

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. Contents lists available at ScienceDirect



Diabetes & Metabolic Syndrome: Clinical Research & Reviews

癯

journal homepage: www.elsevier.com/locate/dsx

Editorial Editorial: Herd mentality, herds of migrants/people, and COVID-19 in India

In this era of COVID-19 pandemic, even scientifically tempered physicians are prone to believe sensationalism, rumors and anecdotal data, more so when it is in the form of repetitive barrage on social media. Story of chloroquine (CQ) and hydroxychloroquine (HCQ) is a prime example of widespread 'herd mentality'. Since doctors (and even patients) are well conversant with these drugs in India, having used it in tropical diseases like malaria, amoebiasis etc., it was 'easy for them to believe' regarding its 'magical effects'. When first reports of 'efficacy' of these compounds came in, we were inundated with the queries mostly for the prophylaxis rather than treatment of COVID-19, despite no evidence of its benefit. At this time, even apex scientific research agency of India, Indian Council of Medical Research (ICMR), hurriedly issued guideline for prophylaxis of COVID-19, thus clearing use of HCQ in high risk contacts [1]. Interestingly, no other health agency globally has given such directive till date.

After ICMR directive for prophylaxis of COVID-19 for Indians, there were long waiting lines in front of medical shops for buying these drugs, even without authorized prescription. This 'herd mentality' of taking HCQ as 'prophylactic drug' was seen far and wide amongst physician community as well, although most of them were not in contact with any COVID-19 patient. As a result, patients who genuinely needed HCQ (e.g. for rheumatoid arthritis) could not get it [2]. Concerns regarding lack of evidence of CQ or HCQ in human trials for mass prophylaxis for COVID 19 was expressed by only a few [3,4].

Meanwhile, herd mentality continues unabated in India; social media is still dominated by how to take these drugs and inquiry about their doses. Interestingly, while people are still deeply engaged in such conversations, little attention have been given to the damaging 'herd behavior' e.g. not following balanced diets, exercise and social distancing. Mass gatherings continued during lockdown (e.g. herds of migrants returning to their native places from cities, herd of people gathering in religious assemblies, in meetings of 'super spreader' preachers [5] and clustering at marriage ceremonies) despite major spread of COVID-19 have been witnessed in other countries following such events.

In India, messages to obviate such 'herd mentality' (blindly following untrusted advice regarding prophylaxis and treatment) and 'herd behavior' (e.g. joining celebrities, preachers etc., in religious and social events) has to be strongly communicated to all segment of society, including physicians.

Declaration of competing interest

Nothing to declare.

References

 National Task Force for COVID-19. Advisory on the use of hydroxychloroquine as prophylaxis for SARS-CoV-2 infection. March 22, https://www.mohfw.gov. in/pdf/
AdvisoryconthousoofHudroxychloroquinectorophylaxisforSAPSCoV2infection.

AdvisoryontheuseofHydroxychloroquinasprophylaxisforSARSCoV2infection. pdf; 2020.

- [2] Jakhar D, Kaur I. Potential of chloroquine and hydroxychloroquine to treat COVID-19 causes fears of shortages among people with systemic lupus erythematosus. Nat Med 2020 Apr 8. https://doi.org/10.1038/s41591-020-0853-0 [Epub ahead of print].
- [3] Shah S, Das S, Jain A, Misra DP, Negi VS. A systematic review of the prophylactic role of chloroquine and hydroxychloroquine in Coronavirus Disease-19 (COVID-19). Int J Rheum Dis 2020 Apr 13. https://doi.org/10.1111/1756-185X.13842 [Epub ahead of print].
- [4] Singh AK, Singh A, Saikh A, Singh R, Misra A. Chloroquine and hydroxychloroquine in the treatment of COVID-19 with or without diabetes: a systematic search and a narrative review with a special reference to India and other developing countries. Diabetes Metab Syndr 2020 May-lune; 14(3):241-6.
- [5] Coronavirus. India 'super spreader' quarantines 40,000 people. https://www. bbc.com/news/world-asia-india-52061915.

Awadhesh Kumar Singh^{a,*}, Anoop Misra^b ^a G.D Hospital & Diabetes Institute, Kolkata, India

^b Fortis CDOC Hospital for Diabetes and Allied Sciences, New Delhi, India

> ^{*} Corresponding author. *E-mail address:* draksingh_2001@yahoo.com (A.K. Singh).