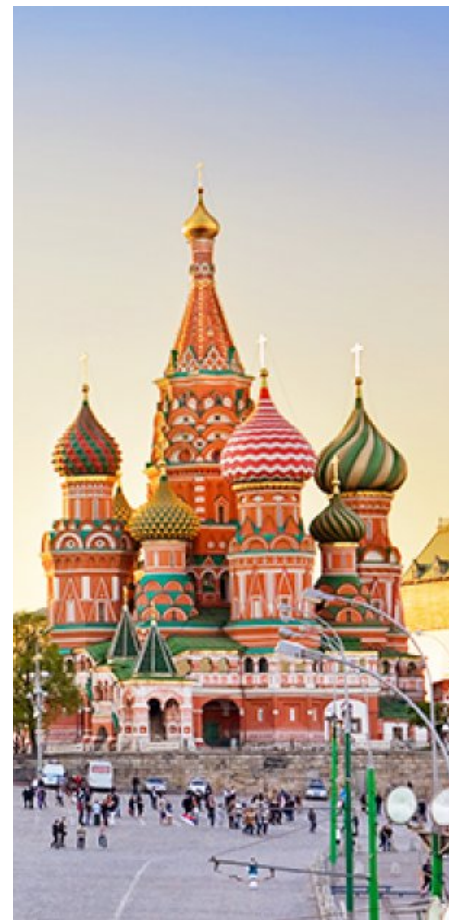


COVID-19



REPORT ON POSTCOVID SYNDROME IN THE CIS * AND OTHER COUNTRIES WITH A RUSSIAN- SPEAKING POPULATION



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Report on postcovid syndrome in the CIS * and other countries with a Russian-speaking population

* CIS is the Community of Independent States (Russia, Kazakhstan, Belarus, Kirgizstan, etc)

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Current Situation

- Lack of medical recognition of long covid
- Lack of warning information about long covid
- Lack of treatment regimens for postcovid syndrome

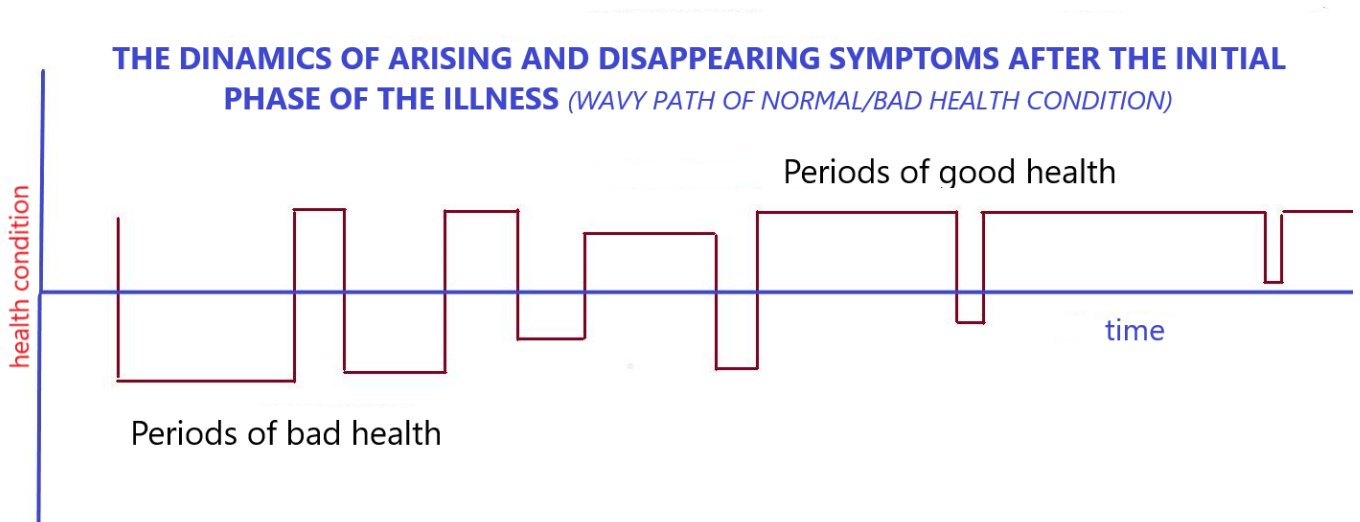
Needs of Long Covid patients

- Research: Creating dedicated departments within Scientific Research Institutes (Neurology, Cardiology, Hematology...)
- Rehabilitation: Developing a network of equipped medical rehabilitation centers
- Statistics: Expanding statistics approach standards applied currently by the Russian State Statistics Organisation (“RosPotrebNadzor”) from Covid-19 to long covid cases
- Public Relations: Cooperating with non-state associations of long covid patients and mass media (to inform people about the long covid phenomenon and possible prevention measures)
- Coordination: Creating a pool of experts in charge of coordinating long covid issues (contacts with research institutes, rehabilitation centers, mass media, non-state associations)

Some words about the long covid syndrom

Long covid may be described as a range of persistent symptoms which won't go away for a long time. They can also arise and dissappear in a wavy manner.

Some patients could summarize it in a visual graphic. It can be seen that at first the periods of bad health are quite long and tough but soon they people may get better as well as get worse again. It might take time to have the periods of good health much longer and phases of bad health shorter.



The major symptoms within the postcovid waves are:

There are groups on social networks in which at least 15-20 thousand people are members, they correspond with a description of the symptoms and course of the disease and the methods of treatment used.

The Moscow City Scientific Society of Physicians conducted a survey of 1,400 patients with postcovid syndrome in social networks, aimed at identifying symptoms, assessing the dynamics of the condition and approaches to treatment. 51.4% of respondents had previously laboratory confirmed COVID-19, 24.6% have a negative laboratory test result, another 24% did not get tested. Among 250 patients who came to us for remote help with symptoms of COVID-19, 17.2% showed signs of postcovid syndrome.

The duration of the postcovid syndrome in 44.3% was more than 3 months, in 22.7% - less than a month, in 19.5% - a month or two, in 13.5% - two to three months.

Based on the questionnaires received, an image of the disease was formed: 80% of the respondents noted weakness, 58.8% - insomnia, 58.6% - cannot perform their usual physical activity, 50.8% each - drowsiness, violation of the change of day and night and periodic increase in body temperature, 47.1% each - chest congestion, lack of air, unexplained chills, or chills, 45.2% report the presence of depression, 44.9% - night sweats or day sweats, 43.6% note headaches, 43% - pain in the heart (not angina pectoris), 41.5% - arthymia (tachycardia), 35.1% - hair loss, 32.9% - goose bumps, burning of the skin, 30.4% - increased arterial pressure, 28.1% - visual impairment, 25.4% - diarrhea, 19.6% - skin rashes, 18.4% note unusual and vivid dreams, 18.2% nodules on the veins, soreness of the veins, 17.9% - gait disorders, 14.9% - lowering blood pressure, 13.6% - hearing impairment. Menstrual irregularities are common and there are many other symptoms.

In 74.1%, the wave-like nature of the course of the disease is noted, and only in 25.9% the symptoms of the disease are permanent.

The main problems of postcovid are:

1. About 35% of people with longcovid are incapable of getting back to work even 3-4 months after they got infected. Or they face extreme difficulties with that.
2. About 30% of people who went in for sports are incapable of continueing their daily exercises within at least 6 months.

Some peculiarities of longcovid patients:

- Most of them are women
- Most of them didn't have any chronic illnesses before
- The average age of people with longcovid is 30-60 years.
- Some of them didn't have any bright initial symptoms
- Some of them had a very light version of initial acute respiratory viral infection (or even no such) but very exhausting postcovid symptoms
- Some people had a month's period of well-being after the initial light symptoms but then suddenly faced tough neurologic or cognitive problems that were general for many people

Moscow City Scientific Society of Physicians has put forward a hypothesis about the connection between postcovid syndrome and autoimmune thrombovasculitis of the cerebral structures and membranes - covid encephalomyelitis. When examining with the use of remote assistive technologies, blood tests were recommended to detect signs of thrombovasculitis: soluble complexes of fibrin monomers, D-dimer, fibrinogen, C-reactive protein. Most had some kind of inflammatory and coagulation changes. Some patients did other studies, in particular, for the

presence of antiphospholipid antibodies, assessment of von Willebrand factor, etc. However, these changes were not analyzed by us.

A therapy regimen using direct oral anticoagulants was proposed. In 90.6% of patients controlled by us (n = 53), the effectiveness of anticoagulant therapy is assessed as high. However, a third of patients continue treatment, and we cannot unequivocally assess the endpoints. In 3.8% of patients it was necessary to additionally apply hormonal therapy with a positive effect. Plasmapheresis was offered to two patients, but the procedure was technically unsuccessful.

During the survey, the respondents were asked how they tried to treat the postcovid stage of pain: 75.1% used vitamins and minerals, 31.4% - antiaggregants, 26.1% - antibiotics, 22.1% - anticoagulants, 10.8% - nothing used, 9% - hormones, 7.9% - homeopathy. Among the respondents, 5.6% had disappeared signs of postcovid syndrome, 53% noted a decrease in signs of postcovid syndrome, 41.1% - no changes.

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