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Management of mild to moderate COVID-19 during the second wave in India: A non-evidence-based approach

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\textbf{A B S T R A C T}

The biggest public health catastrophe of this century-the SARS coronavirus-2, 2019 (COVID-19) pandemic has affected nearly all countries. Countries after countries were gripped by the intermittent waves of the infection. One of the most affected countries was India, wherein the second wave of the pandemic afflicted the vast swathe of the nation. The medical community was overwhelmed and stressed with the inordinate number of patients. Doctors were inundated with the task of managing all kinds of COVID-19 patients ranging from mildly symptomatic to critically ill, in addition to the non-COVID-19 patients. The life of most of the population was significantly disrupted due to the fear of infection and lockdowns in various places. Due to multiple reasons, physician access was limited for mild to moderately sick patients. During this time, online consultations were at their peak and many groups came forward to help Indian patients. These groups were supported largely by Indian doctors based overseas.

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As part of several such groups, we provided the second opinion to more than one thousand patients across India as well as our close associates based there through various online modes. One thing which surprised us was the universal and inappropriate prescription of medicines for all those who were at home with mild to moderate COVID-19 disease. Most prescriptions consisted of an exhaustive list of medications including, ivermectin, doxycycline, azithromycin, vitamin C, vitamin D and zinc. In a few prescriptions, hydroxychloroquine, heparin, and dexamethasone were also included. In many instances, patients who showed up to the hospital with mild disease were admitted and were prescribed methylprednisolone or dexamethasone and broad-spectrum antibiotics like meropenem, cefepime or piperacillin/tazobactam as their first line of treatment.

The antiviral medication Favipiravir was prescribed in almost all cases, and it became the top-selling drug in India in April 2021 [1,2]. Some products were available and prescribed as a drug kit for COVID-19 disease and one such kit under the name of Ziverdo which circulated widely on social media was available over the counter and promoted as a first-line treatment for COVID-19 positive patients. It consisted of zinc, doxycycline and ivermectin in one package [3]. We also came across a government circular issued by the health authority of one of the largest Indian states and it illustrated the use of ivermectin, azithromycin, doxycycline, paracetamol, vitamin C, zinc, and vitamin D for all those in whom the presented symptoms were consistent with COVID-19 disease but had RT-PCR report awaited. This package was allowed to be consumed at home [Fig. 1]. Ivermectin was promoted as a preventive treatment and prescribed to many healthy individuals to prevent the COVID-19 disease [4].

In our observations, tests were advised and conducted without any clear rationale. A battery of unneeded tests was done, and it consisted complete hemogram, CRP (C-reactive protein), ferritin, D-dimer, LDH, and IL-6 (all often repeated several times in those with a prolonged course). Patients were treated according to their lab results rather than on clinical ground which is primarily decided by the absence or presence of hypoxia and its severity. There is a belief among many doctors that abnormal tests result in otherwise stable patients should be treated in the hope that this would improve outcomes. This, however, causes unneeded admission only to
allay the anxiety of abnormal reports in an otherwise clinically stable patient [5]. Additionally, all COVID-19 patients, with a positive RT-PCR, were administered a CT scan of the chest. This practice does not adhere to any international guidelines [6,7]. Moreover, the national task force on COVID-19, for India, cautioned against its indiscriminate use [8].

To assess if healthy individuals had developed immunity, India’s apex health research body- the Indian Council of Medical Research...
COVID-19 disease is not recommended by NIH or NICE guidelines. The use of antibiotics for mild to moderate COVID-19 disease is not recommended by NIH or NICE guidelines. The emergence of “Black Fungus” is a prime example of the overuse of steroids in the treatment of COVID-19 patients as it was only reported as case reports elsewhere [14,15]. It was difficult for us to counter the prescriptions given to patients by their physicians. We found ourselves in an exceedingly inconvenient situation, particularly when some of the medications which were non-evidence-based were endorsed by Indian authorities and were prescribed and widely available. At the time of writing this article, there was still a place of hydroxychloroquine and ivermectin in Indian guidelines for the patient with mild disease which was dropped from the guidelines in September 2021 after the second wave of the pandemic in India was over [16,17].

While on one hand, responsible government authorities failed to produce updated and best evidence-based guidelines on time, most medical professionals also did their job without any due diligence. Patients themselves demanded steroids and favipiravir. Both patients and medical professionals swayed towards the mania of “Do something and Do everything” during the pandemic crisis. The plasma therapy was used randomly without proper evidence supporting its use in hospitalized patients in the name of “Doing everything”. Whether these drugs simply do not offer any benefit or do harm if given as polypharmacy is unknown. In case of clinical worsening, it is difficult to ascertain what lead to deterioration. The use of any drug indiscriminately without evidence of benefit is unjustified even if a drug is known to be safe in human beings. Even safer over the counter available paracetamol can cause harm [18]. The use of an unproven or inappropriate treatment may lead to a false sense of security in a patient with the possibility of harm and a negative outcome. The practice of medicine requires sound judgment by discerning clinicians, and it should be based on scientific evidence.

We found ourselves caught between a rock and a hard place while providing online advice. While on one hand overruling a lot of tests and medications prescribed by other physicians felt unprofessional. On the other side, we would be supporting inappropriate care to our patients. We did what we had felt evidence-based since we could not jeopardize the safety and well-being of patients. As Dr Fauci said rightly in his first White House briefing in Biden administration that everything we do should be based on science and evidence. Let the science speak! [19].

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Conflict of interest statements

We have read and understood the policy on declaration of interests and declare that We do not have conflicting interest of any kind.

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