Safety of COVID-19 Patients and Use of Medicines without Scientific Evidence of Their Benefit

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Key Messages

- The safety of persons with COVID-19 should be a prime objective in ensuring quality of care when delivering health services.

- At this time, nearly 200 therapeutic options or combinations are being investigated in more than 1,700 clinical trials, including their evaluation in prophylaxis. So far, only remdesivir has demonstrated some benefit in a large randomized controlled trial, and only in hospitalized patients with certain characteristics (research is ongoing to evaluate its effectiveness).

- Some COVID-19 patients, often older adults with preexisting conditions, are receiving multiple drug combinations without consideration of possible adverse events and interactions.

- Drugs such as chloroquine or hydroxychloroquine (alone or in combination with azithromycin), ivermectin, antivirals, and immune modulators, among others, should only be used in the context of randomized clinical trials that evaluate their safety and efficacy.

- Countries should follow World Health Organization guidelines on the ethical use of drugs in emergencies, including their use for unapproved indications and compassionate use.

- Protecting the safety of COVID-19 patients depends on using information and surveillance systems that have standardized procedures for reporting adverse events and interactions, in compliance with local regulations, to the national drug regulatory authority.

Treatment options currently under study include several antiviral drugs and immune modulators, the antimalarials chloroquine and hydroxychloroquine, corticosteroids, convalescent plasma, pharmaceutical products that target the renin-angiotensin system, hyperbaric oxygen, and nitric oxide, among many others (*1-19*). However, except for remdesivir, which underwent a clinical trial that showed some preliminary positive results, a systematic review by the Pan American Health Organization (*15, 16, 18, 19*) has so far failed to identify a treatment option that can effectively address the causative agent of COVID-19. The same can be said regarding prophylaxis. PAHO and WHO are regularly publishing up-to-date summaries of available evidence on the effectiveness of these interventions (*1*).

The high mortality and morbidity associated with COVID-19 have drawn attention toward many pharmacological interventions and other symptomatic treatments (*1, 3-13*). The people at greatest risk of mortality and morbidity are those over 60 years of age and those with one or more preexisting conditions, such as cardiovascular disease, diabetes, obesity, cancer, or kidney, lung, or liver disease,

among others. These people are also more likely to experience drug interactions or adverse effects (*17*).

The absence of specific treatment options for COVID-19 that have been demonstrated to be safe and effective is occurring in a context of pressure imposed by the current situation, the media, and other actors, leading to the false perception of that some of the potential alternatives being studied may be better than the management and support of symptoms. In some countries, clinical management guidelines (protocols) have incorporated several of these drugs as standard treatments without considering the available scientific evidence, putting the safety of patients at risk and raising bioethical concerns. There is already previous evidence of adverse events in similar situations (for example, tests of chloroquine in patients with chikungunya virus) (*2*). In particular, the combination of **chloroquine/hydroxychloroquine** and **azithromycin** gives rise to a broad profile of possible adverse events (*3*), including serious cardiovascular effects (e.g., changes in the QT interval and arrhythmias such as torsade de pointes) (*4-10, 12*).

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The information included in this guideline reflects the evidence as of the date posted. However, since many clinical trials are currently in progress, the Pan American Health Organization will be regularly updating the evidence.