Ivermectin and the Media during the COVID-19 Pandemic.

A CASE STUDY OF THE MASS MEDIA'S PROPAGANDA MODEL IN ACTION

Abstract

This study examines media responses regarding the drug ivermectin. After dozens of studies investigating the efficacy of prophylactic use and treatment for COVID-19 the drug shows to be safe and effective. Meanwhile, no adequate attention is given to the drug in the mass media, given its immense importance during an international health crisis. The study theorizes that a narrative is established that has no place for an old repurposed drug such as ivermectin. A quantitative and qualitative analysis is performed on articles published mentioning ivermectin in a total of eight international media and ten national Dutch media. Additionally, statements of four health authorities and one pharmaceutical company are analysed. The analysis of the media shows a vast underreporting, and the occurrence of propaganda tactics suggesting a strong presence of bureaucracy in the media and authoritarian traits among journalists. Currently, the media have established a narrative that ultimately has led to the unnecessary loss of lives. Although the study does not provide solutions, it can help create awareness of the processes in the media of authoritarianism, bureaucracy, and manufacturing consent.

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Introduction

This thesis will discuss an unsettling discrepancy between well-established science results and the representation of this science in the mass media in times of a pandemic. Since the start of the COVID-19 crisis in early 2020, it was evident that medicines for prophylaxis and treatment were essential in solving the crisis. To this date, in the middle of 2021, no effective medicine has been approved for wide use. At the same time, there exists a huge body of evidence of the efficacy of a drug called ivermectin. According to many physicians and local researchers, this medicine could help solve the crisis. Yet, neither health authorities nor important media have promoted the use of this medicine or reported on the positive results endorsed by science. Rather, they are advising against the use of ivermectin, if they mention it at all. This study will capture the responses of different media, authorities, and scientists, and speculate why a part of science is silenced. The study will consist of a qualitative analysis of large international media, and perform a national case study on the news media in the Netherlands. Additionally, the statements of health authorities are analysed. A narrative of a vaccine-only exit strategy seems to have been developed in the media and every aspect that challenges this narrative appears to be rejected or ignored.

For this media study, a theoretical framework is established that seems most plausible for the current phenomenon. This framework uses the theories of Noam Chomsky and Karen Stenner as a basis. I discuss structures like bureaucracy and traits like authoritarianism that can result in the acceptance or rejection of a certain narrative. With tactics of sophistry and manufactured consent, the public is being given a narrative that does not hold all truths, but only one. The desire for unity in times of crisis combined with authorities with mixed interests can do great harm to society as will become clear in this thesis. Media reject a diverse and nuanced narrative and favour a unifying one. By establishing a narrative that is shared among many media organisations the media establish themselves as an authority that can oppose or endorse scientific results, depending on whether the message constitutes a normative threat or confirms their narrative.

Theoretical Framework

Sophistry: The art of persuasion in so-called "Democracies"

When observing a discrepancy between the established science and the message conveyed by popular media and authorities, we should first understand the possible mechanisms that allow the media to reject science. Conveying a certain narrative, false or true, to the public is as old as civilization itself. In ancient Greece, the sophists were the first to bring a message outside the closed schools to the public. They were seen as teachers of everything, but the most interesting subject to be studied was rhetoric, the art of persuasion. Many sophists were seen as nihilists, people that do not believe in the presence of a form of absolute truth, with this belief the best alternative is to persuade others of your truth. The art of persuasion was more important than truth itself. In *Rhetoric, Sophistry, Pragmatism* the link is made between sophistic rhetoric, and modern-day American pragmatism (Mailloux, 1995). Pragmatism is the practice of deriving relative truth from everyday life, as any form of real truth is impossible to gather: "Truth is what works". This connects well to sophistry, as if all truths are relative, the best truths can be chosen by those that are most present in the public debates. The popularity of pragmatism and sophist rhetoric can be seen both at the beginning and the end of the twentieth century (Mailloux, 1995), and is growing in the twenty-first century as well.

In a bureaucracy, as elucidated below, the importance of absolute truth is less important than the manufactured truth of the system, which is established to benefit those in power. Sophistry, therefore, is present in all layers of media and government and private corporations. I will explain

the mechanisms of this sophistry as the filters of propaganda proposed in *Manufacturing Consent* by Noam Chomsky. The possibilities of well-performed sophistries as established by WOII propaganda minister Joseph Goebbels will be described. The ability of the individual to fall for these mechanisms can be explained by authoritarianism which is defined in *The Authoritarian Dynamic* by Karen Stenner.

Authoritarianism: the intolerance to diversity

In her book The Authoritarian Dynamic, Karen Stenner defines authoritarianism as a "predisposition to intolerance". She states that "Authoritarianism is an individual predisposition concerned with the appropriate balance between group authority and uniformity, on the one hand, and the individual autonomy and diversity, on the other." If authoritarian values of group authority and uniformity are preferred above libertarian values of autonomy and diversity, everything that lies outside of the beliefs and values of the group authority is marginalized as a "normative threat". This tendency can result in racial, political and moral intolerance from the ingroup to the outgroup (Stenner, 2005). A normative threat is something that challenges the system of oneness and sameness, the normative order, which characterizes the group. In many instances, it is difficult to differentiate a libertarian from an authoritarian, as in many instances they will act similarly in society. However, Stenner argues the differences between a libertarian and an authoritarian only becomes obvious when fear is introduced in society. This solves the puzzle of the authoritarian dynamic: fear, combined with authoritarian traits increases the intolerance to diversity (Stenner, 2005). Authoritarianism is a trait that can be found in most people to a certain extent. The degree to which it is active in a society depends on the amount and severity of normative threats that are perceived.

Bureaucracy: The enabler of acting without responsibility

Bureaucracies can transform a normally engaged and law-abiding citizen into a bureaucrat. According to Andringa (2015), a bureaucracy is authoritarianism institutionalized. It enables those who have stronger authoritarian traits to contribute more effectively to the institution as individual responsibility and autonomy are not important. However, those who value individual autonomy will not function well in a bureaucratic institution. Usually, bureaucracies are born out of a formalisation process, initially meant to make the institution more effective, but taken too far. This formalisation can help streamline the process and make the work of individuals comparable and more consistent. Many bureaucracies combine their formalisation with coercive measures, to be able to maintain the rules reliably. Coercive measures are guidance measures bureaucracies take to limit worker failure. Behaviour that is deviating from the desired behaviour is corrected to maintain a unified approach. For the authoritarian, coercive measures help to perform better, but it takes away the responsibility for the work of the individual. The combination of high formalisation with coerciveness creates a bureaucracy, fuelled by the fear of worker failure. Seemingly inspired by the Authoritarian Dynamic Andringa calls this the Bureaucratic Dynamic. As a result of this coercive formalisation, workers will not have the ability to oversee the consequences of their actions, creating institutional ignorance (Andringa, 2015). After some time, many bureaucracies will contradict their original purpose of existence. For example, the media once had the purpose to work as a system of checks and balances, actively searching for flaws in policymaking and giving a voice to those that are marginalized in society. Currently, the bureaucratic mass media serve mostly as a spokesperson of the authorities. The workers, journalists do not have much room for individual, responsible and deviant behaviour in the system of the media. The original purpose of journalism is

WOII: Propaganda as a working mechanism of bureaucracy

The best historic example of establishing normative threats and applying the art of persuasion is from WOII. The right hand of Hitler, Joseph Goebbels was responsible for propaganda and is a

prime example of how a narrative can be effectively formed to influence the masses. As described by Herma (1943), Goebbels strongly believed that the best way to realize their goals of National Socialism was to have the whole population behind them. Such an objective cannot be realized without good propaganda. Goebbels saw propaganda as one of the prime methods to implement a well-functioning democratic system (although bureaucracy would be a better name for this system). By convincing the people of the good of your actions you create a consensus between the people and government. A good demagogue tells the masses what they want to hear, so the masses do not question the intentions of the demagogue. A good relationship of trust between the government and the masses was necessary and according to Goebbels forms the basis of a true democracy. Self-criticism was essential in maintaining this relationship and establishing initiative. Citizens are quick to notice failures of the government and if they are not discussed it could turn people against the government. Introducing unpopular measures in time via propaganda before actually implementing them was another tactic of maintaining the initiative, and giving propaganda a prophetic and predictive role (Herma, 1943).

Manufacturing Consent: The propaganda model of the media

Although freedom of the press is seen as an important cornerstone in sustaining a liberal democracy, many have concluded that a real free press is almost non-existent. In Noam Chomsky's book *Manufacturing Consent* he explains how private and national media are influenced by corporate and political interests. According to him, private media are simply corporations that are selling readers and audiences to advertisers. To make the "product" interesting for advertisers the media needs to reflect the views of the elitist political opinion. This ensures that powerful elite groups will defend themselves more easily through media than small groups with less power, even if the same, or worse injustice has been done to them (Chomsky & Herman, 1988). A telling example is the avoidance of the reporting of atrocities performed by Indonesia to East-Timor in the 70s (see Appendix A), while the genocide of Pol Pot in Cambodia was given extreme media attention. The elite corporate interests were more focused on the monetary value of selling military equipment to the Indonesian government than preventing a genocide. The media responses and actions to bring attention to the atrocities in this particular case show many similarities with the case discussed in this study.

During the Vietnam war, the media did not oppose the American involvement in Vietnam, instead, it supported it. Only when the elite interests changed, and the war showed huge economic and human losses, did the media start to oppose the war, at a point where America had put itself in a position that withdrawing was almost impossible. In situations where a consensus is necessary to perform actions (such as war), the media ensures it is difficult, if not impossible for the public to form a balanced opinion of the situation, but instead the media imposes an opinion or belief on the public so that it cannot carry out political influence. Chomsky constructed a model of the propaganda as used by the media to manufacture a public consensus about certain topics. He theorizes that news needs to go through five filters before it can be worthy or interesting enough to be published.

First Filter: Ownership of the Media

The majority of all media companies is owned by only a few large media corporations. As most media are competing in the free market system, media companies are profit-driven. This results in a structure where over the years fewer and fewer media companies own a large scale of media outlets. The media themselves have evolved as a hierarchical structure with only a few national media determining the agendas of all smaller local and regional media under them, all with the same owner. Large investors define the interests of the mass media and force the media to establish a profitable system that does not interfere with the interest of the investors. The media is influenced by the powerful elite because the media is owned by the powerful elite.

Second Filter: Media as advertising product

Without advertising the press would be too expensive for the public, and thus economically not viable. Especially working-class people would not be able to pay for an ad-free news service. However, advertisers have less interest in this group as the best economic gain is found in the wealthier higher class. Therefore the targeted audience of media are high-class (elite) citizens and thus the news should fit an elitist opinion of the world. The less powerful working-class then will not have any media targeted to them, as this would be economically unviable. Media outlets free from corporate interests have died over time in the free market system, resulting in a media system where voices in the disinterest of corporate interests are silenced or ignored.

Third Filter: The bureaucratic sourcing and production of media

Media are bureaucratic institutions that need a constant supply of news. This demand can best be fulfilled by other bureaucratic institutions such as governments and (health)authorities. This results in media that predominantly reflect the opinion of the government and elites. Deviating from the consensus opinion would be dangerous, as that could result in a news-providing institution stopping providing news to the media outlet. For example, if a media outlet would be heavily criticizing the actions of a government, the attendance to press conferences of the government could be denied. Additionally, to maintain the image of objectiveness news sources include opinions from so-called "experts". These experts are specialized in popular opinions and they know how to explain them properly, but most of the time they do not oppose and diversify any debate.

Fourth Filter: Flak

A very important and relevant filter to this study is the filter of flak. Flak is the negative response towards a certain opinion, a source or media, mostly generated by other media or authorities. If a critical sound is voiced somewhere that can be uncomfortable or costly to the media flak is generated to ensure the critical sources are discredited, debunked and ridiculed. This is all done to defend the popular narrative. With the rise of the internet and social media, critical sounds have been significantly easier to spread, as a reaction to this development we can see the introduction of flak generating institutions in the form of fact-checkers. Many established media sources have added fact-checking sections to their reporting outputs. While fact-checkers seem to be a valuable resource for readers, they are designed to create flak and serve a unifying narrative. Receiving flak could be disastrous for the media's reputation and economic gains. This completes a vicious circle as the flak producing media themselves, fearful of flak, are kept back from showing a critical and diverse voice.

Fifth Filter: Anticommunism/Normative Threats

Chomsky describes anticommunism as a mechanism to control the population and as a justification for many interventions. As communism was a vague term, and the western elites were terrified by the notion of communism, it became easy to put the label of 'communist' on everything that was not explicitly anti-communist. It served and still serves to a certain extent the function of a common enemy for the west. The relevancy of the anti-communist tendency seems to be declining in media today, but common enemies are still very relevant and are an important filter, whether that is communism, or terrorism, climate issues, immigrants or even a pandemic. These can all help unify the debate and disregard everything that is not explicitly against this common enemy and the narrative that is established to fight this common enemy.

Individual Journalists do not have malicious intentions

All these processes described by Chomsky and others are completely embedded in the media. In this theoretical framework, however, it would not mean that journalists and reporters are malicious in their work. Many are not aware of the processes that take play, and truly think that they are independent and objective. This is due to the genuine belief in the established narrative, authoritarian tendencies of people and the bureaucratic structure of the media institutions. It makes journalists unable to recognize their responsibility and realize the consequences of their doings.

In a democratic system, we expect media to be objective and independent and report on objective truths, as well as look at both sides of the argument. We expect media to be diverse so that the public can engage in the debate. Having explained human traits of authoritarianism and the processes that are at play in the media through Chomsky's theories, we cannot conclude anything other than that which we call a democracy today, is merely a bureaucracy with the illusion of democracy. This bureaucracy undermines the individual's responsibility for their actions and opinions, and thereby enables the absence of critical debate about war, corporate interests, and the health of the population. The following study will discuss the absence of such a critical discourse amid an existential health crisis.

Media study: Ivermectin against COVID-19

History of Ivermectin

Ivermectin is a widespread medicine having many different appliances and has been approved for human use since 1987 (Campbell, 2016). It has been discovered in Tokyo during a search for a drug against worm parasites by the Japanese researcher Satoshi Ōmura. In May 1975, the component was found working against parasite infections by William C. Campbell at research in Merck Laboratories. The original chemical compound was called "avermectin", but after a few chemical adjustments to make the working component safer for use in organisms it received the name "ivermectin". It turned out to be a highly effective and safe drug for treating animals against a variety of parasites as well as a treatment for humans against River Blindness (onchocerciasis) and worm infections in many developing nations. New uses have been found for ivermectin since then, such as a treatment against Elephantiasis (Campbell, 2016). In 2015 William C. Campbell and Satoshi Ōmura have been awarded half a Nobel Prize for the discovery of this medicine. This medicine is on the List of Essential Medicines of the World Health Organisation for its anti-infective uses under the list of intestinal anthelminthics and antifilarials (WHO, 2019). As of today, billions of people have been treated with the medicine already and the drug has an incredibly good safety profile.

Ivermectin against COVID-19

It is quite common that old medicines are studied to treat different diseases than their known treatment, especially when a new disease emerges. A known medicine can be preferred over a new medicine as we usually know the safety profile of the drug already, which includes the common side effects, rare side effects and the safe dosage. Moreover, old medicines usually are not patented anymore, which makes the production more scalable and the actual medicine less expensive. At the beginning of the COVID-19 pandemic, the search for possible new or old medicines for the infectious disease started. More than a year later, no medicine seems to have been found and the popular media focussed almost solely on the vaccines. However, strong evidence has emerged regarding the effectiveness of ivermectin, which I will describe in the next paragraphs.

In March 2020, the first research on ivermectin as a possible treatment for COVID-19 was received. The study concluded that *in vitro* (this is research outside a living organism, i.e.: in a petri dish), ivermectin seemed to achieve around a 5000-fold reduction in viral RNA material after 48 hours (Caly, Druce, Catton, Jans, & Wagstaff, 2020). This study marked the start of research regarding Ivermectin showing that there could be a possible working mechanism between Ivermectin and the virus.

Meta-Analyses: Ivermectin works well against COVID-19.

Since this first paper, dozens of peer-reviewed studies have been published and dozens of pre-print studies are available. Multiple comparative studies have been released already which combine the results of all trials done on ivermectin. As most of the trials done on ivermectin are small scale, focussed on one stage of the disease and performed in one place, they cannot provide a total picture of the effectiveness of ivermectin by themselves. However, when combining the results of all randomized control trials and high-quality observational trials the results can provide an exceptionally reliable conclusion.

Doctor of Medicine Pierre Kory from the Front Line COVID-19 Critical Care alliance (FLCCC) has performed such a meta-analysis on ivermectin (Kory, Meduri, Varon, Iglesias, & Marik, 2021). It concluded that ivermectin has a great potential for effective treatment against COVID-19 in multiple stages of the disease. Kory compared the data available until December 12, 2020 (Kory, Meduri, Varon, Iglesias, & Marik, 2021). The analysis was done for multiple stages of treatment, and it compared some regions where ivermectin is used as a treatment already. They studied the medicine as prophylaxis, use in patients in and outside of the hospital, and assessed the use of ivermectin for long-covid patients.

Prophylaxis

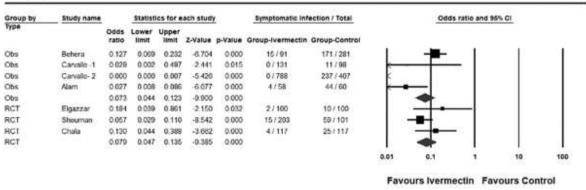


Figure 1 Meta-analysis of the use of ivermectin as prophylaxis. (Kory, Meduri, Varon, Iglesias, & Marik, 2021)

The results of the studies on prophylaxis use, which a preventive treatment method, can be seen in figure 1. The data shows a significant decrease in infections among the group treated with ivermectin, with some studies showing zero infections in the ivermectin group against more than half of the control group infected (Kory, Meduri, Varon, Iglesias, & Marik, 2021). Additionally, Kory et al. looked at several regions in Brazil with large ivermectin distribution and without. Between June and August 2020, the cases dropped significantly faster in the regions where ivermectin was used compared to the regions where it was not used. The death rates also decreased significantly in a few big cities which distribute ivermectin compared to those that did not. Data from Peru showed similar results of declining cases and deaths after the distribution and use of ivermectin.

Recovery time

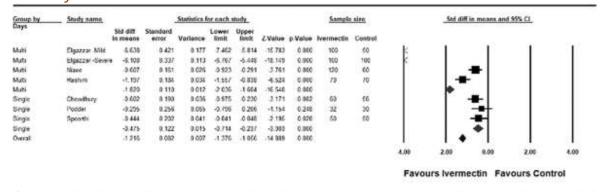


Figure 2 Meta-analysis on the reduction of recovery time in patients using ivermectin (Kory, Meduri, Varon, Iglesias, & Marik, 2021)

In figure 2 the analysis is shown for the recovery time for patients treated with ivermectin. These studies each show a significant decline in recovery time in hospitalized patients. The general trend that can be seen in the research, is that the medicine is the most effective the earlier it is used in treatment. There have also been positive results however in the treatment of long-covid (people that have COVID symptoms for multiple weeks or months).

Mortality

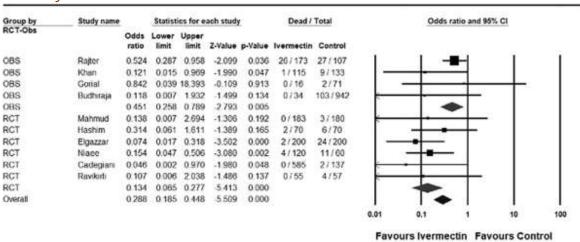


Figure 3 Overall mortality reduction and mortality reduction with only randomized control trials when using ivermectin (Kory, Meduri, Varon, Iglesias, & Marik, 2021)

Lastly, the most important value is the reduction in overall mortality which can be seen in figure 3. Almost all analyses show a reduction in mortality from 65-80%. This reduction can have huge effects on the severity of the crisis as it can protect the vast majority of people currently dying of COVID-19.

This meta-analysis was already completed in December and doctor Kory was given a chance to share his findings with the American Senate on 8 December 2021 (Early Outpatient Treatment: An Essential Part of a COVID-19 Solution, Part II, 2020). A video of this testimony received huge media attention before being removed on YouTube (Lanum, 2020).

The analysis of Kory was previously submitted in the Frontiers and passed multiple stages of peerreview before being retracted for making "a series of strong, unsupported claims based on studies with insufficient statistical significance" (Fenter, 2021). This conclusion was reached by Dr Frederick Fenter, the Chief Executive, and an anonymous external "expert", who were effectively undermining the democratic process of peer-reviewing. Finally, on the second of May 2021, the research was published in the American Journal of Therapeutics. As of late May, this paper has been seen more than 240.000 times and it has more than 14.000 downloads. It is currently ranked in the top one per cent articles of similar age in all journal papers (Altmetric, 2021)lar analyses have been performed by groups from Japan (Yagisawa, Foster, Hanaki, & Ōmura, 2021), the United Kingdom (Bryant, et al., 2021), Italy (Nardelli, et al., 2021) and Spain (Cobos-Campos, et al., 2021). The WHO has done a meta-analysis as well (WHO, 2021), although many studies were left out without any explanation, and the use as prophylaxis was ignored. Except for the WHO (that did found an improvement in mortality rates with ivermectin, but devalued this conclusion by stating the quality of the studies were poor), all these analyses individually reached the same conclusion: ivermectin should be considered as a treatment against COVID-19. Although a lot of these reports are still in a pre-print version, the scope of researchers illustrates the broadness of the knowledge and the publicity of the topic.

Two studies have received a huge amount of attention in the media. These are the studies performed by Caly et al. (2020) and by Lopez et al. (2021). A more in-depth explanation can be found in the appendix (see Appendix B).

Media Study

The story of Ivermectin is very similar to that of the atrocities in East-Timor as Chomsky sets out. The media tends to prefer the story that strengthens the government narrative, over an equally important story that undermines this narrative, despite multiple citizen activists doing everything in their power to bring the neglected story to the surface. In this case, authorities have a focus on vaccines to solve this crisis and any narrative that competes with this is rejected. The case of ivermectin has become a normative threat as it challenges the authorisation of vaccines and the profits that can be made with large scale vaccination. Ivermectin has no financial incentive for large pharma corporations, as it is a cheap off-patent medicine. In their requirements for the Emergency Use Authorisation of medical products the FDA states: "For FDA to issue an EUA, there must be no adequate, approved, and available alternative to the candidate product for diagnosing, preventing, or treating the disease or condition." (Food and Drug Administration, 2017) The EMA requires a medical product to be fulfilling an "unmet medical need" (EMA, 2006). For clarification, this paper does not propagate in favour or against vaccines, rather it examines the possible mechanisms that contribute to the suppression of the medicine ivermectin.

To make these mechanisms visible, it is necessary to study the current existence of ivermectin in the media. This is done on an international level as well as a local, national level. On an international scale, the story seems to be suppressed, as it is actively present in the scientific community but almost non-existent in the international English speaking mass media. In the Netherlands media coverage on ivermectin seems to be almost absent. At the moment of writing, there are very few members of the public aware of the potential of the medicine, let alone its existence. To understand this absence of knowledge and attention, a specific media study is conducted in this paper, looking at international English speaking media and national Dutch news media.

Hypothesis

The ivermectin discourse is actively suppressed and dismissed by authorities and mainstream media, due to a system that favours propaganda as truth, and because of individual journalists that are driven by fear and authoritarian traits. The media are intolerant to diversity and represent the monetary interests of the elites and authorities. These processes are currently so strong that a large body of widely accepted and immensely relevant research among scientists can be reduced to something insignificant in the public debate.

Methods

For this media study, a broad spectrum of media sources is chosen, to capture the average information provided to the public as accurate as possible. The chosen international media are the BBC, CNN, NBC, ABC, FOX, Russia Today, Press TV, Asia Times. The main focus is on influential western media sources, but a Russian, Indian and Asian media outlet are included as well to provide a more complete view of the narrative. All these media companies are owned by different umbrella organisations.

The chosen news media for the Netherlands are all large national news media, such as newspapers and broadcasters. This list consists of: Algemeen Dagblad (AD), Financeel Dagblad (FD), Nederlands Dagblad (ND), Nederlandse Omroep Stichting (NOS), NRC Handelsblad (NRC), NU.nl, Reformatorisch Dagblad (RD), Telegraaf, Trouw and De Volkskrant. This selection includes all national daily periodicals and the two most used national news media. Additionally, an e-mail was sent to the redaction of these media with a suggestion for an article on Ivermectin, together with resources and the question whether the redaction would be interested in publishing about this topic (The article including the resources sent to the media can be found in Appendix D, as well as a translation).

Statements of the health authorities WHO, EMA, FDA and NIH will be evaluated shortly as well as the statement of Merck, the original manufacturer of the drug.

For every media outlet and health authority, a search is performed based on the keyword "Ivermectin" or "Ivermectine" in the case of the Dutch media. Only reports from the period between March 2020 and May 2021 are included. Articles mentioning the medicine in a context that is not related to COVID-19 were excluded. The number of articles that mention the word will be counted and categorised by a negative mention of the medicine, a neutral or a positive mention. A negative response will be counted if the article mentions ivermectin as ineffective or unproven, without giving adequate resources for this claim, articles that focus on the side effects will also be counted as negative. Articles will be counted as neutral when they either mention ivermectin without any focus on the medicine (i.e., a report that it is being used in an article that is not specifically about medicines), or provide an adequate description about the science, but without attaching any conclusions to it. A positive article either mentions the medicine as a potential treatment for the medicine or addresses the inadequate response of authorities to the medicine. Next, I will assess the articles qualitatively based on the following criteria:

1. Use of fear:

As we hypothesise that the Ivermectin narrative is a normative threat to the common narrative, we can anticipate the use of fear in the news reports by mentioning the possible side effects of the medicine. The use of fear is a productive method to strengthen the ingroup narrative and establish the medicine as a 'normative threat'. This connects with the fifth propaganda filter from Chomsky and the theory of the Authoritarian Dynamic by Stepper

- 2. Focus on the person instead of arguments
 - By focusing on the spokesperson, the media can effectively avoid discussing science and facts. This is a good method of producing flak by creating distrust towards people that promote a different narrative. This is an aspect of the fourth propaganda filter.
- 3. Unsupported claims:
 - The use of claims that sound reasonable and support the ingroup narrative but are not backed up by a reference or scientific evidence is expected to be found to strengthen the ingroup narrative effectively. Just as the second criterium, this is connecting to the flak filter as well.
- 4. Reference to authority:

As explained by the third propaganda filter of Chomsky, media will often use the information published by authorities, as they provide a steady stream of material, and will likely reflect the elite group's opinion. In times of fear, when many people express the need for a unified narrative and strong authority, authorities such as the WHO and FDA are the best source to substantiate the narrative.

5. Procedural arguments:

Arguments focussing on bureaucratic procedures, such as pointing out that ivermectin is not approved to treat COVID-19, to avoid discussion of the science are expected. Procedural arguments can show indifference to the validity of claims or scientific results. This provides a method to evade the responsibility of providing qualitative arguments. As these arguments can be only viable in bureaucratic organisations this criterium connects with the third propaganda filter and the bureaucratic dynamic of Andringa.

6. Reference to incidental proof;

It can be expected to find incidental evidence to support the ingroup narrative, to further establish the validity of outgroup normative threats and support the ingroup narrative. This incidental proof can be an example of a person where the drug has not worked or reference to a single study that did not found ivermectin to be effective. This criterium is part of the flak filter.

7. Dismissal of outgroup science;

This last aspect looks at the attitude towards the outgroup-science on positive reports and science results on ivermectin. The dismissal can be the ignoring of the existence of (a part of) the science or arguing that the science done is poor quality, without giving adequate arguments. This can show the strength of the common narrative, as the narrative determines which science is accepted and which is not.

All these criteria are aspects of media sketching a uniting narrative and using sophistry instead of focussing on diversity and truthful reporting. For each aspect, I will evaluate the rate at which it is used, which arguments are common, discuss the science that is put forward as proof for the arguments, and which effect is reached by the reporting tactic.

I will also address the filters of Chomsky's propaganda model. Many of these tactics should become clear from the media responses. The creation of a normative threat, a common enemy, is realized by using fear, the reference to authorities, and the shifting of focus from the topic to the people. The creation of flak will be visible in the usage of unsupported claims or incidental proof, as well as the direct attack on persons that advocate ivermectin or outgroup science. Examples of the bureaucratic nature of the media will be addressed by looking at the articles' sources. The advertising filter will be shortly addressed, but the research performed in this study will be too limited to determine direct financial consequences.

Results

In the appendix (see Appendix C) tables can be found with the media studies on the international media and Dutch media, as well as the analyses on statements from the health authorities and pharmaceutical company Merck. For all criteria, quotes are listed per institution.

Summary

Out of the total eight large international media outlets studied, in total 41 articles were found with the keyword "ivermectin" mentioned in the period from March 2020 until May 2021. The first mention dates from 8 April 2020 and the last mention dated 13 May 2021. 22 of these reports show a clear negative attitude towards the drug. 9 articles did report neutrally on the medicine, either in the context of some preliminary or inconclusive scientific results or in a context that was not relevant to the drug itself. 10 reports placed ivermectin in a positive context, pointing out promising scientific results or discussing failing responses regarding repurposed medicines of the

authorities (and thereby considering ivermectin as a potential medicine). There was no solely negative reporting on ivermectin in April and May of 2020, all articles found in this period mentioned ivermectin as a potential treatment. The BBC reported solely negatively on the drug. CNN had one neutral mention of ivermectin in May 2020 in a report about the need for drugs in general to treat COVID-19 patients, the five other articles were negative about ivermectin. NBC reported indirectly negatively on ivermectin twice on their national site, whereas on two local branches of the news corporation, there were two neutral reports: one of a court case, and one of a doctor claiming successfully using the medicine, although this last news report sounds positive, the report started with the quote: "It is not a cure." (NBC South Florida, 14 April 2020). ABC news had 9 mentions of ivermectin, one of which was positive about early research results on ivermectin in April 2020, there were two neutral mentions of the drug and six negative mentions. Out of these eight news corporations, only FOX news was predominantly positive about ivermectin in their reporting, with one exception, in a report where the statement from the FDA about ivermectin was discussed. The Russian news cooperation Russia Today had three mentions on ivermectin, one positive, one negative, and one neutral. One mention was found at the Iranian Press TV, but no real attention was paid in this article to the drug. The Asia Times, a Hong-Kong based news outlet had three mentions on ivermectin: one neutral, two negatively.

In the Dutch news media, 31 articles have been found: 20 articles reporting negatively on the medicine, 4 that mention ivermectin in a neutral context, with only 5 positive articles that report some study results or shortly mention it as a potential medicine. The first mention dates from 6 June 2020, the last 13 April 2021. The AD had one article where ivermectin was mentioned in a positive context, two mentions that were not relevant and four mentions in a negative context. In The FD only one mention was found of the medicine in a negative context. The ND published two articles mentioning ivermectin negatively. On the NOS a negative mention was found in a liveblog article mentioning an AD article. NU.nl did not have any reports on ivermectin. The RD published one article in November that mentioned the potential of ivermectin and had another article confirming this in December, the other two articles published later reported negatively on ivermectin. Trouw did not report at all on the medicine. The Volkskrant mentioned ivermectin in seven articles, in January it was described once as a potential medicine, it mentioned the medicine in a neutral article in early February referring to the NIH questioning the quality of the studies, but the other three mentions were negative.

The article that was sent to the Dutch news media, sent on 12 May 2021, received no reply to date (1 June 2021), except for some confirmations of acknowledgement.

Health Authorities and Merck

In their statements, the WHO, FDA, NIH and EMA as well as the pharmaceutical corporation Merck gave a negative recommendation for the use of ivermectin. The WHO did this with a statement (WHO, 2021) and a meta-analysis on the drug (WHO, 2021). In their statement, the WHO explains that "The panel did not look at the use of ivermectin to prevent COVID-19, which is outside of scope of the current guidelines." Additionally, the WHO only chose 16 studies and excluded 11 of them resulting in the analysis of only five studies, while at that time many more studies were available. With this, they demonstrate that they have not looked at the large body of evidence that is relevant for the drug. The FDA mostly focussed on the veterinary uses of ivermectin and the fact that it is unapproved for treatment against COVID-19: "The FDA has received multiple reports of patients who have required medical support and been hospitalized after self-medicating with ivermectin intended for horses." The FDA makes the illogical implication that a treatment part of a clinical trial cannot cause serious harm by saying: "Using any treatment for COVID-19 that's not approved or authorized by the FDA, unless part of a clinical trial, can cause serious harm" (FDA, 2021). The FDA also states clearly that it has not yet reviewed any evidence before making the recommendation: "[t]he FDA has not reviewed data to support use of ivermectin in COVID-19

patients to treat or to prevent COVID-19" (FDA, 2021). The NIH dismissed the value of the outgroup science done by stating that "[t]here are insufficient data for the COVID-19 Treatment Guidelines Panel (the Panel) to recommend either for or against the use of ivermectin for the treatment of COVID-19" (NIH, 2021). The EMA mostly defended their negative recommendation by procedural arguments: "[i]vermectin medicines are not authorised for use in COVID-19 in the EU, and EMA has not received any application for such use" and "[m]ost studies EMA reviewed were small and had additional limitations, including different dosing regimens and use of concomitant medications. EMA therefore concluded that the currently available evidence is not sufficient to support the use of ivermectin" (EMA, 2021). The pharmaceutical company Merck focussed on creating fear by mentioning all possible side effects and it made several unsupported claims, saying there is "[n]o scientific basis for a potential therapeutic effect against COVID-19 from pre-clinical studies (...), [n]o meaningful evidence for clinical activity or clinical efficacy in patients with COVID-19 disease [and] [a] concerning lack of safety data in the majority of studies" (Merck, 2021). All these statements were not backed up by any references or data.

Fear

The use of fear was found in most international articles that directly addressed ivermectin as a medicine (BBC, CNN, ABC, FOX, Russia Today). Many claims focussed directly on the side effects, often referencing the FDA's warning on the side effects and the use of ivermectin intended for animal use. "You can also overdose on ivermectin, which can cause nausea, vomiting, diarrhea, hypotension (low blood pressure), allergic reactions (itching and hives), dizziness, ataxia (problems with balance), seizures, coma and even death" the CNN stated (5 March 2021). "[Prof Abdool Karim] says that the doses being given to people may even be toxic" (BBC, 27 March 2021). ABC news portrayed the attention to ivermectin as something to fear itself: "the threats keep changing. Recently, there has been an increase in the number of calls for ivermectin" (ABC, 26 February 2021). The only Dutch newspapers that use fear were the AD and Telegraaf, addressing the toxicity of the medicine.

Focus on people that advocate the Drug.

Creating flak by focusing on people that advocate for the medicine instead of addressing the arguments they make is used by almost all international media investigated (BBC, CNN, NBC, ABC, Russia Today, Asia Times). The only media not using this tactic were Press TV, which did not report on ivermectin at all, and FOX News that reported predominantly positively on ivermectin. These personal attacks come in different forms, the first is portraying people as 'desperate' for any form of treatment: "[a]s India faces a devastating surge of new coronavirus infections overwhelming its health care system, people are taking desperate measures to try to keep loved ones alive" (ABC, 29 April 2021). The second method the media use is politicizing the advocators of ivermectin: "[t]he larger problem was with the senator who invited them: Ron Johnson" (NBC, 9 December 2020) and "I have been following the azithromycin, ivermectin, and chloroquine protocol since Friday and I already feel the positive effects," CNN, 20 July 2020) quoting a twitter message of Brazilian minister Lorenzoni. Also, the use of the strawmen fallacy was used to undermine arguments of people as in the Dutch Volkskrant: "Schetters connects with a theme present in conspiracy circles: there are indeed working medicines against corona, but health authorities are blocking these under the pressure of the industry, to push through the vaccines." (Translation, Volkskrant, 22 January 2021)

Unsupported Claims

False, or unproven and unreferenced statements were found in the BBC, CNN, NBC, and ABC. NBC stated that ivermectin has been proven to be ineffective against COVID-19 (NBC, 29 March 2021). The BBC introduced an unreferenced theory: "It could be treating any parasites [...], without actually tackling the virus" (BBC, 27 March 2021). CNN claims there are no studies that show

ivermectin could work: "Even without studies to demonstrate that it works, a few doctors have heavily promoted the drug." (CNN, 4 March 2021) ABC refers to anonymous experts: "Experts plea that consumers do not take ivermectin at home, as dangerous consequences of the drug include widespread body swelling, liver injury, and serious neurological harm." (ABC, 14 April 2020)

Reference to Authority

Except for the news corporations that did not give relevant attention to ivermectin (NBC and Press TV) all news media did heavily report on the statements given out by authorities. The warning against the use of ivermectin from the FDA was mentioned in the BBC, CNN, FOX and Russia Today. Moreover, the WHO was referenced by the Asia Times and ABC and the NIH by FOX and CNN. Most Dutch articles that discuss ivermectin referred to authorities (AD, FD, NOS, NRC, Telegraaf, Volkskrant). In the FD, doctor Ted van Essen was quoted: "The WHO does not recommend it, and on that I trust" (FD, 1 February 2021).

Procedural Arguments

Procedural arguments were common in most articles that actively, but also passively reporting about ivermectin. Many arguments pointed out that the medicine was not approved: "These are products that are not registered" (Asia Times, 13 May 2021). This removes the need to argue about the scientific results on the medicine. In the Dutch articles, procedural arguments were not that common, a similar argument was found in the AD, NOS and NRC (same article) and some procedural arguments in the Volkskrant.

Incidental Proof

The incidental proof that is given consisted mostly of references to inconclusive scientific papers. The first study referenced by BBC, ABC and FOX was the Australian *in vitro* study. The standard argument was that "Australian researchers published the findings of a study that found ivermectin inhibited the replication of SARS-CoV-2 in a laboratory setting, which is not the same as testing the drug on humans or animals" (ABC, 11 December 2020). The second study referenced was a study by JAMA, mentioned by CNN and FOX: "Ivermectin drug is not effective at treating mild Covid-19, study finds." (CNN, 4 March 2021) Also, incidental proof in favour of ivermectin was found, as a suggestion that there is not scientific proof: "The fact that her mother was infected with Covid-19 but did not develop serious symptoms ended up reinforcing the myth." (NBC, 29 March 2021) The RD and the Volkskrant were the only two Dutch newspapers that referred to the JAMA article to confirm ivermectin was ineffective against COVID-19.

Dismissal of outgroup Science

Dismissal of outgroup science was found mostly in the form of not mentioning the science done so far, denying its existence, or questioning the quality of the studies. ABC argued that "[i]t is a far cry from an in vitro lab replication to helping humans" (ABC, 11 December 2020) and CNN claiming that "so far, no one has shown it helps actual patients" (CNN, 14 January 2021), both ignoring all studies done in humans so far. The BBC draws the attention to the quality of every individual study by saying that "[t]he fight is about the quality of the studies that have been done so far" (BBC, 27 March 2021). Additionally, most of the Dutch reports on ivermectin did not acknowledge the existence of a large basis of studies available suggesting the potential of ivermectin. The Telegraaf states: "Currently scientific substantiation is lacking for the use of the drug ivermectin against Covid-19" (Telegraaf, 25 March 2021).

Bureaucratic Elements

It has become clear, after studying the bureaucratic elements of the news articles, that some of these articles were directly sourced from other news media or news agencies like the Associated Press. Six of the nine articles published by ABC were contributed by the Associated Press. Fox copied one article from the New York Post (FOX, 6 January 2021), and another article was

contributed by the associated press (FOX, 6 March 2021). Also, many reports were directly dedicated to announcements of health authorities such as: "Combinations of drugs may be needed to fight coronavirus, FDA scientists say" (NBC, 29 May 2020) and the many other references to authorities that have been found in the articles. Regarding the Dutch newspapers, there was one article from the AD that received a lot of attention in other news media: "Inspectie start onderzoek naar huisartsen die nog steeds 'coronamedicijnen' voorschrijven" (20 March 2021). This article got referenced by the NOS (21 March 2021), NRC (20 March 2021) and Telegraaf (20 March 2021). Additionally, an article by Maarten Keulemans from De Volkskrant was reproduced in the Nederlands Dagblad, with a slight change in the title (Keulemans, Virus ontsnapt aan vaccin in Zuid-Afrika: 'Dit kon wel eens een groot probleem worden', 2021) (Keulemans, Virus B 1.351 ontsnapt aan vaccin, 2021).

Discussion:

Considering the scientific results that have published until now, the effort that many scientists and physicians have shown to get the data in the public debate, one would have expected huge media coverage with articles discussing ivermectin in the light of these results, such as the article sent to the Dutch newspapers (see Appendix D). But after searching several of the largest international news media, only 41 articles have been found. Depending on the news media one is following, the chance of finding coverage on ivermectin without actively searching is exceptionally low. The coverage that can be found is mostly reporting extremely negatively and biased towards the drug, by focusing heavily on the side effects and claiming the drug can be 'toxic', while it has one of the best safety profiles. In the Netherlands, most people will turn to media as the NOS and NU.nl for daily news coverage. The fact that these media have no single reports dedicated to ivermectin tells a significant part of the story: almost no significant media attention is being given to the drug. Some people will read an additional newspaper, but in this selection, no paper has reported on adequately on the scientific research on ivermectin.

Selective, negative reporting

The moment an argument is found against ivermectin, as was the case with the Australian *in vitro* study and a year later the faulty JAMA paper, the media are eager to report that Ivermectin does not affect Covid. Both of these studies found positive results favouring ivermectin, but the insignificance of these results have been received as 'proof' of inefficacy. Also, the warnings of the FDA received huge media attention, describing the use of the veterinary form of ivermectin and the dangers of overdose. With a large body of studies available that have studied the efficacy of this medicine and a safety profile established over multiple decades, it is evident that the media are selective in choosing how to report on the drug.

Critique started after the introduction possibility of vaccines.

A narrative is established that presupposes repurposed medicines cannot be effective against COVID-19. However, this was not always the case. At the beginning of the crisis, multiple media articles mentioned that these medicines are necessary to fight this pandemic. Until May 2020, no articles were found dismissing the potential of Ivermectin, although the attention given to this was poor. A possible explanation for this could be that the narrative was not established yet, or the media did not know at that time if it was interesting to report on used medicines. Yet, when it was clear vaccines could be used as well to fight the pandemic, repurposed medicines lost their importance in the debate. Additionally, to make the emergency approval of vaccines possible, there needs to be an absence of approved and effective medication as stated by the health authorities FDA and EMA. Effective, repurposed medicines became a normative threat, so every reason to

propagate against ivermectin seems to be accepted and ignoring the majority of studies that found positive results in favour of the medicine is necessary to preserve this narrative.

Monetary interests

We can only speculate whether the absence of coverage on ivermectin is financially beneficial, although it is becoming difficult to believe it is not. Considering the funding and ownership of the media, either the state in case of the BBC, Russia Today, Press TV and the NOS or private owners and investors as is the situation in the rest of the media used for this research, we can expect no media platform to actively try to oppose the interests of their funders. Next, each of these media corporations is (partially) dependent on advertisements. As ivermectin is not a profitable treatment, reporting on this medicine can potentially conflict with the interests of advertisers. The only medium that seemed to report consistently on ivermectin as a potential treatment was FOX. This could be explained by the political affiliation of the news medium, having to support the accepting attitude towards repurposed medicines of former American president Trump. Nevertheless, the coverage was poor and of low quality and after the report on the FDA warning on ivermectin the medium did not address any articles specifically on ivermectin. To establish a better picture of the monetary interests of the media to not report on ivermectin, research should be done on the financial ties between authorities, health authorities and pharmaceutical companies and the media, but one could question the extent to which such research is possible, as it is likely such research is in the disinterest of all powerful organisations.

Authoritarian Dynamic in Journalists

As monetary interests of corporations cannot directly explain the individual actions of a journalist, we can turn to the individual traits that can help explain those. Although journalist could be chosen by the corporations, Stenner's authoritarian dynamic seems present among journalists. The fear established by authorities at the beginning of the pandemic has led to a fear for everything that is a normative threat in the common narrative to solve the crisis. This led to fear in the reporting on ivermectin and portraying the people that support the medicine as 'desperate' (BBC, 27 March 2021) to establish 'unproven drugs' (ABC, 29 April 2021) as a normative threat. The continuous resort behind the authorities' statements undermines the individual responsibility of journalists and the diversity of opinions in the media. Stating that ivermectin is a potential treatment against COVID-19 would require a journalist to do an independent review and research on the data and take individual responsibility for the conclusions that the journalist would make bases upon this research. This especially will be difficult in media organisations that have a bureaucratic structure to maximize the consistency, efficiency, and profit of the corporations.

Dutch case study

A notable difference between the international coverage of ivermectin and the Dutch coverage is the clear link with conspiracy theorists and COVID-deniers in the Dutch media, whereas in the international media, the reason people propagate for ivermectin, is because they are desperate and/or prone to misinformation. Moreover, the complete absence of reporting on the medicine in the largest daily news media, the NOS and NU.nl, and the newspapers Trouw, FD and ND, illustrates the ignorance on the drug in the Netherlands.

Limitations:

Although the study showed that given the importance of this topic the medicine is heavily underreported after quantitative analysis, the extent of this could be made especially clear by comparing ivermectin with a topic of similar relevance, such as vaccines or other drugs against COVID-19. In the analysis of the articles, no difference has been made between articles that mention the drug once or articles that are solely or partially dedicated to the drug. If attention

would have been given to this, the representation of ivermectin would likely be lower than suggested in this study but given the already low representation, this would not affect the conclusions. Another limitation is the actuality of the debate and the crisis. Currently, no study yet has focussed on media responses regarding ivermectin. The debate on ivermectin has not ended, and every week new information is published, and more scientists give attention to the medicine. This means that that the attitude towards ivermectin could change. However, this would not change the conclusion that until now the media attention has been drastically low. Lastly, the study does not provide a definite solution to the problem it is identifying. Due to the complexity and scale of the problem, the quest for a solution goes beyond the magnitude of this study.

Conclusion

After having examined a total of 72 articles on seven criteria we can conclude that the media indeed use propaganda methods to establish a narrative, and actively suppress the counternarrative of ivermectin. Considering the enormous amount of evidence showing that Ivermectin could be a safe and effective treatment against COVID-19 and the large attention and support in scientific communities, the suppression of this drug cannot be justified by other means than the strong presence of an Authoritarian Dynamic. Journalists and the media, driven by fear, consider the narrative from health authorities as absolute truth and show intolerance to almost every form of diversity in the debate.

In the research it was found that the media are using tactics of fear, produce flak against people and opinions that favour the drug, reference authorities to avoid giving factual arguments, and dismiss the existence or utility of the studies done so far. The media are using sophistry to establish the narrative against ivermectin, while at the same time reporting as little as possible to avoid too much attention to the drug. The bureaucratic structure of the media has left no room for diverse reporting. Chomsky's five propaganda filters are present and active in the narrative around ivermectin. This can be already concluded considering the reports that not have been written or published discussing the drug. The limited amount of reports found in the study mostly were in line with all propaganda filters. The few reports found that did mention a role for medicines such as ivermectin, were mostly at the early stages of the crisis when the narrative still had to develop. The media are representing the preferred narrative of the elite, voiced by health authorities and pharmaceutical companies. So far, no article has been published in the media chosen for this study that provides a complete, fair, and balanced report on the drug.

Journalists appear to have strong authoritarian tendencies that make them incapable of producing diverse narratives in times of crises and fear. This is ultimately has resulted in the rejection of a cheap, effective and safe drug possibly costing an enormous amount of lives. We should start asking the question of how to prevent situations like these in the future. Unfortunately, this study does not give a definite answer to this question. However, the study can help to create more awareness of the processes of authoritarianism, bureaucracy and manufacturing consent that have guided the media towards a narrative rejecting a lifesaving medicine.

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Appendix:

A. The most referenced Ivermectin studies in the media:

The first study that got a lot of attention in the media was the *in vitro* study published in Antiviral Research in June 2020. This study claimed a 5000-fold reduction in the virus within 48 hours (Caly, Druce, Catton, Jans, & Wagstaff, 2020). The group researchers concluded that 'ivermectin is worthy of further consideration as a possible SARS-CoV-2 antiviral'. Quickly other researchers concluded that the dose used in the study by Caly et al. was much higher than the dose approved for human use (Schmith, Zhou, & Lohmer, 2020). Although it was a fair critique of the study, it should be noted that this is not a good reason to directly assume that ivermectin is ineffective, especially with many studies emerging showing positive effects in humans. Nevertheless, many started to believe ivermectin has no potential based on these arguments, often without looking at the numerous studies that had been performed in humans by then.

The second article that appears a lot in the news reports about the drug is the Colombian study published in JAMA. The study was done among 400 patients that had mild Covid symptoms for at least 7 days, with a median age of 37 years. The median time for the resolution of the symptoms was 10 days in the ivermectin group and 12 days in the placebo group. The study concluded that there was no significant result to be found to support the use of ivermectin in the treatment of mild COVID-19 (López-Medina E, 2021). Although a slight improvement was found the study stated that this was not enough evidence to prove the efficacy of the medicine. The paper has received a huge amount of critique from academics involved in ivermectin research. There have been some fatal flaws in the blinding process of the study. During the research 38 patients that were supposed to receive the placebo had received ivermectin. Next to that, in Colombia, ivermectin is over-thecounter widespread available. The study excluded patients that have taken ivermectin in the past 5 days before the study, but there is no guarantee that patients have had ivermectin before that. The adverse events reported at the end of the study were similar in both groups but looked like the common adverse events expected in an ivermectin treatment, not a placebo. This would suggest that in the placebo group ivermectin has been used as a treatment by some as well (Scheim, Hibberd, & Chamie-Quintero, 2021).

B. East Timor

In 1975 Indonesia invaded the country of East Timor. Before this, some rebellions against Portuguese influences had taken place in East-Timor as part of decolonisation efforts. At the end of this period, Indonesia was actively involved causing dissent between two leading political (separatist) parties namely the Timorese Democratic Union (UDT) and the Revolutionary Front for an Independent East Timor (FRETLIN). This led to an internal conflict where between 1,500 and 3,000 people were killed. Following this Indonesia invaded East Timor in December 1975. FRETLIN had been able to successfully organise resistance and was able to establish a stalemate by December 1976. In late 1977 Indonesia started attacking with air force powers, targeting agricultural areas to take away their food sources. What followed was famine, disease and mass death. Estimated is that between 150.000 and 220.000 have lost their lives, which is almost a third of the whole population. It has been shown that many western Diplomats were aware of the deadly famine. During this war, the Indonesian army was provided with military equipment from multiple Western Countries, but mainly from the USA (Fernandes, 2015). A democratic country providing weapons for atrocities that can be given the label genocide should have a large basis of support under the citizens of the country. But in this case, this support has not been given, as the government did not discuss this matter publicly at all. This despite actions from action groups such as volunteer Journalist Arnold Kohen set up. Together with a group of scholars he actively tried to bring the issue of the East-Timorese to attention. He brought out an extensive analysis of the famine in 1978. This research has provided us with much important information about the war, but at the time it could not help authorities taking immediate action against the atrocities.

C. Result Tables

 $Table \ {\tt 1} \ Media \ study \ of international \ news \ corporations. \ Every \ row \ mentions \ the \ findings \ of \ a \ specific \ criterium \ as \ defined \ in \ the \ method \ by \ quoting \ the \ articles.$

News Medium	BBC	CNN	NBC	ABC "But like Bolsonaro, some have	FOX	Russia Today Press TV	Asia Times To	otal
Use of Fear	"Some common side effects include dizziness, nausea, diarrhoea, stomach pain, nausea and skin rash, according to the US Food and Drug Administration." (27 March, 2021); "He says that the dosse being given to people may even be toxic." (27 March, 2021);	"You can also overdose on ivermeetin, which can cause nausea, vomiting, diarrhea, hypotension (fow blood pressure), allergic reactions (itching and hives), dizziness, ataxia (problems with balanes), seizures, coma and even death; *G March 2021.*		drawn attention to unproven treatments with potentially harmful side effects." (to July 2020); "the threats keep changing Recently, here's been for ivermeetin" (26 February 2021); "Experts plea that consumers do not take ivermeetin at home, as dangerous consequences of the dug include widespread body swelling, liver barm" (14 April 2020);	""Taking large doses of this drug is dangerous and can cause serious harm," the FDA said Friday. " (6 March 2021)	"Side effects of controversial remedy inflame debate"		
Focus on People that advocate the drug	"Many South Africans are desperate" (27 March 2021): "Kenyan anti- vaccine doctor dies from Covid-19" (30 April 2021);	"Bolsonaro released a video in which he praised the unproven Hydroxyelloroquinel days, swallowing a tablet with a smile on camera." (17 July 2020): "I have been following the azithromycin, tremeetin, and dihoroquine day feel the positive effects," Lorenzoni wrote on his Twitter account." (20 July 2020):	The larger problem was with the senator who invited them: Ron Johnson not only touted unproven treatments to a deadly virus, and not only induled his anti-science impulses, he also suggested real scientists and respected publichealth experts might have corrupt motivations, and credibility in voices from outside the scientific mainstream." (9 December 2020);	"As India faces a dewstating surge of new coronavirus infections overwhelming its health care system, people are taking desperate measures to try to keep loved ones after. (26) April, 2021): The state of the coronavirus faces of the coronavirus faces or effective treatment against COVID-19. Yet Dr. Pierre Kory, a pulmonary and critical care specialist at Aurora St Luke's Medical Center in Milwankee, described ivermectin as a "wonder drug" (26 February and Americans well start buying, up ivermectin out of desperation" (11 December 2020);		"bizarrely touted as a "coronavins vaccine" by local evangelist groups"	"Faced with a lack of vaccines and a snail's pace vaccination program, the Philippine government is resorting to videously a constraint of the program of th	
Unsupported Claims	"It could actually be treating any parasites [], without actually tackling the virus" (27 March, 2021); "Suggesting that a treatment [here: Hydroxychloroquine, Ivermectin and Vitamin D] could be effective and then finding it isn't upon further research is all part of the normal scientific process." (5 April 2021); "South Mirica's medical	"Even without studies to demonstrate that it works, a few doctors have heavily promoted the drug," (5 March 2021); "Most mainstream physicians have reserved their judgment about it" (5 March 2021); "none of these treatments has been shown to help coronavirus" (17 July 2020);	"[] have proven to be ineffective against Covid- 19, such as chloroquine and ivermeetin." (29 March 2021);	"Quick fixes like hydroxychlorquine take "the need for isolation, lockdown and more than the focus," (4 April 2021);				
Reference to	regulator, the drug's manufacturer and some of the country's most of the country's (27 March 2021); "Some common side effects include drzifness, nausea, durrhoea, stometh pain, according to the US Food and according to the US Food and according to the US Food and (27 March 2021); "Its manufacturer, Merck has use of the drug to treat coronavirus" (27 March 2021); "The country of the country's country of the cou	"the FDA has not approved ivermeetin to treat or prevent Covid-19 in humans and the drug is not an anti-viral medication" (S March 2021); "the National Institutes of Health's Treatment Guidelines rand said hat health's the control of the control		"The U.S. Food and Drug Administration and the National Institutes of Health have said that the drug is not approved for the prevention or treatment of COVID-19" (11 December 2020); "Africa's top health official has discouraged the use of ivermectin for COVID-19." (29 January 2021); "WHO strongly recommends [] against using ivermeetin except in studies" (29)	"Taking large doses of this drug is dangerous and can cause serious harm," the FDA said fridux." (6 March 2021); "Despite this in vitro activity, no clinical trials have reported a clinical benefit for ivermectin in patients with these viruses," the	"US Food and Drug Administration (FDA) explicitly prohibits the drug's application for treating	"Covid-19 treatments, including Remdesivir and Ivermectin, despite warnings by leading health experts about potential side-effects and false senses corp." (3, 40% 2021). The control of t	
Authority Procedural Arguments	"Ivermectin "s incorrectly being used for the treatment of Covider research is needed about ivermectin" (27 March 2021);	"larger trials may be needed to better understand if kind of benefit to patients with Covid-19" (5 March 2021):	"other doctors and medical professionals alled the professionals "outlier" and "not within the standard of care." (4 May 2021):	April 2021); "The U.S. Food and Drug Administration and the National Institutes of Health have said that the drug is not approved for the prevention or treatment of COVID-19' (1) December 2020); discouraged the use of ivermentin for COVID-19." (29 January 2021);	NHH explains. " "All we have are observational studies and clinicians' opinions." (6 January 2021). "We Guidelines considently, regardless of speaker and without regard to political viewpoints. In accordance with our COVID-19 misinformation policy, we greatly opinism (YouTube quote)" (9 February 2021);	coronavirus"	"These are products that are not registered" (13 May 2021):	
Reference to incidental proof supporting ingroup nurrative.	"Kenyan anti-vaccine doctor dies from Covid- 19" (30 April 2021); "It must be clearly stated that Ivermectin does not kill the virus at dosages humans can tolerate. The amount of drug needed to kill the virus is toxic to 2021);	Thermectin drug is not effective at treating mild Covid-19, study finds* (5 March 2021);	"ended up reinforcing the myth." (29 March 2021);	"When Suman Shrivastava, 57, was infected with the virus, her doctor in Kampur city in Uttar Pradesh, India's largest state, prescribed ivermectin. When her symptoms worsend, her doctor then asked her to take favipravit, the state of the s	"a promising new study that showed an 80% reduction in hospitalized reduction in hospitalized (6 January 2021). More recently. Colombian researchers found this month that the duration of COVID-19 symptoms was not significantly different for patients who received a 5-day treatment of ivermetria compares to patients who received a 5-day treatment of patients who placebo. (6 March 2021)"			
Dismissal of outgroup science Negative mentions on	"The fight is about the quality of the studies that have been done so far." (27 March 2021)	"But so far, no one has shown it helps actual patients." (14 January 2021)	"Another witness touted a "wonder drug," which should be seen as "the solution to COVID-19," (9 December 2020);	"There is no evidence ivermectin has been proven a safe or effective treatment against COVID-19" (11 December 2020); "most of the research around ivermectin at the research around ivermectin at the said and studies that are not the gold standard in terms of how to use ivermectin." (11 December 2020); "Bit is a far cry from an in vitro lab replication to helping humans," (11 December 2020); "But large, to be a superior of the property of the p				
Negative mentions on ivermectin Neutral mentions on	5	5	2	6	1	1 0	2	22
ivermectin Positive mentions on	0	1	2	2	1	1 1		9
ivermectin Total mentions on	0	0	0	1	8	1 0	0	10
ivermectin	5	6	4	9	10	3	3	41

Table 2 Media study of national Dutch news media.

News Medium	AD	FD	ND	NOS	NRC	NU.nl	RD	Telegraaf	Trouw	Volkskrant	Totaal
W. (P.	"Bij doses boven de 1000 microgram per kilo worden bijwerkingen waarschijnlijker, waaronder leverschade en zenuwbijwerkingen." (25							"Omdat er een risico is op vergiftiging, moet het middel niet worden gebruikt buiten "zorgvuldig opgezette klinische studies"" (22			
Eccus on People that advocate the drug	"Elens redt helemaal geen mensen. Hij is de weg kwijt en gooit alle wetenschappelijke principes bij bet profvul." (20 kb bijn at 3,000 buisartsen, daar zitten altijd een paar vreemde vogels bij, die het niet zo nauw nemen met de wetenschap (20 March 2021); "Sommigen met inhoudelijke kritiek of vragen, maar sommigen ook met desinformatie gekwalificeerd kunnen worden." (20 March 2021);	"Ook gernommeerde artsen laten je soms verslikken in je koffie. Zeker als keel-, neus- en oorarts Eize Wielinga in etelefoongestrek terloops meedeelt ivermeetine te slikken." (1 February 2021);	"Twitter-gebruiker Sol schrijft: Mijn ic- plek heb ik al lange tijd sammen scheden scheden personen scheden scheden kan beiten de mide klachten krijgt, dan regel ik wel een kuurije Ivermectine. Veel plezier in julie nieuwe (ab)normaal scheden sch	"Huisartsen schrijven nog altijd onbewezen medicijnen voor! (21 March 2021);	"Wat ook argwaan wekte is dat het Lancet-artikel niet is geschreven door epidemiologen of maar door hat- en vaatchirurgen." (6 June 2020.)			"Een groepje artsen rond de Limburgse buisarts Rob Elens schrijft nog altijd het autmalariamedicin hydroxydloroquine en ivwrmettine woor aan coronapatiënten' (20 March 2021).		"It kijk ant iets te lang naar dat Kamerdebat ower die loëdkowe en hoor daar het 'enige of die deen een die de oor die de oor die ook een een die de oor die spilnterpartijtje zeggen dat de zorgbelasting wel meevalt, covid een griepie is en het vaccin niet nodig, en je ivermectine, een antiwornmiddel, moet slikken" (21 December 2020; "Schetters haakt hier in op een populait thema dat tondzingt in meer complotdenhende kringen: er bestaan wel corona, maar gezondheidsautoriteiten houden die onder druk van de industrie tegen, om zo vaccins te kunnen doordrukken." (22 alnuary 2021); "Het rare is: er worden hier enthousiast middelen aanbevolen die voor covid nog niet goed zijnt getest op effectivitet. Terwijl men een vaccin dat na onderzoek in 40 duizende wenst le omarmen." (22 alnuary 2021); "Of dat geharnaste voorstanders 200 vertuigen, valt te betwijfelen." (4 March 2021); "Zie de vastberadenheid waarmee denkt Huisman – een een die klankput van sociale media. "Fascinerend," windt Huisman dat. "En van groot belang om te begrijpen wat deze mensen precise besell." (5 March 2021); "Wantrouwen, dus. Tegenover de voer het beleid als annigen." (5 March 2021); "Wantrouwen, dus. Tegenover de voer het beleid als annigen." (5 March 2021); "Het kerstlicht komt niet van virusrelativeerders" (21 December 2020); "Het virusrelativeerders" (21 December 2020); "Het van van van van van van van van	
Unsupported Claims	"Die slaagt er alleen steeds beter in om net te doen alsof ze een deschappen belangwekkende op procent van de huisartsen het totaal niet eens is met hun ideeën. Je ziet ook dat die individuele gevallen daaron vanzelf aan de zijlijn komen te staam." (20 March 2021);		"Zo is men in Zuid Afrika weer massaal aan het behandelen geslagen met allerlei middelen waarvan de werking vaak niet of maar half is bewezen, vertelt Snijder, zoals het antiparasietenmiddel ivermectine" (9 February 2021);		"Gill ziet het als een misstap die voorkomt uit scoringsdrift: "The Lancet wil zijn status als medisch toptijdschrift handhaven. Daarom willen zag artikelen publiceren waarvan ze weten dat die de Karnten zullen halen." (6 June 2020);		"Huisartsen en ziekenhuizen gaven het middel aan het begin van de coronacrisis regelmatig aan patiënten met Covid-19, maar later concludeerden wetenschappelijke studies dat het niet helpt." (26 March 2021);			"Een andere, vorige maand verschenen overzichtsstudie kwam er juist op uit dat behandeling met ivermectine patiënten geen enkel voordeel biedt. (4 March 2021)"	
Reference to Authority	"verspreidt hij medicijnen als hydroxychloroquine en ivermectine onder coronapatiënten (zie kader), tot onvrede van de Inspectie Gezomdheidsorg en Jeugal die medicijnen bebben de deskundigen van de deskundigen van de Werbeldgezondheidsorganisatie (WHO) een negatief advies uitgegeven: ze werken niet tegen corona." (9 March 2021);	"De WHO adviseert het niet en daar vaar ik op." (1 February 2021);		[Inspectie Gezondheidszorg en Jeugd:] "Wij wijzen erop dat zowel hydroxychloroquine als ivermeetine bij corona alleen voorgeschreven kan worden aan patiënten die in het ziekenhuis verblijven" (21 March 2021);	"Maar volgens de inspectie mogen hydroxychloroquine en ivermectine alleen worden toegediend aan coronapatiënten die zijn opgenomen in het ziekenhuis." (20 March 2021);		"De inspectie blijft meldingen binnenkrijgen over artsen die middelen als (hydroxy)chloroquine en ivermectine voorschrijven tegen Covid-19 en vindt dat een risico voor de kwaliteit van de zorg." (26 March 2021);	"Het Europees Geneesmidelenburean (EMA) raadt het gebruik van het middel ivermeetine af voor de preventie of behandeling van Covid- 19" (22 March 2021);		"De Amerikaanse medicijnwakhond FDA raad gebruik van het middel vooralsneg af." "De meste ivermeetinsonderzoeken, concludeerde de Amerikaanse gezondheiskuntoriiet NiH begin dit jaar, zijn van matige kwaliteit (1 February 2021); "Dit is een negatief resultaat. En dat ondersteunt de huidige behandelrichtlijn van de WHO, de Vs en die van Nederland." (4 March 2021);	
Procedural Arguments	"Wij wijzen erop dat zowel hydroxychloroquine als ivermeetine bij corona allen voorgeschreven kan worden an patiënten die in het ziekenhuis verblijven" (20 March 2021)			[Inspectie Gezondheidszorg en Jeugd:] "Wij wijzen erop dat zwel hydroxychloroquine als ivermectine bij corona alleen voorgeschreven kan worden aan patiënten die in het ziekenhuis verblijven" (21 March 2021);	"Maar volgens de inspectie mogen hydroxychloroquine en ivermectine alleen worden toegediend aan coronapatiënten die zijn opgenomen in het ziekenhuis." (20 March 2021);					"Het probleem is: het is daar niet voor geregistreerd." (22 January 2021). 'Het wachten is, schrijft ook de Nederlandes SWAB, op grote, goed uitgevoerde onderzoeken." (1 February 2021);	
Reference to incidental proof supporting ingroup narrative.							"Tvermectine werkt niet tegen corona" Dat concluderen Colombiaanse onderzoekers na een klinische studie waarvan de resultaten donderdag zijn gepubliceerd in vakblad JAMA." (6 March 2021);			"En een dag later was daar, in het statige vakblad JAMA, het eerste grote, gedegen patiëntenonderzoek naar ivermeetine." (5 March 2021)	
Dismissal of outgroup science	"Het vaak vruchteloze gehannes met uit de nottenballen opgednikelde middelen legen andere zieket maakt pijnlijk duidelijk wat er nog altijd ontbreekt (28 February 2021): een medicijn specifiekt geen corona." ("Een overtuigend effect van ivermeetine tegen het coronavirus is daarrijn jon ginet gevonden"; "Alleen ging het gevonden"; "Ben ging het gevonden"; "Ben gevonden"; "Ben gevonden"; "Bousema verlet dat er desondanks onderzoek wordt gedaan." (25 January 2021);	"Bijvoorbeeld over het mut van hydroxychtooquiven hydroxychtooquiven huisarts stelled dat al zijn patiënten er baat bij hadden. Een bewijs van niets. Ik kan ook zeggen tegen mijn patiënten draug allemaal se ziden sokken. Be ziden sokken das de oplossing zijn?" 'Eén onderzoek is geen onderzoek." (156 rebruary 2021);	"Zo is men in Zuid Afrika weer massaal aan het behandelen geslagen met alleriei middelen waarvan de maar half is bewezen, vertelt Snijder, zoals het antiparasietenmiddel ivermeetine" (9 February 2021);				"Zo is het qua biologisch werkingsmechanisme moeilijk verklaarbaar waarom het effectief tegen corona soo in die gebruike oneentratie was echter zo hoog dat dit voor gebruik bij mensen onveilig zoo zijn." (6 March 2021);	"Volgens het EMA kan ivermeetine het coronavirus vet tegengaan, maar pas bij veel hogere concentraties dan die zijn toegestaan." (22 March 2021), mondere vermeetine Covid-19 onthreekt het vooralsnog awetenschappelijke onderbouwing." (25 March 2021), March 2021), March 2021, March 2		"De vraag is alleen of al die kleine, samengeraapte studies good zijn uitgevoerd, ze zijn nog nergens in detail te lezen." (16 January 2021): 'Dat komt niet in de laatste plaats doordat het middel volgens vroege eelproeven alleen tegen het coronavirus zou werken in extreem hoge, woor de mens 2021; 'Zo is men in Zuid Afrika massaal aan het behandelen geslagen met allerlei middelen waarvan de werking vaak niet of maar half is bewezen, vertelt Snijder, zoals het antiparasietenmiddel ivermeetine." (12 February 2021); "Twemeetine, een goodkoop middel tegen schurft en riverbindiedde, werkt niet tegen corona." (4 March 2021); "Na hoge echer door een schaalbjus de dompelen" (4 March 2021); "Na hydroxychloroquine zakte deze week 'ivermeetine' door het ijs, tervijl de Gezondheidsraad vaststelde dat vitamine D helaas ook al niet de gedroomde redding is." (5 March 2021);	
Negative mentions on ivermectin Neutral	4	1	2	1	2	0	2	3	0	5	20
mentions on ivermectin Positive	2	0	0	0	0	0	0	1	0	1	4
mentions on ivermectin	1	0	0	0	0	0	2	1	0	1	5
Total mentions on ivermectin	9	1	2	1	2	0	4	5	0	7	31

Table 3 Study of statements on ivermectin from health authorities and the pharmaceutical Merck

Institution	WHO	FDA	NIH	EMA	Merck
Use of Fear		"Taking large doses of this drug is dangerous and can cause serious harm." (3 May 2021);		"Although ivermectin is generally well tolerated at doses authorised for other indications, side effects could increase with the much higher doses that would be needed" (22 March 2021);	"Patients treated with STROMECTOL for onchocerciasis may experience cutaneous and/or systemic reactions of varying severity (the Mazzotti reaction) and ophthalmological reactions." (4 February 2021);
Focus on People that advocate the					
drug					
Unsupported Claims		"Using any treatment for COVID-19 that's not approved or authorized by the FDA, unless part of a clinical trial, can cause serious harm." (3 May 2021);		"Although ivermectin is generally well tolerated at doses authorised for other indications, side effects could increase with the much higher doses that would be needed" (22 March 2021);	"No scientific basis for a potential therapeutic effect against COVID-19 from pre-clinical studies." (4 February 2021): "No meaningful evidence for clinical activity or clinical efficacy in patients with COVID-19 disease" (4 February 2021): "A concerning lack of safety data in the majority of studies" (4 February 2021);
Reference to Authority		"FDA has not approved ivermectin for use in treating or preventing COVID- 19 in humans." (2) May 2021)			
Procedural Arguments	"The panel did not look at the use of ivermectin to prevent COVID-19, which is outside of scope of the current guidelines."(31 March 2021)	"Taking a drug for an unapproved use can be very dangerous. This is true of ivermectin, too." (3 May 2021);		"Ivermectin medicines are not authorised for use in COVID-19 in the EU, and EUA has not received any application for such use." (22 March 2021); "Most studies EUAA reviewed were small and had additional limitations, including different dosing regimens and use of concomitant medications. EUAA evidence is not sufficient to support the use of ivermectin." (22 March 2021);	
Reference to incidental proof supporting ingroup narrative.		"The FDA has received multiple reports of patients who have required medical support and been hospitalized after self-medicating with ivermectin intended for horses." (3 May 2021);			
Dismissal of outgroup science	"The panel did not look at the use of ivermectin to prevent COVID-19, which is outside of scope of the current guidelines." (31 March 2021); "The current evidence on the use of ivermectin to treat COVID-19 patients is incondusive." (31 March 2021);	"Data from clinical trials are necessary for us to determine whether ivermectin is safe and effective in treating or preventing COVID-19." (26 March 2021); "The FDA has not reviewed data to support use of ivermectin in COVID-19 patients to treat or to prevent COVID-19" (3 May 2021);	"There are insufficient data for the COVID-19 Treatment Guidelines Panel (the Panel) to recommend either for or against the use of ivermeetin for the treatment of COVID-19." (In in vitro would require administration of does up to 100-fold higher than those approved for use in humans." (II February 2021);	"Results from clinical studies were varied, with some studies showing no benefit and others reporting a potential benefit." (22 March 2021);	

D. Article sent to Dutch newspapers.

Title: Ivermectine zou globaal moeten worden ingezet voor preventie en behandeling van COVID-19

"Ivermectine zou globaal moeten worden ingezet voor preventie en behandeling van COVID-19." Dat is de conclusie van Amerikaanse onderzoekers in the American Journal of Therapeutics. Inmiddels zijn er zo'n 55 wetenschappelijke studies gedaan die met zeer grote betrouwbaarheid aangeven dat het inzetten van ivermectine 74% van de Covid gerelateerde overlijdens kan voorkomen. Het middel werkt het beste preventief als bescherming tegen besmetting, of wanneer het vroeg ingezet wordt tijdens de ziekte. Het medicijn werkt ook in latere fases van de ziekte, en kan zelfs helpen bij mensen die last hebben van long Covid.

Ivermectine wordt al decennialang ingezet tegen rivierblindheid. Het middel is al sinds 1978 op de markt en in 2015 kregen ontdekkers van dit medicijn, waarmee inmiddels al miljarden mensen geholpen zijn, een Nobelprijs. Ivermectine is mede daarom te vinden op de lijst van essentiële geneesmiddelen van de Wereldgezondheidsorganisatie (WHO). In het voorjaar van 2020 werd door diverse artsen ontdekt dat het middel ook mogelijk effectief was tegen COVID-19.

In Europa wordt ivermectine al ingezet in Slowakije en Bulgarije maar ook in landen als Bangladesh, Egypte, Bolivia en diverse regio's in Latijns-Amerika wordt het middel gebruikt, met positief resultaat.

"We hebben een oplossing voor deze crisis", aldus de gerenommeerde COVID-19 arts Pierre Kory van de FLCCC (Front Line COVID-19 Critical Care Alliance) in een pleidooi aan de Amerikaanse Senaat. Hij pleit al sinds december voor het inzetten van Ivermectine tegen corona. Eerder adviseerde hij, als een van de eersten, voor het inzetten van corticosteroïden aan patiënten in het ziekenhuis. Deze behandeling wordt inmiddels gezien als standaardbehandeling voor Covidpatiënten.

In Nederland kan de Inspectie Gezondheid en Jeugd op het moment een boete van 150.000 euro opleggen aan artsen die het middel voorschrijven aan hun patiënten. Deze maatregel lijkt in strijd met de wetenschappelijke onderzoeken die tot nu toe gedaan zijn voor dit middel.

Immunoloog prof. Dr. Theo Schetters pleit een bredere aanpak van de crisis, waarbij geneesmiddelen als ivermectine een plaats moeten krijgen. "Vaccins zijn een belofte voor later, ze werken niet nu. Dit doet niets aan de patiënten die nu in het ziekenhuis en op de intensive care liggen." Dat de EMA een negatief advies heeft uitgegeven vindt Schetters "gezien de risico's die corona patiënten in het ziekenhuis lopen medisch-ethisch niet verantwoord."

De status van het onderzoek naar ivermectine, het wereldwijde gebruik en de resultaten van onderzoek worden bijgehouden op de site ivmstatus.com.

Translation of the article:

Title: Ivermectin should be globally and systematically deployed in the prevention and treatment of COVID-19

"Ivermectin should be globally and systematically deployed in the prevention and treatment of COVID-19." This is the conclusion that was drawn by a team of researchers in the American Journal of Therapeutics. To date, over 55 scientific studies have been performed, which combined reliably determine that ivermectin could prevent 74% of COVID related deaths. The medicine works the best when used as prophylaxis, which means as a preventive measure, or when taken in the earlier stages of the disease. But even in later stages of the disease and for people with long COVID it has benefits.

Ivermectin is an old medicine, used for decades against river blindness and other parasitic infections. It has been on the market since 1978 and the discoverers of the drug, which currently has helped more than 4 billion people, received a Nobel Prize in 2015. Partially because of this, ivermectin can be found on the list of essential medicines by the World Health Organization (WHO). In the spring of 2020, multiple researchers found out that ivermectin had a possible working mechanism against COVID-19.

In Europe, multiple countries such as Slovakia and Bulgaria have started treatment with ivermectin but also countries like Bangladesh, Egypt, Bolivia, and diverse regions in Latin America are using the medicine, all with positive results.

"We have a solution for this crisis", says Doctor Pierre Kory, a qualified intensive care physician from the Front Line COVID-19 Critical Care Alliance (FLCCC) during a plead to the US Senate. Since December he has been advocating the use of ivermectin against COVID-19 due to the overwhelming body of evidence. Before, Kory and his team of the FLCCC were one of the first to advocate for the use of corticosteroids on patients in the hospital. This treatment is now seen as the standard of care in COVID-19 patients.

In the Netherlands, the Health Inspection (Inspectie Gezondheid en Jeugd) can charge doctors who prescribe ivermectin to their patients with a fee of up to 150.000 euros. This measure seems to go against the scientific results that have been found on ivermectin.

Dutch immunologist professor Theo Schetters also advocates for a wider approach to this crisis, one where old and established medicines such as ivermectin have a place. "Vaccines are a promise for later, they do not work right now. They do nothing for the people that are currently suffering in hospital," he states. The fact that the European Medicines Agency (EMA) has given negative advice to use the medicine is "compared with the risks COVID-19 patients have in hospital, ethically irresponsible", according to Schetters.

The resources sent to the news media:

Peer-Reviewed Meta-Analyse in the American Journal of Therapeutics: <u>Review of the Emerging Evidence Demonstrating the Efficacy o...</u>: <u>American Journal of Therapeutics (lww.com)</u>

Article about the published study: <u>Ivermectin Meta-Analysis Demonstrating Safety & Efficacy Targeting COVID-19 Published in Peer-Review Journal (trialsitenews.com)</u>

Website of the FLCCC: <u>Home | FLCCC | Front Line COVID-19 Critical Care Alliance</u> (covid19criticalcare.com)

An up-to-date overview of Ivermectin Studies: <u>Ivermectin for COVID-19</u>: <u>real-time meta analysis of 55 studies (ivmmeta.com)</u>

Article with a critique on the JAMA Study: <u>Open Letter by U.S. Doctors: JAMA Ivermectin Study Is Fatally Flawed (trialsitenews.com)</u>