# **Journal of Medicine Says HCQ + Zinc Reduces COVID Deaths**

Analysis by Dr. Joseph Mercola (



### **STORY AT-A-GLANCE**

- > Early on in the COVID-19 pandemic, doctors around the world reported high success rates using an inexpensive treatment protocol of hydroxychloroquine (HCQ) and zinc, typically in combination with an antibiotic to treat secondary bacterial infections
- > A medical review in the January 2021 issue of The American Journal of Medicine now urges early use of HCQ and zinc to reduce hospitalizations and deaths from COVID-19

- > HCQ is a zinc ionophore, meaning it shuttles zinc into the cell, and there's compelling evidence to suggest the primary benefit of the HCQ protocol actually comes from the zinc, which effectively inhibits viral replication
- > For patients with cardinal features of COVID-19 (fever, body aches, nasal congestion, loss of taste and smell) at-home treatment can be the same as those with confirmed COVID-19, the authors say
- > While media headlines have painted HCQ as a life-threatening drug, it actually has a very robust safety profile that goes back decades

Early on in the COVID-19 pandemic, doctors around the world reported high success rates using an inexpensive treatment protocol of hydroxychloroquine (HCQ) and zinc, typically in combination with an antibiotic to treat secondary bacterial infections.

Almost immediately, government health agencies and mainstream media started attacking the treatment, going so far as to ban the prescription and use of HCQ for COVID-19 in some

areas. Over time, it became painfully clear that a concerted and coordinated effort to prevent its use was afoot.

One of the most obvious reasons for why certain individuals and companies might want to prevent the use of an inexpensive generic drug is because it might eliminate the need for a vaccine or other antiviral medication under development.<sup>1</sup> Hundreds of millions of dollars have been invested, and drug companies were, and still are, counting on a massive payday. As noted by Dr. Meryl Nass in a June 27, 2020, blog post:<sup>2</sup>

"Hydroxychloroquine has been used safely for 65 years in many millions of patients. And so the message was crafted that the drug is safe for its other uses, but dangerous when used for COVID-19. It doesn't make sense, but it seems to have worked. Were these acts carefully orchestrated? ...

Might these events have been planned to keep the pandemic going? To sell expensive drugs and vaccines to a captive population? Could these acts result in prolonged economic and social hardship, eventually transferring wealth from the middle class to the very rich?"

## **Politicizing Medicine Has Grave Consequences**

The fight over HCQ also appears to have had political underpinnings, and by politicizing medicine, the media has played a role that can readily be likened to agents of genocide. There's no telling how many lives may have been saved had they done their due diligence and reported the science truthfully.

Most of us in the holistic field have been aware that the intent of censorship is to mislead people. After all, a majority of news outlets rely on revenue from advertisers, and drug companies tend to spend the most. As a result, what the drug industry wants is what the media deliver.

During this pandemic, conventional doctors have gotten a taste of what it's like as well and, clearly, many have been absolutely floored by it. It's certainly understandable, because to censor potentially lifesaving medical treatment during a global pandemic really brings it to a whole new level of evil.

As just one example among many, July 23, 2020, Dr. Harvey A. Risch, professor of epidemiology at Yale School of Public Health, published an op-ed in Newsweek in which he expressed his dismay and frustration:<sup>3</sup>

"I have authored over 300 peer-reviewed publications and currently hold senior positions on the editorial boards of several leading journals.

I am usually accustomed to advocating for positions within the mainstream of medicine, so have been flummoxed to find that, in the midst of a crisis, I am fighting for a treatment that the data fully support but which, for reasons having nothing to do with a correct understanding of the science, has been pushed to the sidelines.

As a result, tens of thousands of patients with COVID-19 are dying unnecessarily ... I am referring, of course, to the medication hydroxychloroquine.

When this inexpensive oral medication is given very early in the course of illness, before the virus has had time to multiply beyond control, it has shown to be highly

effective, especially when given in combination with the antibiotics azithromycin or doxycycline and the nutritional supplement zinc."

In what appears to be an effort to change the tide, a medical review<sup>4</sup> in the January 2021 issue of The American Journal of Medicine now urges early use of HCQ and zinc. The authors include Risch, as well as a long list of medical doctors from hospitals around the world.

### The Importance of Early Outpatient Treatment

Risch's paper, "Pathophysiological Basis and Rationale for Early Outpatient Treatment of SARS-CoV-2 (COVID-19) Infection," points out that:5

"In the absence of clinical trial results, physicians must use what has been learned about the pathophysiology of SARS-CoV-2 infection in determining early outpatient treatment of the illness with the aim of preventing hospitalization or death ...

Therapeutic approaches based on these principles include 1) reduction of reinoculation, 2) combination antiviral therapy, 3) immunomodulation, 4) antiplatelet/antithrombotic therapy, and 5) administration of oxygen, monitoring, and telemedicine."

The authors stress that "Most patients who arrive to the hospital ... with COVID-19 do not initially require forms of advanced medical care," and that, therefore, "it is conceivable that some, if not a majority, of hospitalizations could be avoided with a treat-at-home first approach."

They also stress that since it can take up to a week to get PCR test results back, it's important to start treatment before results are known. "For patients with cardinal features of the syndrome (i.e., fever, body aches, nasal congestion, loss of taste and smell, etc.) ... treatment can be the same as those with confirmed COVID-19," they say.

### The Case for HCQ and Zinc

In terms of early drug treatment for patients who are quarantining at home, the authors recommend using a combination of HCQ and zinc lozenges, along with several other drugs (depending on your symptoms).

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While I will review those here, keep in mind that I do not necessarily recommend using all of them, as in some cases there are safer alternatives. At the end of this article, I will summarize my personal at-home treatment recommendation, which I believe is among the absolute safest and most effective.

That said, in his paper, Risch and his co-authors explain the rationale for using HCQ and zinc as follows:

"Hydroxychloroquine (HCQ) is an antimalarial/anti-inflammatory drug that impairs endosomal transfer of virions within human cells. HCQ is also a zinc ionophore that conveys zinc intracellularly to block the SARS-CoV-2 RNA-dependent RNA polymerase, which is the core enzyme of the virus replication.

The currently completed retrospective studies and randomized trials have generally shown these findings:

- 1. when started late in the hospital course and for short durations of time, antimalarials appear to be ineffective
- 2. when started earlier in the hospital course, for progressively longer durations and in outpatients, antimalarials may reduce the progression of disease, prevent hospitalization, and are associated with reduced mortality ...

A typical HCQ regimen is 200 mg bid for 5 days and extended to 30 days for continued symptoms. A minimal sufficient dose of HCQ should be used, because in excessive doses the drug can interfere with early immune response to the virus ...

Zinc is a known inhibitor of coronavirus replication ... This readily available nontoxic therapy could be deployed at the first signs of COVID-19. Zinc lozenges can be administered 5 times a day for up to 5 days and extended if needed if symptoms persist.

The amount of elemental zinc lozenges is <25% of that in a single 220-mg zinc sulfate daily tablet. This dose of zinc sulfate has been effectively used in combination with antimalarials in early treatment of high-risk outpatients with COVID-19."

It's worth noting that in areas where hydroxychloroquine is hard to get a hold of, the nutritional supplement quercetin may be a useful (and perhaps even better) substitute, as its primary mechanism of action is identical to that of the drug. It also has antiviral activity of its own.

You can learn more about this in "Is Quercetin a Safer Alternative to Hydroxychloroquine?" 
"Quercetin Boosts Interferon Response to Viruses and COVID-19" and "How to Improve Zinc 
Uptake with Quercetin to Boost Immune Health."

## Zinc Is a Crucial Key

While much attention is placed on HCQ, it in and of itself is not the answer. Zinc is. Both HCQ and quercetin are zinc ionophores, meaning they shuttle zinc into the cell,<sup>7,8</sup> and there's compelling evidence to suggest the primary benefit of the HCQ protocol actually comes from the zinc, which effectively inhibits viral replication.<sup>9</sup>

If given early, zinc along with a zinc ionophore should, at least theoretically, help lower the viral load and prevent the immune system from becoming overloaded. The problem is that zinc does not readily enter cells, which is why a zinc ionophore is needed.

Evidence of this was presented in a September 2020 study<sup>10</sup> in the Journal of Medical Microbiology. In it, they compared outcomes in hospitalized COVID-19 patients treated with one of three regimens: HCQ alone, Azithromycin alone, or a triplet regimen of hydroxychloroquine, azithromycin and zinc.

While the addition of zinc had no impact on the length of hospitalization, ICU duration or duration of ventilation, univariate analyses showed it did:

- Increase hospital discharge frequency
- Decrease the need for ventilation
- Decrease ICU admission rates
- Decrease the rate of transfer to hospice for patients who were never admitted to the ICU
- Decrease mortality

### As noted by the authors:11

"After adjusting for the time at which zinc sulfate was added to our protocol, an increased frequency of being discharged home (OR 1.53 ...) reduction in mortality or transfer to hospice remained significant (OR 0.449 ...). This study provides the first in vivo evidence that zinc sulfate in combination with hydroxychloroquine may play a role in therapeutic management for COVID-19."

Another paper that addressed the crucial role of zinc was published in the September 2020 issue of Medical Hypotheses:12

"Besides direct antiviral effects, CQ/HCQ [chloroquine and/or hydroxychloroquine] specifically target extracellular zinc to intracellular lysosomes where it interferes with RNA-dependent RNA polymerase activity and coronavirus replication.

As zinc deficiency frequently occurs in elderly patients and in those with cardiovascular disease, chronic pulmonary disease, or diabetes, we hypothesize that CQ/HCQ plus zinc supplementation may be more effective in reducing COVID-19 morbidity and mortality than CQ or HCQ in monotherapy. Therefore, CQ/HCQ in combination with zinc should be considered as additional study arm for COVID-19 clinical trials."

### **Antibiotics, Steroids and Other Treatment Additions**

In addition to HCQ and zinc, Risch<sup>13</sup> et.al also recommend using one of two antibiotics — azithromycin or doxycycline — primarily to address secondary bacterial infections.

Azithromycin also has antiviral properties and anti-inflammatory effects, while doxycycline

has "multiple intracellular effects that may reduce viral replication, cellular damage, and expression of inflammatory factors."

According to the authors, COVID-19 studies that used azithromycin found "markedly reduced durations of viral shedding, fewer hospitalizations, and reduced mortality combination with HCQ."

People with known or suspected arrhythmias, and anyone taking a contraindicated medication, should get a thorough workup and review of baseline electrocardiogram though before receiving HCQ and/or azithromycin. In those worried about azithromycin's effects on the heart, doxycycline is a better alternative as it has no ill effects on your heart. On the downside, it can cause gastrointestinal upset and esophagitis instead.

An important side note here is that while not addressed in this paper, all antibiotics have the drawback of disrupting your gut microbiome, and should therefore be used only if absolutely needed.

Risch<sup>14</sup> et.al also recommend using corticosteroids, which have immunomodulating effects and help reduce the effects of cytokine storms. As explained in their paper:

"In COVID-19, some of the first respiratory findings are nasal congestion, cough, and wheezing. These features are due to excess inflammation and cytokine activation.

Early use of corticosteroids is a rational intervention for patients with COVID-19 with these features as they would be in acute asthma or reactive airways disease ... One potential dosing scheme for outpatients starting on day 5 or the onset of respiratory symptoms is prednisone 1 mg/kg given daily for 5 days with or without a subsequent taper."

#### Other treatment additions include:

- Colchicine, a nonsteroidal antimitotic that has been shown to reduce D-dimer levels and improve outcomes in hospitalized COVID-19 patients
- Antiplatelet agents such as aspirin (81 mg daily) or heparin to treat the abnormal blood clotting sometimes seen in COVID-19

Supplemental oxygen if needed

To reduce the risk of self-reinoculation (since the virus is airborne), they also recommend opening windows and/or spending long periods of time outdoors (away from others) without a face covering.

The figure below, from The American Journal of Medicine and republished in Science Direct,<sup>15</sup> illustrates the different approaches to home care suggested depending on whether you are healthy, have a single comorbidity or several, and at which point in the disease process the various drugs should be administered.

# **Hydroxychloroquine Has a Proven Safety Profile**

While media headlines have painted HCQ as a life-threatening drug, it actually has a very robust safety profile that goes back decades. In a paper published in the American Journal of Epidemiology,<sup>16</sup> Risch reviewed several large-scale studies demonstrating the safety of the medication.

In his Newsweek article,<sup>17</sup> he also pointed out that the adverse event reports cited by the U.S. Food and Drug Administration when it warned HCQ might cause cardiac arrhythmia, especially when administered with azithromycin, were from patients who had used HCQ for very long periods of time for the treatment of chronic conditions such as lupus or rheumatoid arthritis. The same risks simply do not apply when you're taking HCQ for a few days or weeks.

"Even if the true rates of arrhythmia are tenfold higher than those reported, the harms would be minuscule compared to the mortality occurring right now in inadequately treated high-risk COVID-19 patients," Risch wrote.<sup>18</sup>

"This fact is proven by an Oxford University study of more than 320,000 older patients taking both hydroxychloroquine and azithromycin, who had arrhythmia excess death rates of less than 9/100,000 users ... A new paper in the American Journal of Medicine by established cardiologists around the world fully agrees with this."

Indeed, the so-called evidence that HCQ causes lethal heart problems has been shown to be fraudulent. One study was retracted after it was discovered the data had been manufactured, and other large-scale trials were all using toxic doses.

While doctors reporting success with the drug were using standard doses around 200 mg per day for either a few days or maybe a couple of weeks, studies such as the Bill & Melinda Gates-funded<sup>19</sup> Recovery Trial used 2,400 mg of hydroxychloroquine during the first 24 hours — three to six times higher than the daily dosage recommended<sup>20</sup> — followed by 400 mg every 12 hours for nine more days for a cumulative dose of 9,200 mg over 10 days.

Similarly, the Solidarity Trial,<sup>21</sup> led by the World Health Organization, used 2,000 mg on the first day, and a cumulative dose of 8,800 mg over 10 days. These doses are simply too high.

Meanwhile, a July 1, 2020, retrospective analysis<sup>22,23,24</sup> of 2,541 patients in Michigan found use of hydroxychloroquine alone cut mortality by more than half, from 26.4% to 13.5%. Patients received 400 mg of hydroxychloroquine twice on day 1, followed by 200 mg twice a day for the next four days.

No adverse heart-related events were observed. Hydroxychloroquine in combination with azithromycin had a mortality rate of 20.1%, and azithromycin alone had a mortality rate of 22.4%. The azithromycin was dosed as 500 mg on day 1, followed by 250 mg once a day for the next four days.

According to the authors,<sup>25</sup> "The combination of hydroxychloroquine + azithromycin was reserved for selected patients with severe COVID-19 and with minimal cardiac risk factors." Unfortunately, zinc was not included in this trial.

"Physicians who have been using these medications in the face of widespread skepticism have been truly heroic," Risch wrote in Newsweek.<sup>26</sup> "They have done what the science shows is best for their patients, often at great personal risk.

I myself know of two doctors who have saved the lives of hundreds of patients with these medications, but are now fighting state medical boards to save their licenses and reputations. The cases against them are completely without scientific merit ... As all know, the medication has become highly politicized. For many, it is viewed as a marker of political identity, on both sides of the political spectrum. Nobody needs me to remind them that this is not how medicine should proceed ... Reality demands a clear, scientific eye on the evidence and where it points"

With that in mind, evidence that HCQ could be useful against SARS-CoV-2 goes as far back as 2005, when the article "Chloroquine Is a Potent Inhibitor of SARS Coronavirus Infection and Spread" was published in the Virology Journal.<sup>27</sup>

Did Dr. Anthony Fauci, appointed to lead the White House Pandemic Response Team, know about this? One could argue he should have. And, if he did, why didn't he say something? According to this study:<sup>28</sup>

"... chloroquine has strong antiviral effects on SARS-CoV infection of primate cells. These inhibitory effects are observed when the cells are treated with the drug either before or after exposure to the virus, suggesting both prophylactic and therapeutic advantage."

In other words, chloroquine functioned as both a prophylactic (prevention) and a treatment against SARS coronavirus. This is precisely what many doctors have found with HCQ as well — a drug that is very similar to chloroquine but has a safer profile — when used against SARS-CoV-2.

## **Nebulized Peroxide — My Favorite Treatment Choice**

While HCQ with zinc appears to be a very useful early treatment choice, my personal choice for the treatment of COVID-19 symptoms is nebulized peroxide. This is a home remedy I recommend everyone familiarize themselves with, as in many cases it can improve symptoms in mere hours. You can also use it as a preventive strategy if you know you've been exposed to someone who is ill.

Nebulizing hydrogen peroxide into your sinuses, throat and lungs is a simple, straightforward way to augment your body's natural expression of hydrogen peroxide to combat infections and can be used both prophylactically after known exposure to COVID-19 and as a treatment for mild, moderate and even severe illness.

Dr. David Brownstein, who has successfully treated over 100 COVID-19 patients with nebulized peroxide, published a case paper<sup>29</sup> about this treatment in the July 2020 issue of Science, Public Health Policy and The Law. He also reviews its benefits in "How Nebulized Peroxide Helps Against Respiratory Infections."

Nebulized hydrogen peroxide is extremely safe, and all you need is a desktop nebulizer and food-grade hydrogen peroxide, which you'll need to dilute with saline to 0.1% strength. I recommend buying these items beforehand so that you have everything you need and can begin treatment at home at the first signs of a respiratory infection.

In the video above, I go over the basics of this treatment. Be sure to buy a nebulizer that plugs into an electrical outlet, as battery-driven ones are too low-powered to be truly effective. Also make sure your nebulizer comes with a face mask, not just a mouth piece. If it doesn't come with a face mask, you can pick one up separately. Just search Amazon for "nebulizer face mask for adults."