



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



Scientific letters

**Twitter and the pursuit of global health-care during COVID-19 pandemic**



**Twitter y la búsqueda de una atención sanitaria global durante la pandemia COVID-19**

To the Editor,

The coronavirus-2 disease 2019 (COVID-19) presents a particularly high infection rate and, by 1st May 2020, a total of 3,269,667 cases were confirmed worldwide.<sup>1,2</sup> Social distancing measurements approved by national governments have been demonstrated as the most efficient way for controlling the spread of the disease, though severe socio-economic impact is derived from the limitation of non-essential activities. Medical attention at all levels is not an exception with a variable interpretation of what “essential health-care” is in each geopolitical context. For the first time in our era, we health-care professionals are facing the feeling of having abandoned some of our duties to focus in only one. At the same time, we are all aware of the great anxiety that the population is suffering while we are unable to comfort them, which is one of our main missions. Not only that, but from our particular perspective as cardiologists, there are also all the potential cardiovascular effects

of the pandemic that we are not preventing.<sup>3</sup> Such frustration has forced both, physicians and patients, to seek for alternative ways to communicate. Telephonic attention to our patients was slowly settled, but this tool has not been widely available. As a consequence, there was a movement in the social network Twitter where physicians offered their free advice to whoever needed it. I joined that initiative in March 15th 2020 (XXXX1<sup>1</sup>). Not being one of the most popular physicians (or even cardiologists) in this network – with only little above 1200 followers – I was surprised on how quickly the tweet spread. One month and a half after its publication, more than 22,600 people watched it and a total of 1077 people worldwide directly requested my help. The aim of this manuscript is to report the results and analyze the potential impact of this approach in the health-care system logistics from now on.

Users that requested attention were mainly from Spain (556, 51.6%) and Latin America or other regions (521, 48.4%), though this was not always identifiable. As seen in Fig. 1, the main symptom was variable but chest pain and palpitations accounted for 72% of the global number of messages. The larger proportion of the cases (86.3%) could be solved via Twitter through a short anamnesis given the lack of risk criteria according to the Guidelines.<sup>3</sup> In these cases, recommendation to attend their primary care professional once social distancing measurements were relaxed was

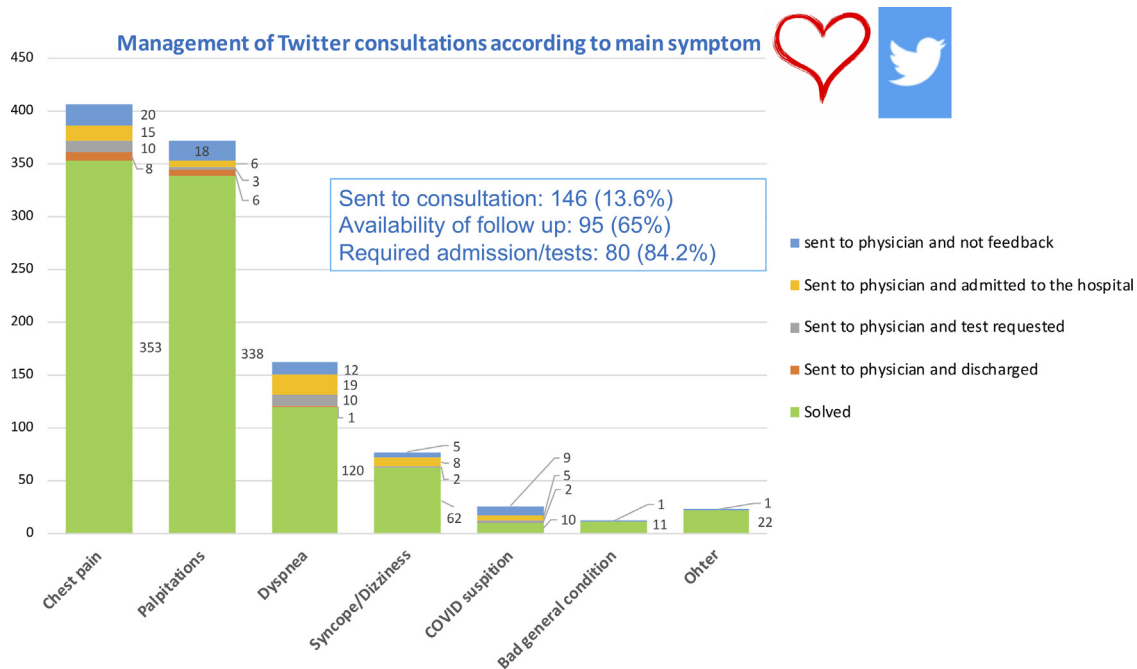


Fig. 1. Distribution of consultations attended through Twitter from March 15th to May 1st 2020.

<sup>1</sup> Omitted information

(<https://twitter.com/ignamatsant/status/1239117293843623940?s=21>).

given. In this group, none of the patients with an available follow up required emergent attention. An immediate visit to an emergency department or a primary care physician was recommended in a total of 145 cases (13.5%). In 65% of these cases follow up was obtained with 84.2% of the patients requiring further tests or admitted to the hospital and only 9.6% discharged after this initial medical contact.

Our main conclusion from this experience is that the initiative was useful for the society. We do not ignore its limitations, including the unknown rate of misdiagnosis due to lack of appropriate evaluation, and the lack of a legal framework to protect both professionals and patients. These crucial elements were disregarded only due to the global health-care crisis but this provided an unprecedented opportunity to perform a preliminary evaluation of the ability of digital platforms for providing health assessment globally. National health-care systems have demonstrated to be limited to confront global health crisis in the 21st century. It is well-known that health-care access is unequal worldwide; however, the ability to provide a basic *triage* is easier and cheaper than ever. Just imagine how we could have anticipated the course of events if people in Wuhan had massively requested attention through such kind of platform. Perhaps we can get something good out of the pandemic and the sentence “creating opportunities in times of crisis” is more than a catch phrase.

#### Financial disclosures

None to declare.

#### Increase in the severity of acute malignant hemopathies during the COVID-19 pandemia<sup>☆</sup>



#### Aumento de la gravedad de las hemopatías malignas agudas diagnosticadas durante la pandemia COVID-19

Dear Editor:

In December 2019, the appearance of the coronavirus disease (COVID-19) was detected in Wuhan, China, and since then it has spread extensively, turning this infection into a pandemic. The healthcare system has mobilised a large amount of health-care resources to control this pandemic, which has had a major impact on hospital care for patients, especially during the months of March and April 2020.<sup>1</sup> After riding out the pandemic's acute phase, one of the consequences is the great impact it has had on the care of patients afflicted with diseases other than COVID-19 infection, including cancer. Apart from the delays in population screening programmes, rapid diagnostic circuits, and diagnostic and therapeutic surgical interventions, there have also been delays in medical consultations in patients whose eventual diagnosis is cancer.<sup>2,3</sup> This has been due not only to the collapse of the health system, but also because patients shelved or postponed their primary or hospital care visit until their clinical manifestations were intolerable. This has meant that in the case of malignant haemopathies with their frequently acute course, patients are being diagnosed in more advanced stages with the prognostic implications this entails. This fact has been widely commented by

#### Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at <http://dx.doi.org/10.1016/j.medcli.2020.06.004>.

#### References

1. Zhu N, Zhang D, Wang W, Li X, Yang B, Song J, et al. A novel coronavirus from patients with pneumonia in China, 2019. *N. Engl. J. Med.* 2020;382:727–33.
2. World Health Organization situation report 102. [https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200501-covid-19-sitrep.pdf?sfvrsn=742f4a18\\_2](https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200501-covid-19-sitrep.pdf?sfvrsn=742f4a18_2).
3. ESC guidance for the diagnosis and management of CV disease during the COVID-19 pandemic [Internet]. Available from: <https://www.escardio.org/Education/COVID-19-and-Cardiology/ESC-COVID-19-Guidance>, <https://www.escardio.org/Education/COVID-19-and-Cardiology/ESC-COVID-19-Guidance> [accessed 24.04.20].

Ignacio J. Amat-Santos\*, Carlos Baladrón, Jose Alberto San Román

CIBERCV, Cardiology Department, Hospital Clínico Universitario, Valladolid, Spain

\* Corresponding author.

E-mail address: [ijamat@gmail.com](mailto:ijamat@gmail.com) (I.J. Amat-Santos).

<https://doi.org/10.1016/j.medcli.2020.06.004>

0025-7753/ © 2020 Elsevier España, S.L.U. All rights reserved.

professionals but has barely been analysed. The objective of this study was to analyse the characteristics of patients newly diagnosed with acute malignant hemopathies, seen in a Haematology department of a tertiary hospital, in an area with a high incidence of COVID-19 infection.<sup>3</sup>

In March and April 2020, 17 patients were diagnosed with acute malignant haemopathies (10 acute leukaemias and 7 lymphomas). The main prognostic characteristics are shown in Table 1. Four patients with acute leukaemias presented poor prognostic factors (hyperleukocytosis, disseminated intravascular coagulation, cerebral haemorrhage) and in 5 cases the patients suffered severe infections at the time of diagnosis. Six of the 7 lymphoma patients also had unfavourable prognostic characteristics, such as bulky masses and marked elevation of serum LDH, and two patients had spinal cord compression.

The collapse of the healthcare system in regions with a high incidence of COVID-19 infection, such as Barcelona, has led to the hospital system focusing mainly on the care of COVID-19 patients who presented clinical manifestations of varying severity and who required hospital admission or support in intensive care units. This has greatly affected the healthcare of high health impact diseases such as cardiovascular diseases and cancer. This fact, together with the reluctance of patients to go to hospitals practically saturated with COVID-19 patients, has determined that these diseases are frequently diagnosed in more advanced stages, with the prognostic consequences that this entails. In the cases of acute malignant haemopathy analysed in this study, it should be noted that most share characteristics indicative of a delay in diagnosis, such as hyperleukocytosis in acute leukaemias and bulky tumour masses in lymphomas. And for patients with established spinal compression whose chances of functional recovery are extremely low, this is even more disturbing.

<sup>☆</sup> Please cite this article as: Franch-Sarto M, Torrent Catarineu A, Ribera Santasusana J-M. Aumento de la gravedad de las hemopatías malignas agudas diagnosticadas durante la pandemia COVID-19. *Med Clin (Barc)*. 2020;155:269–270.