



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.



Invited Commentary

An invited commentary on “The socio-economic implications of the coronavirus and COVID-19 pandemic: A review”



Coronavirus disease 2019 (COVID-19) was first identified in November 2019 in Wuhan, Hubei province in China. Since then the disease has rapidly spread to become a global pandemic, affecting all sectors of our society and all aspects of our lives, even for those who were not affected directly by the virus. We therefore should congratulate Nicola et al. [1] for the excellent up-to-date review on the socio-economic outcomes of the COVID-19 pandemic. The authors have chosen to describe a highly relevant topic that influences the daily living of people worldwide.

Everything is now rapidly changing. Most specifically, the COVID-19 pandemic will have a big impact on the healthcare sector and its interactions with the “customers”, the patients. In light of all the published data in the digital media, the COVID-19 pandemic raised a lot of concern among patients, especially the elderly and those with chronic diseases. The anxiety and fear of infection causes a significant delay in seeking medical care due to other unrelated medical conditions – both acute and chronic. For example, in the single-center study by Tam et al. [2], the authors reported a significant delay in time to seeking medical help in patients with ST segment elevation myocardial infarction. These delays may be explained by the fear of patients from attending the emergency room and possible exposure to infected patients and also by the time it takes for physicians to properly protect themselves when treating suspected or confirmed patients. In addition, lack of physical activity and weight gain during quarantine and the decision to postpone elective procedures, may possibly result in an increase in cancer incidence and cardiovascular events in the near future.

As a result, we should now seek for new solutions and for novel pathways to communicate medical care to our patients. We, the caretakers, should call for action to our governments, to the emergency medical services, to our hospital managements - to acquire a technology that is capable of gathering medical data from a distance, a system that is capable of monitoring patient status and reaching diagnoses without physically seeing the patient. These telemedicine systems should be simple, convenient and affordable for real-time consultation between

patients and care providers, between rural or community hospitals and surgeons in centers of expertise, for improved decision-making in emergency and routine daily situations [3]. This is the time for the biotechnology industry together with the health economy decision-makers and government officials to apply the revolution of telemedicine to larger portions of the population, making it available worldwide. We should implement these telemedicine systems only after an intensive quality assurance research in large-scale, randomized clinical trials that will convince the medical community that telemedicine is the next medical revolution. The COVID-19 pandemic should be the spark that will ignite the fire of reachable and affordable global telemedicine.

Provenance and peer review

Invited Commentary, internally reviewed.

References

- [1] M.A.Z. Nicola, C. Sohrabi, A. Kerwan, A. Al-Jabir, C. Iosifidis, et al., The socio-economic implications of the coronavirus and COVID-19 pandemic: a review, *Int. J. Surg.* (2020).
- [2] C.F. Tam, K.S. Cheung, S. Lam, A. Wong, A. Yung, M. Sze, et al., Impact of coronavirus disease 2019 (COVID-19) outbreak on ST-segment-elevation myocardial infarction care in Hong Kong, China, *Circ Cardiovasc Qual Outcomes* (2020) CIRCOUTCOMES120006631.
- [3] S. Atar, Telecardiology—close to the heart, but still out of reach, *Isr. Med. Assoc. J.* 13 (8) (2011) 496–497.

Shaul Atar**

Department of Cardiology, Galilee Medical Center, Nahariya, Israel
Azrieli Faculty of Medicine, Bar-Ilan University, Safed, Israel
E-mail address: shaula@gmc.gov.il.

Itai Atar

Sackler School of Medicine, Tel Aviv University, Tel Aviv, Israel

DOI of original article: <https://doi.org/10.1016/j.ijjsu.2020.04.018>

* Corresponding author. Department of Cardiology, Galilee Medical Center, 1 Ben Tzvi Blvd., Nahariya, 2210001, Israel.

<https://doi.org/10.1016/j.ijjsu.2020.04.054>

Received 20 April 2020; Accepted 22 April 2020

Available online 29 April 2020

1743-9191/ © 2020 IJS Publishing Group Ltd. Published by Elsevier Ltd. All rights reserved.