



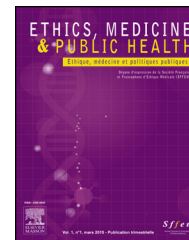
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COMMENTARY

Dear and Glorious Physician, who are we in COVID-19?



Cher et glorieux médecin, qui sommes-nous dans le COVID-19 ?

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Summary We are on the brink of a public health crisis. Science is changing, medicine is evolving, politics are adapting as we are attempting to retain our "normal lives". The origin of COVID-19 is not exclusively a medical or scientific one. Rather, it lingers more towards damaged public policies with a global pandemic surfacing as merely a consequence of failed economic and health strategies. In this paper we provide a narrative review of the evolution of COVID-19 with emphasis on the its origin and the place of physicians in an ethical perspective.

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MOTS CLÉS

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Résumé Nous sommes à l'aube d'une crise de santé publique. La science change, la médecine évolue, la politique s'adapte alors que nous tentons de retrouver une "vie normale". L'origine de COVID-19 n'est pas exclusivement médicale ou scientifique. Il s'agit plutôt d'une politique publique endommagée, avec une pandémie mondiale qui fait surface comme simple conséquence de l'échec des stratégies économiques et sanitaires. Dans cet article, nous présentons un examen narratif de l'évolution de COVID-19 en mettant l'accent sur son origine et la place des médecins dans une perspective éthique.

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Introduction

In an effort to reach a medical audience, we have decided that we wish to speak as a person does, without a significant *OR* and a *P*-value and all those critical bits that make us so confident to do something we've never done, safe in the knowledge that it is "evidence-based". We have been trained as soldiers are trained, to be disciplined, effective, methodical and assertive, to uphold secrecy, to keep sharp records, identify targets and destroy enemies, to be ruthless and practical in the battlefield against disease, to obtain and process medical data as compulsively as the soldier cleans and polishes his weapon. This text is not for the soldier. The aim of this document is not to appeal to the soldier in every med school graduate, it is not meant to boost the morale of our ranks, this is for the warrior within. This is for that little part of every doctor that felt (rightly) uncomfortable being compared to a soldier.

"Everyone, deep in their hearts, is waiting for the end of the world to come." Haruki Murakami, 1Q84 [1]

The near future

In the 2015 film *The Big Short*, the words above sounded off even as no voice uttered them, for anyone who knows what happened in 2008 also knew what they were about to see, both in *The Big Short* and the not too distant future [2]. The generations born in the 21st century have not yet completed their childhood and have now twice seen the world collapse for reasons we make every effort to conceal. Twelve years ago, the sub-prime mortgage crisis made its devastating world tour, making fools out of real estate businesspeople and world leaders everywhere, leaving millions without their livelihoods, without their homes and, for many, without their hopes. The generation that graduated into the post 9/11 economy, and those who continue to, will be the first children to be worse off than their parents, the first to have less children, many of us will be homeless forever [3]. Doctors are a part of it, not by any stretch the least fortunate, but certainly the most involved, if we are to rise to the occasion. Now at the peak of our lives, most still recovering the onslaught of 2008, we see history has taken a turn that is so wild, so rare, that even historians must acknowledge, we now sail in uncharted seas.

The era leading to covid-19

Coronavirus was well known to the scientific community in the early 2000's, as the first outbreak of SARS made its way through the Southeast Asian territories, and researchers then took pains to find the root cause, the first domino and the finger that unleashed it, and they did not disappoint. The Southeast Asian wet markets were correctly identified not only as the source of SARS but also a prolific breeding ground for future disease, so much so that specialists at the University of Hong Kong then called the *Coronavirus* a "time bomb", with haunting accuracy [4]. Even though this research would tacitly propose a heavy focus on dealing with the virus by tackling the wet market problem, in this article we choose a different angle, one that speaks

to science, rather than from it. SARS-CoV 2 has caught us off-guard, like a Black Knight holding the King in check, and who can deny that our almighty Science, our White Queen, is checked as well? For all chess players out there (we imagine in this we're not alone), you know what this means: it is the King that must move, if we are ever to overcome this deadlock. It also means that our Queen is as good as dead.

As the now infamous horseshoe bats and other wildlife have become a target for action, as they were in 2003, it begs the question (in most of the Western world): how did we fail at getting people to stop eating bats? In our city, likely yours and on the Internet, there is no lack of jovial banter and wisecracking opinions as to why anyone would choose a boiled creature of the night over some tasty chicken soup for dinner, but favoring a sober assessment, it is a rather puzzling question, and it has a puzzling story as well. Beyond the actual, biologically explained transmission of the virus from a bat's bodily fluids onto a *pangolin* (or so it is believed), its flirtations with snakebites and the fateful leap into human bloodstreams, there is a much greater, more painful reality for the calamity at hand. Hence, *Coronavirus* is a lot more than a virus, a lot more than a disease, and if we do not look at it as such, we will be shooting at decoys for many years to come.

As it is now common knowledge, the story begins with China. That is not to say, the physical China; where Wuhan lies and a Great Wall endures, but the *idea* of China. British, Japanese and American occupations of the Asian Giant in the 20th century had an impact on the Chinese psyche that was similar to those that come upon nations, upon an identity built in a time when *they* were the Empire, a collective of great people that instilled a sense of pride and self-love that bordered on predestination, (not unlike what happens with the British, Japanese and American peoples today) and were now defeated [5]. Many events were necessary for the Chinese Revolution of 1949, but it is safe to say that the clashes between nationalists and communists for more than 20 years, in addition to the Second World War and the aforementioned occupations had laid a fertile ground for a revolution. Not only in the change of regime, but in *thought*, in the idea that the Chinese had of themselves. In the aftermath of such a conflict-ridden decade, the People's Democratic Republic of China was declared in 1949, setting a precedent that would send the world into an unmitigated chaos, spanning years into the future, swaying the winds of change throughout the Cold War, conquering the world economy, and ending today in the historical milestone of COVID-19.

All for the crime of daring to dream of a free, independent China. Between 1958-1960, Mao's "Great Leap Forward" policy was enacted, in an attempt to make the young, revolutionary republic an industrial world power, and many will remember how the forced shift from an agricultural economy into a steel industry caused horrific famines across China, their dead numbering several millions over the following decades, forcing the Chinese government to seize the food and manage its distribution so as to uphold public safety and food security [6]. However, feeding 900 million souls is no easy task. The famines continued their deadly course until the Communist Party was forced to allow private farming in 1978, as the previous measures had been insufficient [7]. Far from the communist ideal, Chinese farming

was largely taken by major agricultural companies, mostly dominating trade in popular foods such as pork, chicken, rice and others. Some smaller farmers, however, took up hunting and raising wild animals as a way to sustain themselves. Poverty, it seems, was the reason wildlife trade emerged and became self-sufficient, since it gave the poorest people a means to provide for themselves, and in fact the government encouraged the practice. And they were right to do so.

The origins of fire

As we now know, this would prove to be a fatal error some 40 years later. Yet, who in their right mind would have done otherwise? What kind of ruler deals with famine by forbidding the people to eat? The early wildlife farming activities were adopted by *necessity*, because food was scarce then, and had been for 16 years. The Holocaust and the atom bombs dropped in Japan had a traumatizing effect upon the survivors, and both of those tragedies represent a fraction of the cost of human life brought about by the Chinese famines under Mao Zhedong. In Jung Chang's magnificent memoirs, *Wild Swans*, the tragedy of the famine is depicted through grotesque and terrifying images of the extremes the Chinese people were pushed to by the relentless scarcity and abject desperation, including cases of cannibalism in some of the most painful accounts [8]. Much of this seems archaic and savage, as if it were history, and it appears we are quite comfortable with that feeling. However, it is a crass error to think of it as an evil of another time, when in fact the collective trauma of the Chinese in the 60's and 70's is not all that different from what occurs in African nations on a daily basis, or from what occurs in cities like Dhaka, where children and immigrants are forced to look for a livelihood among the waste products of the world's powerhouses, dumped without consequence into the poorest places of the globe [9]. It is likely not that different from what a family is suffering right now, hardly a full bus ride away from where we stand at any moment in our lives.

Yet another step took place in 1988, when wildlife was declared a resource owned by the state in the Protection of Wildlife Act [10]. Now considering wild animals to be a product from which human benefit can be yielded, it protected small farmers dedicated to this kind of trade, and so it became an industry, it increased its scope and size considerably [11]. Of course, regulations existed then as they exist now, but to anyone paying attention it is obvious that China is the greatest manufacturing center in the world, and the reason for it is that it keeps its prices as low as possible, which of course, translates into a meager budget that cannot ensure product safety. This does not happen by decision of the Chinese government alone, but by the full support of this practice, on behalf of and enjoyed by corporations and governments benefitting from the highly profitable Chinese manufacturing labor all over the world, while practically all opposition to this state of affairs is done strictly in rhetoric, if done at all. And so, it will be no surprise that a Chinese market does not, strictly speaking, follow regulations¹.

¹ On this last statement, we wish to make a second: we condemn any and all forms of slander and defamation of the Chinese people, the purpose of this language and framing is precisely to highlight the conditions that allow for such prejudices to arise, as the present

Evolving into a pandemic

As the wildlife industry grew, so did the chances of disease transmission, and an illegal wildlife trade industry branched off the farmers, and ventured into capturing and selling products from endangered species, with a depressing rate of success. The 2003 SARS epidemic was a consequence of illegal wildlife trade. It was traced to farm civet cats from wet markets that had been flooded with sick and endangered animals for profit [12]. The markets were closed and some sectors of the industry were banned, but the damage was done. Not by the SARS virus, no offense to the several hundred victims, but by profit [11]. As it is with nearly all highly profitable businesses (one might even argue that it is the hallmark of all things deemed successful), they are upheld by a lobbyist army, and the ban on endangered species did not last long [11]. Although it seems counterintuitive that such a favor would be done for a relatively small industry when compared to the bulk of the Chinese economy, the influence of lobbyists was enough to slowly and progressively lift the public health measures that resulted from the 2003 outbreak [11]. By late 2018, regulations on the wildlife trade markets in China were almost as if SARS had never happened.

Why now?

The reason a *Coronavirus* species is now rampant in human populations, in a nutshell, is hunger. Disease caused by SARS species are a consequence of poor regulations of the markets, poor regulations are a consequence of negotiations for profit, profit was a consequence of a successful wildlife trade, wildlife trade was a consequence of limited access to the food supply, which was limited due to famine, which was caused by a desire to be a great country, and that was brought about by an endless chain of events plagued with all of the above. It is the story of inequality; "borne back ceaselessly into the past", for as long as there is recorded history to explore [13]. It comes down to scarcity, to literal hunger for the poor, ideological hunger for the government, hunger for profit for the rich. And hunger breaks down civility, pain breaks down resilience, alternatives turn into forced moves, morality dies in the face of survival. It really should speak to the public to see that most of the people in the world are not living, they are surviving. The story of SARS-CoV2 needed each and every one of those elements for this outcome. Probabilistic theory aside, it should hardly surprise us to see a pandemic like this in the 21st century. [11] And so, where exactly should we have intervened?

The origins of this new herald of the "Endtimes", as many would imagine, has been foretold in many a story, including the Book of Revelations by St. John and the *Clinical Microbiology Reviews*, issued in October 2007 by the American Society of Microbiology. To our everlasting shame, both of these warnings were taken with the same degree of seriousness, and their authors received about equal amounts of attention, and to this day are likely and equally ignored

article concludes, it is because of the neglect of the international community on the reality of many countries, including China, that SARS-CoV 2 has become a worldwide crisis

by the public. Even in more educated and powerful circles, efforts to take measures in preparation for the crisis have proven to be tragically similar in their anemic enforcement, in their pathetic feebleness. And even though discourse soon turns to blame, specifically to those in positions of power (rightly so), it is not the intent of the article leave the reader with a list of people responsible for the disaster at hand. Hard and uncomfortable truths are often dealt by doctors upon patients, much more rarely upon themselves, and this collection of present failures should include our own.

The physician of the COVID-19 times

If we get a round of applause and get called “heroes” on a daily basis, it is all too easy to feel as if we hold a moral high ground, as if we have a pardon from society, and if no one criticizes physicians out of a misguided sense of respect, we are failing at our labor. Make no mistake, COVID-19 is also our fault. The Greeks considered that medicine and politics should not mix, so that a physician did not make decisions based on a person’s status, they believed both a lowly slave and the king of Mycenae were treated with equal attention and received equal benefit. Although it is a rosy picture found in the descriptions of ancient Greek medicine in Rosen’s *History of Public Health*, one cannot help a healthy skepticism (surely Rosen doesn’t [14]). Ancient Greece is, after all, too easily idealized. The Hippocratic Oath includes a pledge such as this, and every year hundreds of thousands of new physicians swear to treat the poor and the rich alike, and do no harm and many others. And so, let us have a moment of brutal honesty: is there a single medical professional who believes we treat the rich and the poor just as well? Do we truly believe we don’t do harm? These questions, at first, are reflexively answered as yes and yes. Then, when insisted upon, we may admit it is not always so. When questioned, we acknowledge a frustration that we keep under wraps because it is uncomfortable to talk about all the times we had to pick a lesser evil or *select* a patient. Upon further scrutiny, we may choose to become defensive and justify our actions, when pressed, we eventually just become silent. One is quick to say: “I’m a doctor, I don’t get involved with insurance policy. I don’t manage budgets. I don’t make the protocols. I just follow guidelines. I only do what is based on evidence. It is not my *job*.” But these questions are central to our *identity* as doctors, we study so that we decide. What we do and how we treat, of course, but also who we *are*. We should be quick to answer: “I swore to protect life. It is my job to save lives. The patient’s pain is my responsibility. Anything that affects my patient’s health *is* my concern. I cannot let anyone fall behind. Yes, it *is* my job”.

Since the time of Hippocrates, it was decided that physicians should be apolitical, that their concerns should end outside the body of the patient, and some were even intelligent enough to include the study of grounds and environments as a part of medicine. However, historically speaking, the study of health as an issue beyond disease has been managed by politicians, scientists and intellectuals, and it remained a field of knowledge that was complimentary, when it should have been a cornerstone of medical education [12]. As if done deliberately, one needs only a

glance at a medical student’s syllabus to see the dry, starving public health topics crushed under the hulking genetics, internal medicine and endocrinology material that are most likely to make or break the National Board scores of the young, ambitious doctors in training.

We could do so much more. Our profession is one of the few that retains power, so archaic and so elemental is the archetype of the physician that even after 5000 years of civilization, the patient will still look to the physician to ease their bodily suffering, rather than the modern solution for everything: a mass produced, prepackaged product. There is so much doctors could do, yet we don’t. To us, public health is everything we passively do about health problems until medical science finds a tailored solution. We don’t get involved with systemic choices, we don’t want to know about health outside of science, we do not look for different ways of tackling problems. We look at health issues as quantifiable, measurable things that are run through an algorithm so that we achieve another quantifiable, measurable thing that fits the textbook description of a job well done. No one questions the merits of medical science nor the gargantuan efforts of medical professionals, but science has limits. It has limits because it is done by human beings, and these human beings are excellent scientists, but terrible politicians. And, as we said, science needs time, resources, transparency, planning, analysis. . . COVID-19 is here. It’s too late for science. One more for uncomfortable truths: we will not overcome this disease through medicine. And that does not mean physicians are out of the picture.

Science, medicine, politics and ethics

From hydroxychloroquine to azythromycin and a plethora of promising antiviral drugs, we still look for the same solution that also didn’t work for any of the other pandemics in history. Just in the past 50 years (as documented in the western world): Ebola has been around since 1976 no cure, no vaccine, no safe treatment. HIV has been around since 1981: no cure, no vaccine, safe treatment available after almost 20 years of research. SARS has been around since 2003: no cure, no vaccine, some safe treatment. What will it be for COVID-19?

When I was still waiting for the birth of my son, we took him to a zoo. We saw a monkey inside the monkey cage, with a wound on its side, lying against the wired fence that kept him inside the cage. There was another monkey outside, black coat, it was from a different species. The black monkey was cleaning the wound, and the monkey inside the cage made all sorts of expressions of pain, and yet it stoically let the healer clean him. They made sounds for each other, in turns, looking straight into one another, much like a patient and a caretaker. I don’t speak the monkey’s language, but some messages could never be so well communicated in my own words.

Healers are the guardians of life. There is nothing more political than holding someone’s life in your hands. If we don’t engage in politics, someone will do it instead. Public health policy today is not designed by doctors, it is designed by economists that determine access and resources to doctors. Disease is not managed by doctors, it is managed by politicians that determine what doctors are allowed to do

when they treat their patients. If we let this continue, our work will remain a series of situations we react to, a series of orders, predetermined, unquestioned actions written in a script. How different is that from a soldier? A soldier is a trained fighter who waits for orders on who and how to fight. A warrior is a trained fighter who chooses how and what to fight for. Enough rhetoric, see you on the battlefield.

Disclosure of interest

The authors declare that they have no competing interest.

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