



## Why is there a Fear of Coronavirus?

**Igor Klepikov\***

*MD, Professor, Retired, Renton, WA, USA*

**\*Corresponding Author:** Igor Klepikov, MD, Professor, Retired, Renton, WA, USA.

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It has been more than two years since the SARS-CoV-2 pandemic swept the world. During this time, not only vaccines were created to protect against this infection, but also vaccination of the population of many countries was started, followed by the preservation of the effect by the introduction of booster doses. Preventive measures have been expanded through the introduction of unprecedented quarantine measures. After a long implementation of such unusual preventive measures, it would seem that it is already possible to get rid of the feeling of fear and uncertainty before the trouble that has arisen. However, the surrounding reality shows that there has not been a complete reduction in tension due to the pandemic, and the fear of the danger of a disease with an uncertain outcome has not decreased even among passionate followers of protective measures.

According to the generalized opinion of experts, which is presented from different points of view in the professional literature over the past couple of years, the current situation is a confluence of two circumstances: on the one hand, the high virulence of the coronavirus, which also has a rapid spread, which creates a danger of affecting a large number of people, and on the other hand, the lack of effective antiviral drugs capable of stop the development of the disease. This view, which dominates today, presents the pandemic as an unexpected fatal catastrophe and determines the direction of efforts to overcome this phenomenon.

The preventive segment of medical care, including vaccination and anti-epidemic measures, has almost completely covered many countries and regions. The beginning of these grandiose campaigns assumed that strict compliance with preventive measures would help to extinguish an unexpected natural disaster. However, today it

is already quite obvious that grandiose actions, the implementation of which was often supported by political and administrative acts and decisions, could not stop the repeated waves of infection that continue to affect the population of the planet in the same rhythm.

The therapeutic segment of medical measures, which is necessary in the case of COVID-19 pneumonia, as a variant of specific medical care does not currently exist, and this situation should be recognized honestly and frankly. Throughout the entire period of the pandemic, unsuccessful searches for drugs against the coronavirus have been going on and are continuing, but at the same time, the treatment of the most severe patients is carried out with the help of palliative and symptomatic means. Such a state of affairs with the treatment of viral pneumonia could only arise as a result of an unexpected infectious intervention. After all, this is how this natural disaster is presented not only in the media, but also in professional publications, without focusing due attention on well-known facts that not only refute the surprise factor, but also expose the underestimation of the harbingers of this phenomenon.

The SARS-CoV-2 pandemic is presented in all informational and scientific reports as a sudden surprise, for which medicine was unprepared, and the pathogenic properties of the coronavirus in various versions are exaggerated as the main cause of a global catastrophe. However, it is necessary to recall the history of previous events in order to unbiasedly and impartially assess the origins of the situation observed today and come to logical and pragmatic conclusions.

Human coronaviruses have been known to medicine for more than half a century, but more important is the fact that over the past

couple of decades there have been at least two major epidemics of this infection in the world, SARS and MERS, on the example of which health systems and clinical medicine had to gain relevant experience [1]. The course of these epidemics was characterized by a severe course, high mortality and required intense professional work, however, judging by the state of medical care during the SARS-CoV-2 pandemic, no practical achievements and strategic conclusions were made from previous events, although even the preservation of terminology indicates a recurrence of the same infection.

During the current pandemic, antibiotics remain the main method of treating patients with acute inflammation of the lung tissue, although their uselessness against viral aggression is known even to non-specialists. There is no scientific justification and arguments explaining the fact that from 70-80 to 100% of patients with COVID-19 pneumonia receive treatment with antibiotics, while bacterial co-infection is detected only in 7-20% of cases [2-11].

There is no reason to believe that the noted therapeutic dissonance arose only during the rampant coronavirus. As you know, influenza epidemics in recent decades have become a "traditional" annual event, and over the past many years experts have expressed deep concern about the steady increase in the number of cases of viral pneumonia, which accounted for almost half of all cases of this disease in the world a decade and a half ago [12-14].

A noticeable shift in the etiology of pneumonia towards viruses has led to an increase in preventive measures, which in many countries have taken the form of annual routine procedures, such as vaccination of the population and precautions during epidemics. However, the treatment of patients remained without significant correction. As before, the leading method of treatment of this group of patients remained antibacterial therapy, which in expert assessments was considered as the only real help for acute inflammation of the lung tissue. At the same time, neither the absence of reliable results in the determination of pathogens, nor the empirical nature of the use of antibiotics, nor the selectivity of their action only on certain bacteria in the absence of a direct effect on the mechanisms of the disease, as well as the uselessness of their use in viral lesions have not changed the prevailing stereotype of views [15-17].

The virulence and high aggressiveness of the coronavirus are currently elevated to the rank of emergency circumstances, which are considered to cause a high risk of serious illness in case of contact with an infection. Such information, supplemented by the fact that there are no effective antiviral agents, creates an atmosphere of anxiety and uncertainty, up to a feeling of fear and hopelessness. However, if the reliability of this meme about the significance of the pathogen is compared with well-known facts, then a picture emerges that is completely different from the one that dominates modern ideas.

First of all, among those infected with coronavirus, signs of the disease develop only in 80% of cases, and in the vast majority of clinical symptoms proceed relatively easily, do not require hospitalization and are actually eliminated spontaneously, since specific medical care has not yet been developed. At the same time, in 20% of cases, infection is not accompanied by signs of the disease at all, and the fact of infection is established only on the basis of microbiological analyses. Only 20% of patients have criteria requiring observation and assistance in a hospital setting, and only 5% of patients are referred to intensive care units [18-23].

Impartial statistics clearly show that claims about the deadly danger of coronavirus infection are exaggerated, to put it mildly, and the vast majority of patients tolerate such contact without medical care, but this conclusion does not explain the atmosphere of anxiety and fear that accompanies the entire pandemic period. Having identified the main areas of research that are being undertaken to solve it, it is possible to understand the reason for such a tense situation.

The absence of etiotropic treatment of COVID-19 pneumonia for modern medicine is actually equivalent to the absence of specialized medical care, therefore, the reason for the surging pessimism becomes clear. According to the flow of current publications, the main factor that various methods of its neutralization are aimed at today is the coronavirus. However, medical care begins to be applied only in case of severe development of the disease at the time of hospitalization, and therefore the main attention is paid to those 20% of observations from among all infected who are concentrated in specialized departments.

Of particular concern and concern are the results of treatment of 5% of patients with COVID-19 pneumonia who are admitted to

intensive care units, because it is here that medicine loses the fight for life and receives the most dramatic indicators. Trying to imagine the causes of negative outcomes as a result of the special virulence of the pathogen, most analysts do not mention and do not give any explanation to the fact that the overwhelming number of infected (and this is still 80%) do not need medical care and cope with this event on their own. In this regard, it is necessary to decipher and understand the motives for such a selective interpretation of existing estimates and forecasts.

The history of the last few decades shows that the reason for such a narrow view of the treatment of acute pneumonia (AP) is more a subject of psychology than clinical medicine. It is well known that after the introduction of antibiotics into clinical practice, against the background of their initial effectiveness, a meme was formed that the treatment of these patients is possible only with the help of antimicrobial therapy. Despite the fact that the effect of antibiotics extended only to the bacterial factor and did not directly affect the mechanisms of the incipient inflammatory process, this idea became widespread. However, as the effectiveness of antibiotics decreased and their side effects developed, this statement steadily turned into a so-called "destructive meme", and its replication grew in accordance with the principle of the "information cascade" [24,25].

Currently, the situation around a group of patients with acute inflammation of the lung tissue is a vivid example of a widespread destructive meme, and this example is very characteristic in its clarity and classicism. Typical features of the destructive nature of the worldviews that have developed in this direction are their numerous inconsistencies and contradictions with scientific axioms and various facts. Distortions of existing views on the problem remain without correction, despite their obviousness. Perhaps many researchers pay attention to such inconsistencies, but the prevailing public opinion is a classic deterrent to the necessary correction.

If the causative agent of pneumonia COVID-19 is considered the main specific cause of the disease, then the clinic of such a disease should have its own distinctive features, right? However, in reality it is already known that there is no clear separation between bacterial and viral forms of lung damage. And since such differential diagnosis is crucial for the choice of etiotropic therapy, and the latter continues to be considered as the leading therapeutic

agent, decisions are made on the treatment of patients with AP according to a single scheme, regardless of the possible etiology [9-11]. The latter circumstance means the preservation of the leading role of antibiotics in the treatment of viral pneumonia. But where is the logic and scientific justification for such a decision?

Attempts to suppress the pathogen, the qualities of which do not have a fundamental effect on the clinic of pneumonia, should cause quite logical doubt that even highly effective antiviral drugs, which are now intensively sought as a life-saving remedy, will not be able to instantly affect the clinical manifestations and alleviate the severity of the condition of patients with AP. When bacterial forms of the disease have a similar manifestation to viral ones and they cannot be separated by these signs, it means that the manifestations of the disease that require urgent care are not caused by the type of pathogen, but have other causes, right?

The main feature that unites all these cases into one nosology, regardless of the etiology, is the presence of inflammation in the lung. It is the development of the focus of inflammation that disrupts the functions of the affected organ and causes the appearance of specific symptoms. But at the same time, there is a significant difference in the clinical manifestations of the process even when comparing monoetiological cases of the disease. For example, the symptoms of the disease can be expressed from barely noticeable signs to the lightning-fast development of critical situations, which can be stated with COVID-19 pneumonia. This obvious fact refutes the statement that the development of the inflammatory process in the lung and the severity of its manifestation are due solely to the virulence and properties of the pathogen, emphasizing the importance of the initial state of the body.

Methods by which, in case of infection, it would be possible to accurately predict the probability of development and severity of the course of the disease in a particular patient are not currently developed. The approximate prognosis of the disease scenario is based on taking into account risk factors, but such a forecast does not give high accuracy. Moreover, as the results show, the absence of so-called risk factors does not guarantee an easy course of the disease, the outcome of which can be completely unpredictable.

Thus, there is no convincing evidence that, on the one hand, the clinic of the disease is due only to the characteristics of the pathogen, against which an intensive search for means of

protection and counteraction is currently underway. On the other hand, the initial state of the patient's body, which does not yet have clear and practically significant assessments, also does not give a complete answer to the prognosis of the disease. At the same time, it is quite obvious that inflammation of the lung tissue occurs when these two mandatory factors interact. The latter means that a combination of a microbiological agent capable of damaging lung tissue and the body's ability to respond to such aggression by developing an inflammatory process is necessary.

In real conditions, the first symptoms of the disease appear only with the onset of the inflammatory process, which is the result of the interaction of micro- and macroorganism. To do this, the pathogen must first overcome the body's defenses. Up to this point, its presence in the body does not advertise itself in any way and can only be established with the help of special testing.

The disease, which is based on the inflammatory process of the lung tissue, is manifested by characteristic signs reflecting its essence and localization. The signals of inflammation and dysfunction of the affected organ are not only specific to this group of patients, but also differ in each observation. Such clinical variants of the disease are one of the individual characteristics of the body, and their range is as infinite as the number of cases.

Thus, a detailed study of the causes that determine the features of the occurrence and development of acute pneumonia does not confirm the thesis that the causative agent of the process is the main factor in this disease. Of course, the qualities of the pathogen are important for overcoming the protective barriers of the body, but when an inflammatory reaction occurs, its individual manifestations become a decisive condition for the uniqueness of the disease clinic.

Treatment of acute inflammation of the lung tissue by purposefully suppressing the pathogen of the process for several decades is a strategy for solving the problem. Time has inexorably added and continues to add materials and facts that refute this concept of the disease and indicate the need for its revision [26]. However, adherence to previous ideas reflects blind faith in established stereotypes combined with an inexplicable indifference to the numerous contradictions between theory and practice [27]. The possibility of pathogenetic care for patients with

acute pneumonia is not consistent with the dominant ideology of the disease [28], therefore, the question of effective treatment of severe patients remains open all the time.

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### Conflict of Interest

The author states that he has no conflict of interest.

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