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RESEARCH ARTICLE

CURRENT EVENTS AND PROSPECTS FOR THE CORONAVIRUS EPIDEMIC

*Giulio Tarro, MD, PhD

President of the T.&L. de Beaumont Bonelli Foundation for Cancer Research, Naples, Italy

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ABSTRACT

The certainties of this coronavirus infection are it is a new coronavirus with human-to-human transmission. The genome varies up to 12% compared to the original bat coronavirus, <1% of healthy people die from the disease. The antibodies of the healed subjects neutralize the virus also for the other infected. Those who have had the virus perhaps without their knowledge because it is asymptomatic and have overcome it by treating it as a normal flu or even pneumonia, preserve its memory through specific antibodies and are protected. He cannot infect anyone after being healed. For relapses, the subjects are immunodeficient, they did not produce the antibodies or they are infected by a different or modified virus. The symptomatology of this coronavirus respiratory syndrome is considered moderate for the majority of cases as a simple cold, which can however deepen in the pulmonary bronchus and give "mild" pneumonia, according to the Chinese Center for Disease Control and Prevention, statement made at the end of February after the observation of about 90 thousand cases. 14% of confirmed cases became severe with serious pneumonia and dyspnoea. Another 5% of the patients had pulmonary collapse, septic shock and deficiency of several organs and correspond to the critical cases that led to the exit (2.3% of the total). The coronavirus that travels regularly in winter cause symptoms mostly colds. The cases infected by this new COVID-19 develop severe forms only if there are previous diseases and in the elderly. Less than 1% of healthy subjects died of this new SARS, while cardio patients were 10.5%, diabetics 7.3% and patients with chronic respiratory diseases, hypertension or cancer 6%.

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INTRODUCTION

When the Covid 19 emergency ever end? There are two aspects of this question. The purely medical one allows reassuring answers. Quite the opposite, however, for the political-health one where an already bankruptcy management of the health emergency today risks being procrastinated by a truly disheartening "official information" (Tarro, 2020). For example, the one that presents Covid19 as a scourge that can only be defeated by vaccination. And that, after trying to silence, for example, the use of chloroquine and hydrochloroquine and defamed its advocate Didier Raoult, would now appear to be disinterested in a truly promising serotherapy (Tarro, 2020).

Passive immunotherapy: The most comprehensive documentation on plasma therapy in Covid patients can be found in this article, (Kai Duan *et al.*, 2020) here just a few words. The plasma transfusion (i.e. the most 'liquid' part of our blood, where antibodies are present formed after the battle won against the virus) has been successfully used in the other two coronavirus epidemics, SARS of 2002-2003 and MERS of 2012-2015, entering the plasma at a precise stage of the disease

(Tarro, 2020); that is, when there is already poor oxygenation and the patient is subjected to assisted ventilation with a C-pap helmet, but is not yet intubated. It is a therapy that, like many, presents risks but, frankly, it is not clear exactly why the World Health Organization - which had confined its use "only in the case of serious diseases for which there is no effective drug treatment" - did not suggest, at least, the experimentation during this Covid19 emergency (Karpas, 2020). Despite this, after the positive results attested in the above article, timidly, challenging bureaucratic dispositions, not a few doctors, even in Italy, have started experimenting; in some cases - such as the team of the San Matteo Hospital in Pavia and the one of Poma Hospital in Mantova - developing health protocols in a week that would have taken months (Karpas, 2020). But do you know what is the most incredible aspect of using this therapy, which is achieving excellent results?. What if it was not for an audio message conveyed on Whatsapp and quickly became (forgive the pun) "viral", almost no Italian doctor would know something of this therapy. Moreover, if colleague Didier Raoult - after having ascertained the boycott and the media lynching to which the anti-Covid19 therapy based on chloroquine was subjected (a drug that no longer having patents is seen as smoke in the eyes by Big Pharma) - were "dirty hands" by putting a video on Youtube that denounced

TABLE. SPREADING AND LETALITY % OF MAIN VIRAL EPIDEMICS FROM 2002 TO 2020						
Note	VIRUS	Identification year	Cases	Dead	Letality	Spreading (Countries
1	SARS CoV	2002	8.096	774	9,60%	29
2	H1N1 (suina)	2009	1.632.258	284.500	17,40%	214
3	MERS CoV	2012	2.494	858	34,40%	28
4	H7N9 (aviaria)	2013	1.568	616	39,30%	3
5	Ebola West Africa	2014	8083	3909	63%	6
6	nCoV-2019 WHO 19 May	2020	84,500	4.645	5,50%	China
7	nCoV-2019 WHO 19 May	2020	4.696,849	315,131	6,72%	World

this scandal, for the drug treatment of Covid19 we will still be groping in the dark (Tarro, 2020).

Current Events: As everywhere, for example, in Germany, you are loosening the bland despite prophylactic measures there turned to face the Covid19, in Italy, to prepare for Phase 2, the litany goes crazy "to live with the virus." While waiting for the messianic arrival of the vaccine, it proposes "solutions" such as beaches dotted with umbrellas shielded by plexiglass panels or sanitary cords to isolate Lombardia. Let's clear up a question right away. In Italy, the ones infected by Covid19 are not the 175,000 counted today by the Civil Defence, based only on the few diagnostic swabs made by the Regions. Absolutely not. The most reliable estimates show, like the periodic flu epidemics, from six to ten million infected by Covid19 in Italy. I speak of estimates (based on the transmission rate of the infection recorded in other countries or of what is recorded on the Diamond Princess ship) as satisfactory epidemiological investigations (based serological analyzes and on statistically valid population samples) in Italy, incredibly, have not been still done. And in this regard, I do not know exactly which investigations, the president of the institute of health, has obtained the number of people infected in Italy to even advise against sunbathing on the beaches.

Prospects for the epidemic: With the percentage of infected people highlighted by the estimates, it can be deduced that, in Italy, everything Covid19 could have done - in terms of recovered, immune, deceased... - has already done so. So, in my opinion, the current goal should not be to stem an indiscriminate contagion but, for example, to protect the elderly, restore the intensive care network (compromised by cuts to our health system) and, above all, structure an investigation national serum-epidemiology (currently only that of the Tuscany Region is in the pipeline) that allows us to keep the situation under control. My teacher, who even considered me his "godson", was Albert Sabin, the discovery of the polio vaccine. Imagine, therefore, if I underestimate the importance of vaccines. But for some viruses - as I believe it is for Covid19 - the vaccine may prove to be a chimera. As was the case for the AIDS vaccine, which has been presented as "imminent" for almost forty years. And statements such as those of the deputy health minister say that "we either keep still and closed in the house or we get vaccinated and take back our lives". Or the disconcerting initiative of Region Lazio Governor, given that the vaccine for Covid19 is not there, to oblige all the elderly of Lazio (under penalty of their exclusion from public events) and all health personnel (under penalty of

their dismissal) to be vaccinated against the flu. Among other things, it must be said that this Covid19 is not a biblical condemnation but one of the many epidemics that have served to fortify our immune system; which, incidentally, falls apart if, like larvae, we are holed up at home and, moreover, trembling with fear at the apocalyptic nonsense they tell us on TV. But practically all viruses change; and not inevitably worse for us. The Coronavirus responsible for the infamous SARS epidemic of 2002-2003, for example, seems to have disappeared from the scene (Table). I don't see why the same thing could not happen for Covid19. It would therefore be appropriate to hurry to restore the rhythms of our life with those prior to the Covid emergency19; above all to avoid that the economic situation following this emergency does not condemn us to starvation. This certainly does not mean forgetting the follies that have punctuated this emergency in Italy. First of all a terrorist information campaign - which ended up institutionalizing a staggering lethality index for Covid19 (to understand 28 times that of Germany) - which forced, yes, the population to barricade themselves at home but which, provoking panic, prevented general practitioners from visiting patients' homes; patients who, therefore, often indiscriminately, were transported to increasingly crowded wards to die from hospital infections. That already, in Italy, 50,000 people are taken away every year.

Immune system protection: According to South Korean scientists a number of reported cases of COVID-19 patients relapsing after overcoming the diseases were due to faulty testing; researchers at the South Korean CDC now say that it is impossible for COVID-19 to reactivate in human bodies (8). The South Korean CDC has found that the PCR test results for the suspected relapsed patients were false positive, warning that the tests were not able to distinguish between live traces of the virus and the harmless dead samples that remain after the patient has recovered. Another complicating factor for immunity passports is that antibody tests can't rule out that a person is no longer infectious, says Smith. A study published in Nature this month found that viral RNA declines slowly after antibodies are detected in the blood. The presence of viral RNA could mean that the person is still shedding infectious virus (Mallapaty, 2020). As early as next week, at least two hospitals in New York City - Mount Sinai and Albert Einstein College of Medicine — hope to start using coronavirus-survivor plasma to treat people with the disease. After 45 days, the situation show some progress and Hospitals in New York City are gearing up to use the blood of people who have recovered from COVID-19 as a possible antidote for the disease. Researchers hope that the century-old approach of infusing patients with the antibody-laden blood of those who have survived an infection will help the metropolis (Gibney, 2020). In two leading Italian cities, almost 80 patients have been treated so far with severe but not very serious respiratory problems with plasma and none have died with a zero mortality rate. A plasma bank was created in Mantua, an idea that should be replicated throughout Italy and which could stem a possible second wave (Karpas, 2020).

Conclusion

Epidemiological observation indicates that countries with a current universal BCG (Bacillle Calmette-Guerin) vaccination policy have a signigicantly lower COVID-19 incidence than countries which does not have BCG vaccination policy or withdrawn the policy earlier (Hamiel, 2020). Examining virus interference by specific respiratory viruses showed mixed results. Vaccine derived virus interference was significantly associated with coronavirus and human metapneumovirus; however, significant protection with vaccination was associated not only with most influenza viruses, but also parainfluenza, RSV, and non-influenza virus coinfections (Wolff, 2020). The new coronavirus, severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2), has caused more than 210.000 deaths worldwide. However, little is known about the causes of death and the virus's pathologic features (Wichmann, 2020; Zietz, 2020). Recent reports from Italy carried a story commenting on the results of a study from Italian Meleam lab. Data from the study suggested that around 38% of the general population in Italy could have been infected by SARS-COV-2 (the virus that causes COVID-19) but details on the methodology or sample were unclear. As such, we contacted the company for further comment on the study and it has provided the following details. The study was a serology test to detect antibodies, meaning it can discover who has previously been infected and not just those who are infected now (Bacco, 2020). The first stage of the study took place between February 25th to April 2nd and involved the testing of 1,731 individuals from nine regions. Individuals were tested if they could remember having slight flu-like symptoms in the recent past but had subsequently recovered. The second stage of the study took place from April 3rd to April 10th and included 1,597 individuals from six regions and we believe included asymptomatic individuals, as well as those with a recollection of slight flu-like symptoms (Guan, 2020). Study 1 reported that 38% of people tested positive. Study 2 reported that 30% of people tested positive. In total 35% of the combined populations tested positive for antibodies.

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