Re: Covid-19: politicisation, “corruption,” and suppression of science

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Dear Editor,

We read with interest Kamran Abbasi's editorial in BMJ on the politicization and "corruption" of science during the Covid-19 pandemics (1). The author, who is executive editor at BMJ, highlights the manipulation of data and medical and scientific literature by the medical-political complex. Abbasi reported that the interference of the political authority in the medical and scientific research process is represented by the intrusion of members of the political authority in scientific advisory groups, with the notable under-representation of clinical care.

This interference is at the origin of the double standard applied to the evaluation of the efficacy and toxicity of the two main molecules identified as potential candidates for the treatment of Covid-19 by molecular screening methods, hydroxychloroquine and remdesivir (2). To date, literature evidences that remdesivir is not superior to hydroxychloroquine, and that hydroxychloroquine is non-toxic when used at standard dosages (600 mg per day) (3). The doses offered in the megatrials SOLIDARITY (4) and RECOVERY (5) are four times higher (2400 mg on the first day) than the usual doses in infectious diseases (6) and may be considered toxic in patients < 96kg. The authors of the SOLIDARITY report justify this by the

dosage used in hepatic amoebiasis (4), but the article they cited to justify these dosages recommends only 600mg of chloroquine base (i.e. about 800mh of hydroxychloroquine sulfate) daily for liver amebiasis (7).

Here in the BMJ, data in favor of hydroxychloroquine have been censored or neglected. A first randomized trial showed a significant benefit on the alleviation of symptoms, a significant reduction of the inflammatory syndrome in patients with an initial inflammatory syndrome, and a faster (but not significant) cure of lymphopenia, but these results have been deleted between the first online version (8) and the final article (9). Another study was published with significant benefit in a subgroup of patients with hydroxychloroquine and azithromycin dual therapy (0 deaths out of 15 patients treated, significant difference with the standard of care group) but these results were not analyzed (10). Thus, it appears that the efficacy and toxicity data for hydroxychloroquine and remdesivir have been manipulated in favour of remdesivir and against hydroxychloroquine.

Overall, we thank Kamran Abbasi for his editorial and agree that it is time for core clinical journals to free themselves from political and industrial interference and restore good science, including unbiased scientific controversy, in order to save thousands of lives.

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References

1. Abbasi K. Covid-19: politicisation, "corruption," and suppression of science. BMJ. 2020;371:m4425. Published 2020 Nov 13. doi:10.1136/bmj.m4425

2. Wang M, Cao R, Zhang L, et al. Remdesivir and chloroquine effectively inhibit the recently emerged novel coronavirus (2019-nCoV) in vitro. Cell Res. 2020;30(3):269-271. doi:10.1038/s41422-020-0282-0

3. Lofgren SM, Nicol MR, Bangdiwala AS, et al. Safety of Hydroxychloroquine Among Outpatient Clinical Trial Participants for COVID-19. Open Forum Infect Dis. 2020;7(11):ofaa500. Published 2020 Oct 19. doi:10.1093/ofid/ofaa500

4. WHO Solidarity trial consortium, Repurposed antiviral drugs for COVID-19 –interim WHO SOLIDARITY trial results. medRxiv 2020.10.15.20209817; doi: https://doi.org/10.1101/2020.10.15.20209817

5. RECOVERY Collaborative Group, Horby P, Mafham M, et al. Effect of Hydroxychloroquine in Hospitalized Patients with Covid-19. N Engl J Med. 2020;383(21):2030-2040. doi:10.1056/NEJMoa2022926

6. Eldin C, Mélenotte C, Mediannikov O, et al. From Q Fever to Coxiella burnetii Infection: a Paradigm Change. Clin Microbiol Rev. 2017;30(1):115-190. doi:10.1128/CMR.00045-16

7. Conan NJ Jr. The treatment of hepatic amebiasis with chloroquine. Am J Med. 1949;6(3):309-320. doi:10.1016/0002-9343(49)90167-9

8. Tang W, Cao Z, Han M, et al. Hydroxychloroquine in patients with COVID-19: an open-label, randomized, controlled trial. medRxiv . 2020.04.10;20060558. doi: 10.1101/2020.04.10.20060558 (version 1).

9. Tang W, Cao Z, Han M, et al. Hydroxychloroquine in patients with mainly mild to moderate coronavirus disease 2019: open label, randomised controlled trial. BMJ. 2020;369:m1849. Published 2020 May 14. doi:10.1136/bmj.m1849

10. Mahévas M, Tran VT, Roumier M, et al. Clinical efficacy of hydroxychloroquine in patients with covid-19 pneumonia who require oxygen: observational comparative study using routine care data [published correction appears in BMJ. 2020 Jun 18;369:m2328]. BMJ. 2020;369:m1844. Published 2020 May 14. doi: https://doi.org/10.1136/bmj.m1844