of interest in pharmacovigilance concerning the ADRs is represented by the poor adherence of patients to anti-COVID-19 medications.

The correct identification of risk factors for the onset of adverse reactions is basically vital to choose the most appropriate antiretroviral regimen for the treatment of patients.

A rapid signaling of all ADRs related to anti-COVID-19 medications can facilitate the role of health care workers in the COVID-19 era and, thus, increase the level of patients' adherence.

## REFERENCES

1. Elbeddini A, Prabaharan T, Almasalkhi S, Tran C. Pharmacists and COVID-19. *J Pharm Policy Pract.* 2020;3:1–4.
2. Fitzgerald TJ, Kang Y, Bridges CB, Talbert T, Vagi SJ, Lamont B, et al. Integrating pharmacies into public health program planning for pandemic influenza vaccine response. *Vaccine.* 2016;34:5643–8.
3. Hayden JC, Parkin R. The challenges of COVID-19 for community pharmacists and opportunities for the future. *Ir J Psychol Med.* 2020, <http://dx.doi.org/10.1017/ijpm.2020.52>.
4. Tuccori M, Convertino I, Ferraro S, Cappello E, Valdiserra G, Focosi D, et al. The impact of the COVID-19 “infodemic” on drug-utilization behaviors: implications for pharmacovigilance. *Drug Saf.* 2020, <http://dx.doi.org/10.1007/s40264-020-00965-w>.
5. Sun J, Deng X, Chen X, Huang J, Huang S, Li Y, et al. Incidence of adverse drug reactions in COVID-19 patients in China: an active monitoring study by Hospital Pharmacovigilance System. *Clin Pharmacol Ther.* 2020;1–7.

A. La Gatta <sup>a,\*</sup>, F. Ghidinelli <sup>b</sup>

<sup>a</sup> Recordati S.p.A., Milan, Italy

<sup>b</sup> Spedali Civili di Brescia, Brescia, Italy

\* Corresponding author.

E-mail address: [alessandra.lagatta03@gmail.com](mailto:alessandra.lagatta03@gmail.com) (A. La Gatta).

1576-9887/

© 2021 Elsevier España, S.L.U. All rights reserved.

<https://doi.org/10.1016/j.vacun.2020.12.003>