



Rumour Guidance: Unproven treatments – Chloroquine and Hydroxychloroquine

The drugs chloroquine and hydroxychloroquine have been talked about a lot lately. World leaders have promoted them, scientists have begun studying the drugs and its effects on COVID-19 and social media around the world is filled with claims, fear, and panic buying. Media have also been at the heart of the dangerous promotion of this unproven treatment.

In Indonesia there has been a rush to purchase chloroquine over the counter without a doctors' prescription after Indonesian President Joko Widodo described the drug as "having been proven to cure COVID-19 in other countries". He was referring to US President Donald Trump's claims that chloroquine was a "game-changer". The Indonesian president later admitted his statements were misleading.

Questions and comments on chloroquine and hydroxychloroquine have also made it to online forums and Twitter:

Question Asked 3rd Mar, 2020

Asif Hanif
University of Lahore

Any Prophylaxis for COVID-19?

Along with all available preventive measures (hand wash, social distance, staying home, no travelling etc.) can we take any medication as prophylactic, for example on social media it is said Hydroxychloroquine, chloroquine may prevent (although no scientific evidence is available) as per my search.

تاريخ السودان مُؤرّر
@Wa7id_Sakit

Replying to @opiedog8 and @tedlieu

Could've taken chloroquine as covid-19 prophylaxis, ended up with a heart attack.

10:54 AM · Apr 26, 2020 · [Twitter for Android](#)

But what are these drugs, and how can we report on them responsibly?

What are chloroquine and hydroxychloroquine?

Chloroquine and hydroxychloroquine have been in the news lately as drugs that could be taken to prevent COVID-19. Chloroquine and hydroxychloroquine have long been used to treat malaria. Chloroquine was originally developed in 1934 at the pharmaceutical company Bayer and used in World War II to prevent malaria.

Both drugs are also used to treat rheumatoid arthritis, a long-term condition that causes pain, swelling and stiffness in the joints, and lupus, a disorder of the immune system.

Why would antimalarial drugs work on a virus?

COVID-19 is caused by the SARS-CoV-2 virus and it still remains unclear how chloroquine and hydroxychloroquine, which are effective against *Plasmodium* parasites that cause malaria, can work against a virus at the same time.

Do they work to treat or prevent COVID-19?

Doctors think chloroquine and hydroxychloroquine might help COVID-19 patients by preventing the coronavirus from entering cells and replicating in them. It is also possible that the drugs tame a potentially deadly overreaction of the patient's immune system if it goes into overdrive in fighting off the SARS-CoV-2 virus. Laboratory studies have suggested chloroquine can slow down the activity of the SARS-CoV-2 virus but the doses needed are usually high and could cause severe poisoning in humans.

But there is still ongoing controversy about the role of chloroquine or hydroxychloroquine in the treatment of COVID. Studies so far have been small with several limitations and conflicting results. Further research is needed to determine the optimal dose and duration of treatment, and explore side effects and long-term outcomes.

The World Health Organization has stated that there is insufficient data to determine the effectiveness of either chloroquine or hydroxychloroquine in treating patients with COVID-19, or in preventing them from contracting the coronavirus.

On 24 April, the US Food and Drug Administration (the FDA) cautioned against the use of hydroxychloroquine or chloroquine for COVID-19 outside of the hospital setting or clinical trials due to risk of heart rhythm problems.

The FDA caution cites serious heart-related adverse events and death reported from hospital and outpatient settings for treating or preventing COVID-19. The FDA says it will continue to investigate these safety risks.

The Infectious Diseases Society of America, the American College of Cardiology, and the US National Institutes of Health all recommend that patients only receive chloroquine or hydroxychloroquine in clinical trials until there is more evidence that the drugs are safe and effective against COVID-19.

There is a higher risk of side effects if a COVID-19 patient has heart, liver or kidney problems and there have been isolated reports of the virus also affecting these organs in the human body. One recent study in Brazil had to be stopped after participants developed irregular heart rates after being given high doses of chloroquine.

More than 20 clinical trials have already been registered to test the use of chloroquine and hydroxychloroquine for the treatment of COVID-19. See here for more tips on how to responsibly report on clinical trials.

Why should care be taken to report on these drugs?

Stocks of both drugs are now running out fast as people seek out this unproven cure. Shortages are being reported from the UK to Thailand and France. This is dangerous for two reasons:

- It could leave millions of lupus and rheumatoid arthritis sufferers without the vital drugs they legitimately need;
- It can lead to self-medication which can have fatal consequences

Why is self-medication dangerous?

Self-medication to prevent COVID-19 with chloroquine and hydroxychloroquine can be dangerous. The effects of medically unsupervised use of both drugs have been documented and could lead to eye disorders as well as movement and muscle disorders. Other side effects may include cardiomyopathy or the difficulty of the heart to pump blood to the rest of the body that could result in heart failure. Too high a dose of chloroquine can also cause severe cardiac arrhythmia in certain patients. With this condition, a person's heart may beat too quickly, too slowly, too early, or with an irregular rhythm.

The unsupervised use of chloroquine and hydroxychloroquine by those with kidney problems can give rise to complications caused by the inability of the kidneys to get rid of excess urine and wastes resulting in renal failure.

The most talked about case of chloroquine poisoning involves a couple in Arizona who were afraid of dying of COVID-19 and self-medicated with a non-medical version of chloroquine phosphate that is used to clean fish tanks. The man died and his wife remains in a critical condition.

How can you, as a journalist, report on chloroquine and hydroxychloroquine without contributing to fear, panic or encouraging risky behaviours?

Promote information from trusted medical experts: Medical experts and researchers often do not have the same platform as politicians to have their voice heard. Actively promote the voice of medical experts and work with them to ensure information is in plain language, relatable and practical in your context.

Do not let emotion overpower facts: Let's face it, emotion from a family member who has lost a relative to coronavirus humanizes this crisis. But do not fall into the trap of broadcasting emotional pleas to make chloroquine, or other medical interventions widely available. Friends and relatives of coronavirus victims are not medical scientists. They are in a vulnerable position and these statements should not become fodder for your reporting.

Look for limitations in trials: there are hundreds of trials underway at the moment to find preventative and curative drugs for COVID-19, many trials may be rushed and announce findings without the usual checks and balances. See [here](#) for more tips on how to responsibly report on clinical trials.

How can you, as a journalist, report on chloroquine and hydroxychloroquine without contributing to fear, panic or encouraging risky behaviours? (continued)

Be discerning. Don't lump your audience or readers into a single category of adults when reporting on chloroquine and hydroxychloroquine. While high doses are dangerous to adults, doses of as little as 1-2 grams can be deadly to small children. There is a need, therefore, to exercise a duty of care.

Be careful with adjectives: Stick to the cold hard facts. Don't sensationalize your writing with terms like 'miracle cures' or 'game-changer'.

Practice good Information Hygiene: Your role as a journalist does not end when you shut your laptop at 5pm. Make sure anything you share or like on social media includes verified and reliable information, even on your personal accounts. don't be tempted to forward articles or information from unreliable or unverified sources.

Address misinformation when you see it: If you see misinformation online or being shared by friends and family members, you have a duty to point them towards verified facts. There is no need to start an argument.

Evidence Aid assisted in the literature review for this guidance. If you have any questions, requests for resources, feedback or would like to let us know when our tools have been useful, you can email us at any time at covid-19@internews.org

