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## Risks of hydroxychloroquine use for COVID-19 prophylaxis



*To the Editor:* We were very pleased to read the article by Alia et al,<sup>1</sup> “Does hydroxychloroquine combat COVID-19? A timeline of evidence.” After thoroughly summarizing the literature studies on the efficacy and safety of hydroxychloroquine (HCQ), they rightly concluded that there is currently no robust evidence to support prescribing HCQ as a treatment or prophylaxis for COVID-19. As they mentioned, the United States President Donald Trump tweeted on March 21, 2020, that HCQ and azithromycin “taken together, have a real chance to be one of the biggest game changers in the history of medicine” and further urged that these drugs “be put in use IMMEDIATELY. PEOPLE ARE DYING, MOVE FAST.”<sup>1,2</sup>

Furthermore, on March 22, 2020, the National Task force of India for COVID-19 recommended that high-risk individuals—asymptomatic health care workers of laboratory- suspected or confirmed cases and household contacts of laboratory-confirmed cases—be placed on a 400 mg/wk dose of HCQ prophylaxis for 7 weeks.<sup>3</sup>

We would like to bring attention to the dangerous medical consequences of these endorsements by guideline recommendations and institutional leaders, which have led to asymptomatic individuals using HCQ without prescriptions and without awareness of the serious adverse effects of this drug. This is a serious potential risk, especially because consuming higher than standard doses can lead to fatal outcomes.

In the United States, an asymptomatic man recently died, and his wife was hospitalized in critical condition, after self-medicating for COVID-19 using HCQ prophylaxis.<sup>2</sup> France’s drug safety agency has also linked the deaths of 3 asymptomatic people to potential self-medication with HCQ.<sup>4</sup> In Italy, a similar case was anecdotally reported, with 1 individual dying from prophylactically consuming nonprescribed HCQ. Further, there has been a report of HCQ poisoning after 2 asymptomatic individuals from Nigeria self-medicated, leading to overdose.<sup>5</sup> Recently, a Brazilian trial immediately halted the high dose use of HCQ (600 mg as opposed to 450 mg) after 11 patients died by the day 6 of the intervention.<sup>6</sup>

Health officials, including France’s drug safety agency, *Mayo Clinic Proceedings*, and the British Columbia Centre for Disease Control, have now publicly addressed the importance of recognizing that HCQ is associated with severe and some fatal adverse effects. Thus, we suggest that politicians,

governments, and health care providers avoid the recommendation of HCQ prophylactic treatment to the public without evidence-based information and critically appraise upcoming studies on COVID-19 treatment and prophylaxis before formulating guidelines. We encourage individuals to avoid purchasing HCQ without prescriptions and medical consultations, because self-medicating can lead to accidental overdoses. Further research is required with transparent reporting of adverse effects to evaluate the efficacy of HCQ as a prophylactic agent for COVID-19.

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