

# Evidence does not make decisions, people do

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**To the editor** A recent meta-analysis of observational studies published in *Polish Archives of Internal Medicine* (*Pol Arch Intern Med*) summarized the available evidence on the efficacy of different therapies for patients with coronavirus disease 2019 (COVID-19). This meta-analysis reported that the use of glucocorticoids is associated with an increased risk of death (OR, 2.43; 95% CI, 1.44–4.10;  $P = 0.001$ ,  $I^2 = 61.9\%$ ).<sup>1</sup> However, a recent meta-analysis of randomized trials found a significant reduction in death with glucocorticoids use.<sup>2</sup> The speed with which information concerning COVID-19 becomes available is unprecedented, and this example highlights the difficulties authors and journal editors confront while trying to make research current and relevant. This also generates new challenges for individual clinicians.

When faced with changing, imperfect, and conflicting evidence, clinicians may behave differently. The COVID-19 pandemic exacerbated this phenomenon: in addition to hundreds ongoing randomized controlled trials and emerging meta-analyses, clinicians are confronted by opinion papers, editorials, and practice guidelines. All those publications / online webinars and interviews / prepublication news releases add a sense of urgency, and at the same time anxiety over “missing the right answers.” This augments to an emotional burden experienced by many of us. Would it help if we knew that we are not alone?

We decided to explore the world of decision making from a different angle, taking the perspective of an individual critical care clinician subjected to a barrage of information and recommendations. We asked what clinicians believe is an appropriate pharmacological management concerning the use of several drugs linked to treatment of patients with COVID-19.

Completing the process of item generation, clinical sensibility, and piloting testing, we designed short questionnaires and, after securing approval of a local ethics committee, distributed it to a convenience sample of critical care clinicians. We used an interactive web-based platform, MetaClinician®, which we have used in large surveys before.<sup>3</sup> The European Society of Intensive Care Medicine (ESICM) and some national societies distributed the survey electronically. In addition, we posted the survey on social media platforms.

Over August 2020, 93 critical care clinicians from 10 countries completed the survey. One of the areas we explored were individual beliefs of what constitutes the correct use of different COVID-19-related drugs. Only 4% of respondents believed that corticosteroids should only be used in clinical trials, while 96% indicated some use in their clinical practice. On the other hand, chloroquine / hydroxychloroquine was at the other end of the spectrum with 83% believing it should either not be used at all (49%), or be used only in the context of clinical trials (34%). The opinions concerning the use of other drugs are summarized

**TABLE 1** Responses to questions: “In YOUR OPINION, how should the following interventions be used?”

Medication	Number of responses	Not used at all	Used only in clinical trial	Used in clinical trial or restricted use	No restriction of use
Remdesivir	50	0	22%	60%	18%
Convalescent plasma	49	2%	53%	37%	8%
Tocilizumab	49	2%	55%	37%	6%
Lopinavir / ritonavir	50	36%	38%	22%	4%
Hydroxychloroquine or chloroquine	53	49%	34%	15%	2%

in [TABLE 1](#) (the number of responses to individual questions is lower than the total number of respondents as an option “outside my area of expertise” was available for each question).

Rather than presenting complete results, which could be “filtered” by country, specialty, and time period, we invite readers (including the authors of the original meta-analysis) to respond to our living survey at <http://metaclinician.com/covid-drug> and provide their opinions as of September 2020. After completing the survey, respondents will be able to see the aggregate and anonymous results of previous responses and compare their own views against that of national or international colleagues. There is also an option of following the development of answers in different time-periods down the road.

## ARTICLE INFORMATION

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**NOTE** A correction to the list of authors was made after approval for publication. Yousef Al Mubarak was added as the sixth author (September 11, 2020).

**CONFLICT OF INTEREST** WA, R.J, and YAM are developers and owners of MetaClinician®.

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