

# Ivermectin – New Peer-Reviewed Study

A preprint paper showing ivermectin's effectiveness against COVID-19 in Peru convinced a group of doctors that widespread ivermectin distribution could end the pandemic in October 2020

Because the paper wasn't yet peer-reviewed, it was brushed off; ivermectin for COVID-19 was vilified, as were those who dared to prescribe it

Now, the study has been peer-reviewed and published in Cureus, vindicating ivermectin as a treatment for COVID-19

Not only did ivermectin work against COVID-19, it was remarkably effective, resulting in a 74% reduction in excess deaths in the 10 Peru states where it was used most intensively

There was a 14-fold reduction in nationwide excess deaths when ivermectin was readily available and then a 13-fold increase in excess deaths in the two months after ivermectin use was restricted

As the COVID pandemic wore on, with potential treatments supposedly unknown, New York pulmonologist Dr. Pierre Kory and others tried to get the word out about ivermectin. A widely used antiparasitic drug that's listed on the World Health Organization's essential medicines list<sup>1</sup> and approved by the U.S. Food and Drug Administration, ivermectin is widely available, inexpensive and has a long history of safe usage.

In fact, since 1987, 3.7 billion doses of ivermectin have been used among humans worldwide,<sup>2</sup> but it was quickly vilified – as were those who dared to prescribe it. Now, the tables have turned. Not only did ivermectin work against COVID-19, it was

remarkably effective, resulting in a 74% reduction in excess deaths in the 10 states where it was used most intensively.<sup>3</sup>

# **Ivermectin                      Dramatically Slashed COVID Deaths**

Kory and other physicians with the Front Line COVID-19 Critical Care Working Group (FLCCC) had success early on treating patients with ivermectin and other therapies during the pandemic. His efforts to get the word out on this treatment protocol were stifled by censorship, ridicule and colleagues brainwashed by the official narrative and unwilling to accept the science.

A preprint paper showing ivermectin's effectiveness against COVID-19 in Peru "was the final piece of evidence which convinced me, Paul [Marik] and the FLCCC that widespread ivermectin distribution could end the pandemic in Oct of 2020," Kory tweeted.<sup>4</sup> "Took 2 years but now peer-reviewed & published in a major journal."

That study, published in Cureus,<sup>5</sup> vindicates ivermectin as a treatment for COVID-19. "Reductions in excess deaths over a period of 30 days after peak deaths averaged 74% in the 10 states with the most intensive IVM [ivermectin] use," the study found.<sup>6</sup> It used Peruvian national health data from Peru's 25 states to evaluate ivermectin's effects.

A natural experiment was set in motion in May 2020, when Peru authorized ivermectin for COVID-19. The significant reduction in excess deaths noted "correlated closely with the extent of IVM use," the researchers noted.

# Global Success Stories Highlight Ivermectin's Potential

Few have heard about the astonishing success of ivermectin in Uttar Pradesh, India, which embraced large-scale prophylactic and therapeutic use of ivermectin for COVID-19 patients, close contacts of patients and health care workers.<sup>7</sup>

*“The possibility of both preventative and treatment efficacies of IVM was raised by outcomes in another world region in which IVM was distributed to the population at risk for COVID-19 on a mass scale. This IVM distribution occurred in Uttar Pradesh, the largest state in India, having a population of 229 million,” the study added.*<sup>8</sup>

There, widespread ivermectin distribution likely resulted in significantly lower COVID-19 deaths compared to areas not using the drug:<sup>9</sup>

*“The cumulative total of COVID-19 deaths per million in population from July 7, 2021 through April 1, 2023 was 4.3 in Uttar Pradesh, as compared with 70.4 in all of India and 1,596.3 in the United States ... The much lower number of COVID-19 deaths per population in all of India versus the United States in that period may reflect the use of these same home treatment kits containing IVM, doxycycline, and zinc in some other states of India.”*

A similar series of events occurred in Itajai, Brazil, a city of 220,000 people. In June 2020, they implemented a prophylaxis program using ivermectin. The program was advertised throughout local media, and people were encouraged to participate and take ivermectin four times a month, on days

1, 2, 15 and 16.

On the appropriate days, they set up tents and centers where people could get the drug, and the entire program was carefully logged in an electronic database. In all, 159,000 Brazilians participated, of those 113,000 elected to take the ivermectin.

Kory and eight coauthors published a paper on the results, which showed “regular use of ivermectin as a prophylactic agent was associated with significantly reduced COVID-19 infection, hospitalization, and mortality rates.”<sup>10</sup>

Those who used ivermectin had a 44% reduction in COVID-19 infection rate, a 68% reduction in COVID-19 mortality and a 56% reduction in hospitalization rate compared to those who did not.<sup>11</sup>

Meanwhile, a study from Japan demonstrated that just 12 days after doctors were allowed to legally prescribe ivermectin to their COVID-19 patients, cases dropped dramatically.<sup>12</sup> The chairman of the Tokyo Medical Association<sup>13</sup> noticed the low number of infections and deaths in Africa, where many use ivermectin prophylactically and as the core strategy to treat river blindness.<sup>14</sup>

## **Government's Ivermectin Restrictions Increased Deaths**

In a striking revelation, ivermectin was used against COVID-19 in Peru for four months, before the new president put restrictions on its use. During that time, “there was a 14fold reduction in nationwide excess deaths and then a 13-fold increase in the two months following the restriction of IVM

use.”<sup>15</sup>

The U.S. Food and Drug Administration has towed the anti-ivermectin narrative all along, with its infamous tweet reading, “You are not a horse. You are not a cow. Seriously, y’all. Stop it.”<sup>16</sup> While commanding the U.S. public and physicians not to use ivermectin for an off-label use, the irony stands that close to 40% of U.S. prescriptions are for off-label uses.<sup>17</sup>

But now, after years of vilification, it had no choice but to admit what’s been right all along – doctors have the authority to prescribe ivermectin for COVID-19. Attorney Jared Kelson of Boyden Gray & Associates, who is representing physicians who have sued the

FDA for interfering with their practice of medicine, including relating to ivermectin for

COVID-19, explained:<sup>18</sup>

*“The fundamental issue is straightforward. After the FDA approves a human drug for sale, does it then have the authority to influence or interfere with how that drug is used within the doctor-patient relationship? The answer is no.”*

The FDA did just that, nonetheless, but finally admitted the truth on August 16, 2023, tweeting, “Health care professionals generally may choose to prescribe an approved human drug for an unapproved use when they judge that the unapproved use is medically appropriate for an individual patient.”<sup>19</sup>

In September 2021, the American Medical Association also told doctors to stop prescribing ivermectin for COVID-19. In a statement, AMA, along with the American Pharmacists Association (APhA) and American Society of Health-System Pharmacists (ASHP), warned:<sup>20</sup>

*“We are alarmed by reports that outpatient prescribing for and dispensing of ivermectin have increased 24-fold since before the pandemic and increased exponentially over the past few months. As such, we are calling for an immediate end to the prescribing, dispensing, and use of ivermectin for the prevention and treatment of COVID-19 outside of a clinical trial.*

*In addition, we are urging physicians, pharmacists, and other prescribers – trusted health care professionals in their communities – to warn patients against the use of ivermectin outside of FDA-approved indications and guidance, whether intended for use in humans or animals, as well as purchasing ivermectin from online stores.”*

How many died unnecessarily as a result of these commands? As noted by journalist Kim Iversen, even the FDA’s move advising doctors that they’re allowed to prescribe ivermectin for COVID-19 is too little, too late. “Now, two, three years later, too little, too late... ultimately, we now get this study that has been officially peer reviewed and published, and it shows significant, significant, significant reduction [of mortality] in COVID-19.”<sup>21</sup>

### **How Does Ivermectin Work Against COVID?**

Ivermectin binds to SARS-CoV-2’s spike protein, limiting the virus’ morbidity and infectivity.<sup>22</sup> The drug, while best known for its antiparasitic effects, also has demonstrated antiviral and anti-inflammatory properties. An in vitro study demonstrated that a single treatment with ivermectin effectively reduced viral load 5,000 times in 48 hours in cell culture.<sup>23</sup>

Studies have shown that ivermectin helps to lower the viral load by inhibiting replication.<sup>24</sup> A single dose of ivermectin can kill 99.8% of the virus within 48 hours.<sup>25</sup> A meta-analysis

in the American Journal of Therapeutics also showed the drug reduced infection by an average of 86% when used preventively.<sup>26</sup>

Ivermectin has also been shown to speed recovery, in part by inhibiting inflammation and protecting against organ damage.<sup>27</sup> This pathway also lowers the risk of hospitalization and death. Meta analyses have shown an average reduction in mortality that ranges from 75%<sup>28</sup> to 83%.<sup>29,30</sup>

Additionally, the drug also prevents transmission of SARS-CoV-2 when taken before or after exposure.<sup>31</sup> As the Cureus study noted, the latest data only adds further evidence that ivermectin has an important place in COVID-19 treatment:<sup>32</sup>

*“These encouraging results from IVM treatments in Peru and similar positive indications from Uttar Pradesh, India, which have populations of 33 million and 229 million, respectively, offer promising models for further mass deployments of IVM, as needs may arise, for both the treatment and prevention of COVID-19.”*

It's worth noting, too, that ivermectin has notable antitumor effects, which include inhibiting proliferation, metastasis and angiogenic activity in cancer cells.<sup>33</sup> It appears to inhibit tumor cells by regulating multiple signaling pathways, which researchers explained in the Pharmacological Research journal, “suggests that ivermectin may be an anticancer drug with great potential.”<sup>34</sup>

### **Why Was Ivermectin Suppressed?**

The average treatment cost for ivermectin is \$58.<sup>35</sup> Do you think this has anything to do with ivermectin's vilification?

The authors of the Cureus study certainly do:<sup>36</sup>

*“The exceptional safety profile and low cost of IVM certainly support its use as in Peru’s operation MOT [Mega-Operación Tayta] and in Uttar Pradesh as an attractive national policy for COVID-19 mitigation. These significant reductions in mortality as achieved in Peru and Uttar Pradesh suggest that the impact of such a national IVM deployment would be observable within a relatively short period.*

*However, generic drugs have often fared poorly in competition with patented offerings in past decades, based upon the unfortunate vulnerability of science to commodification and regulatory capture ... Such a potential bias against IVM was suggested by a February 4, 2021 press release from Merck, which was then developing its own patented COVID-19 therapeutic, claiming that there was ‘a concerning lack of safety data’ for IVM.*

*However, IVM is Merck’s own drug, found safe at doses considerably higher than its standard dose in several studies, as cited in the section on the background on IVM treatments of COVID-19, and the Nobel Prize committee specifically noted IVM’s safety record in honoring the discovery of this drug in its 2015 prize for medicine.”*

If you’d like to learn more about ivermectin’s potential uses for COVID-19, FLCCC’s ICARE protocol can be downloaded in full,<sup>37</sup> giving you step-by-step instructions on how to prevent and treat the early symptoms of COVID-19.