

Corona pandemic – aspects and perspectives

The new coronavirus SARS-CoV-2 is spreading worldwide and has led to unprecedented consequences and restrictions in public life and of civil rights. The symptoms of the frequently only mild infection affect the airways and cardiovascular system in particular. Alongside the general symptoms such as fever, muscle pain and fatigue, it is above all the lungs as the organ of the middle, rhythmical human being which can be seriously affected if the diseases progresses that far. The affinity of the SARS-CoV-2 virus to the ACE2 receptor means that there can be associated cardiovascular regulatory disorders which can, for example, affect patients with high blood pressure, who often take antihypertensive medication (e.g. ACE inhibitors), to a greater extent.

Viruses and other pathogens mostly only lead to the manifestation of a disease if there is the relevant disposition. Not every person develops disease symptoms after infection and if they do, such symptoms can vary greatly in their extent. Thus the estimates of mortality worldwide (calculated across all age groups) for COVID-19 currently fluctuate between 0.25–3%, in Germany between 0.3–0.7%. Some figures quoted internationally are significantly higher, whereby in almost no country a precise comparison of the number of infected people with the number of people who have died has been possible, which would require blanket testing. Thus the true number of infected people is undoubtedly higher than the number of people positively tested, for example in seriously affected Italy.

If the pathogen enters, an inflammation develops as the active response of the person. The aim is to overcome the invader. We thus have to differentiate between the infection by the pathogens, the required disposition of the person and the inflammatory response. As a consequence, the appropriate inflammatory reaction to overcome the pathogen should under no circumstances be uncritically suppressed through anti-inflammatory and antipyretic drugs. There are indications that this could encourage a more serious course of the disease. Therapeutic recommendations of Anthroposophic Medicine on the prevention and treatment of the disease have already been published in this regard. Prophylaxis and prevention accordingly have to relate to different levels. Washing hands is of course particularly important, as is coughing into the crook of the arm in order to prevent droplet infection.

But disposition also has to be taken into account. We know about the clearly higher risk from COVID-19 for elderly people and patients with underlying health conditions such as of the cardiovascular system or sugar metabolism. But stress and anxiety also worsen immune performance and support a more serious course of

¹ Wilson N et al.: Case-Fatality Risk Estimates for COVID-19 Calculated by Using a Lag Time for Fatality: https://wwwnc.cdc.gov/eid/article/26/6/20-0320_article

² Drosten C: https://www.charite.de/klinikum/themen_klinikum/faq_liste_zum_coronavirus/

³ Baud D, Xiaolong Q et al.: Real estimates of mortality following COVID-19 infection: The Lancet, published: March 12, 2020. DOI: https://doi.org/10.1016/S1473-3099(20)30195-X

the disease following infection. Too much tension in our consciousness, too little sleep and lack of movement lead to elevated susceptibility to infection and a disposition for the infectious disease. Currently many people additionally have a real fear of losing the economic basis of their existence as a consequence of the crisis.

The nature of the disease

Diseases have various levels. The visible symptoms coalesce into a whole – the respective clinical "picture". It expresses a type: diseases can develop clinically in very different ways and yet have something in common. The type of an illness is its spiritual "principle" which manifests and comes to individual expression in the ill person. It thus becomes clear that the disease consist of more than its visible symptoms. The latter point to the nature of the disease which comes to expression in the symptoms. What are the characteristics and qualities of such nature of the disease? The famous pathologist Rudolf Virchow already referred to the necessary disposition for an infectious disease. If an infectious disease requires a disposition, then this is clearly related to its nature. Here we can distinguish several levels:

- General disposition; immunological susceptibility through anxiety; stress; excessive demands of our consciousness and at work without doubt a signature of the "western model" of a global and materially oriented performance society. Included here is the increasing readiness to ignore disease symptoms such as fever and fatigue as the reasonable response of the organism calling for rest for as long as possible and to suppress them with medication. This practice may contribute significantly to a more serious course of the disease. The soul suffering from excessive demands and tension, and thus the development of stress and tension in our emotion, creates the disposition which allows the infection to penetrate the rhythmical system.
- But the content of our consciousness is also important: if we approach truth, we experience the connection of our being with the spiritual world. Recognising truth can awaken joy, confidence, trust and fulfilment. We encounter a quality which gives necessary orientation, frees the human being from tension and insecurity and thus strengthens the healing forces of the body. In contrast, untruths and lies make us ill: they separate human beings from the spiritual world of truth, isolate them and impede the healing forces which flow from truth. Rudolf Steiner indicated that the "lies of humanity" can be of epidemiological relevance. This is not about the individual patient but rather about the way we handle truth in the public discourse. In a time of fake news and untruthful distortion, this spiritual dimension is also of importance. Rudolf Steiner referred both to cultivating spirituality and the harmful nature of materialistic thoughts: "Bacilli are most intensively cultivated when people take with them into the sleep state nothing other than a materialistic mindset. There is no better way to cultivate them than entering sleep with nothing but materialistic ideas and to act from there, from the spiritual world, from our I and astral body, back on the organs of the physical body[, ...]."5

Against this background, conspiracy theories about the origin of this pandemic, as circulate not uncommonly also in anthroposophical contexts, are also problematical. The will to examine the truth with our thinking, to digest the wealth of news ourselves and not simply to let ourselves be infected by mere assertions, forms a part of the immunity for which we are ourselves responsible.

• If the emphasis on the consciousness, that is the nervous and sensory system, gives rise to the disposition for viral colds, its transformation requires warmth-creating movement and will activity. Fear inhibits the will, we are subject to external control, as indeed we are as we "function" in our everyday working lives determined by external "pacemakers". Accordingly our disposition for disease is marked by excessive

⁴ Steiner R: Die Theosophie des Rosenkreuzers, GA 99, Dornach 1985, Vortrag vom 30. Mai 1907.

⁵ Steiner R: Wie erwirbt man sich Verständnis für die geistige Welt?, GA 154, Dornach 1985, Vortrag vom 5. Mai 1914.

demands on our consciousness in the information society; tension, restlessness and the experience of stress in our emotions; and an increasingly paralysing fear in our will. Against the background of our threefold nature, such a disposition is characterised by a shift of the human constitutional elements towards the nervous and sensory system. The organism they have abandoned becomes accessible for infections and outside "occupation".

Whereas in childhood and young adults the spiritual and soul being of the person unites with the body and shapes it, it leaves the body again with increasing age. To this extent it is particularly elderly people who develop a disposition for COVID-19. The corona pandemic affects humans, evidently no animals are falling ill. It thus clearly indicates that it is related to the I being. Prevention and cure must therefore also include the spiritual dimension alongside many other things.

Reinforcing hygiogenesis, salutogenesis and autogenesis

We distinguish various levels of recovery: to begin with we are familiar with physical healing and as defined by Gunther Hildebrandt refer to *hygiogenesis*. Physical healing requires mental support. Anxiety and fear are not good counsellors and through tension and inner unrest weaken the generative life and healing forces. When meaning can be identified or created, connections understood and there are also possibilities of manageability in threatening situations, a *salutogenic potential* develops. Aaron Antonovsky called this mentally transformative work of the consciousness guided by the I as *sense of coherence*. Finally, inner development can take place through the encounter with the illness and lead to self-development, that is *autogenesis*.

Prevention thus has inner and outer aspects. Inwardly it is about supportive perspectives and spiritual content which can provide strength, about cultivating inner coherence. The control of infectious diseases leads outwardly to isolation: public events are cancelled, borders are closed; confinement to the house can have a particularly invasive effect if people are separated from the experience of nature, sunlight and the starry sky. To counter this, the inner, spiritual light, the inner sun in the form of increased loving affection, of interest in the other person and inner commitment in the form of lived values, needs in the first instance to be strengthened. After all, there is no healing without hope. To this extent we live on perspectives and inner assurance. External aids are, to the extent possible, our active self-movement and the relationship with the sun (Rudolf Steiner referred to the infectiological relevance of a lack of light in 1920 even before the discovery of vitamin D⁶). The absorption of sunlight to the right degree and at the right time strengthens our defence against infections; promotes the presence of the I in the body; and forms the basis for stabilising our inner, hormonally mediated light rhythms which are very important for sleep and health. Not only do we need a relationship to the light of the sun freed from fear but also an appreciation of the night, the starry sky, what might be described as "Hymns to the night" to quote Novalis in the title for his cycle of poems. The effects on health of nightly light pollution through artificial light and screens is meanwhile well known.

Our rhythmical system is connected with the sun and its course throughout the day. We thus have a large number of circadian rhythms. A rhythmical structure to the day and particularly a physiological relationship between waking and sleeping are important. Too little or too much sleep both make us ill and lead, among other things, to the restriction of immunological functions. Another crucial factor is the relationship with warmth. The cardiovascular system forms the central organ of our warmth organism and requires strengthening, as does the respiratory system. A central role is played here by our self-movement. Here the hygienic exercises in eurythmy therapy as given by Rudolf Steiner in the fifth lecture of the eurythmy therapy course

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⁶ Steiner R: Geisteswissenschaft und Medizin, GA 312, Dornach 2020, Vortrag vom 24. März 1920. Vgl. dazu Reckert T: Titel Sonnenlicht, Vitamin D, Inkarnation. Der Merkurstab 62 (2009), S. 577–593.

of 1921 – particular the triad of A reverence, love E and hope U, supplemented by the rhythmical R – can offer valuable reinforcement and can also be learnt by many in small groups and then used independently.

The importance of movement outside and the regular absorption of sunlight has already been mentioned. Although being sensible in many respects from an infectiological point of view, "house-bound quarantine" nevertheless also has worrying consequences against this background since it restricts the aids mentioned above.

Why do viruses arise as human pathogens?

There is, however, one big question: where do these evidently new types of virus come from and why have they arisen? Interestingly, many of the viruses, including coronavirus, come from the animal kingdom. We too carry in our intestinal tract not only bacteria, the microbiota, but numerous viruses which are undoubtedly important for our health in a similar way as we know the gut bacteria to be. We know, after all, that it is not just our immune functions but many other areas of the organism, indeed our mental wellbeing, that is influenced by the gut bacteria.

Why, then, do viruses from the animal kingdom pose a risk to humans? We are currently imposing inexpressible suffering on animals: mass and cruel slaughter, up to and including experiments on laboratory animals, leads to pain to which the animal world is helplessly exposed. Even the normal trade in live animals can put them under exceptional stress with heightened fear. Can such suffering lead to consequences which change viruses living in the animal organism? We are used to looking only at the physical level and to see it mostly as separate from the mental level. We are, however, today aware of relationships which connect the intestine for example with the mind. Thus with regard to many viral diseases it is not just the microbiological question which arises regarding the origin of the virus but also the ecological and moral one as to the way we treat the animal world. Steiner spoke about these connections more than a hundred years ago. ⁷ Today it is up to us to investigate these relationships and to ask deeper questions alongside the scientific analysis.

Perspectives

The focus thus turns to the ecological dimension of this pandemic. Globalisation has so far developed very much in the light of economic interests and political power plays. The corona pandemic makes us aware of the great extent to which, as humanity today, we form a whole which is responsible for the health of our fellow human beings, our descendants and the earth. It can teach us a new reverence for life which Albert Schweitzer so urgently called for, the so often neglected dimension of the totality of life in which there is ultimately no separation of one living being from another and their fate. These days and weeks are showing the extent to which apparently incontrovertible principles in the economy, education and transport are turning out to be relative when life is at risk. They can teach us a new flexibility and consideration for others in our behaviour. There can be no question that everything should be done to prevent the at-risk groups in particular being infected. This is where the measures which have meanwhile been taken to halt the spread of the pathogen, particularly the rapidity of it, apply and here everyone should act in solidarity with the whole of civil society and the world community.

⁷ Steiner R: Die Offenbarungen des Karma, GA 120, Dornach 1992, Vortrag vom 17. Mai 1910. Steiner, R.: Erfahrungen des Übersinnlichen. Die drei Wege der Seele zu Christus. GA 143. Dornach 1994, Vortrag vom 17. April 1912.

If for a long time homage was paid to the goal of eliminating infectious pathogens as radically and comprehensively as possible, the corona epidemic teaches us instead – as does the rapidly increasing antibiotic resistance, for example – that the question of the co-existence with and acquisition of immunity and demarcation from the world of animals, plants, bacteria, fungi and viruses requires a sustainable developmental perspective instead of demonised images of an enemy. The SARS-CoV-2 virus cannot be eliminated or eradicated and we have to expect further new mutations in this field in the coming decades. Protection against infection and, on the other hand, the gradual development of communal immunity (the technical term "herd immunity" also indicates a distorted relationship between humans and animals) requires well-thought out measures which are guided by the goal of a balance between necessary abstention and necessary relations. Movement outdoors in nature, but also empathy and interest in other people have a health-giving action and are particularly important now. Healing, too, requires affection and human assistance. There are studies which show how social relationships – here the degree of popularity of children – have a positive effect on their longer-term infection risk.⁸

Strengthening resilience has a physical, mental and spiritual dimension in this crisis.

Alongside maintaining warmth and the rhythms of life as well as getting the sun, attention should be paid at a physical level to healthy nutrition and the avoidance of poisons (tobacco, alcohol). Bitter vegetables strengthen immunity, greater sugar consumption reduced resistance. Prevention and constitutional reinforcement can be supported with appropriate anthroposophical medicines and eurythmy therapy.

Mentally it is about coping with anxiety, calmness, courage and spiritual perspectives. Anxiety and mental tension restrict immunological functions and can be presumed to contribute to the spread of disease in the same way as careless and thoughtless behaviour. Conversely, a positive mental mood ("positive emotional style") has a beneficial effect and leads to a reduced risk of falling ill. The concentration of cortisone in saliva as an indication of mental stress and tension also correlates with the susceptibility to infection. ¹⁰

We therefore have inwardly to counter anxiety and often generated fear since only clear thinking, a balanced frame of mind and courage reduce the disposition for disease. "[...] fear of the diseases which occur all around at the source of an epidemic and [if we] enter the night and sleep with fearful thoughts, then unconscious after-images will be generated in the soul, imaginations which are riddled with fear. And that is a good way to foster and cultivate bacilli"11, is how Rudolf Steiner characterised it more than a hundred years ago.

Great questions arise from a spiritual perspective: what do pandemic diseases call for from humanity? On the one hand, this pandemic is dramatically inhibiting the life of society and thus turning into a growing economic, social and societal threat. On the other hand, it is leading to a pause with the possibility of questioning the direction of society, its values and goals, and determining them anew. Here the relationship between humans and the realms of nature, particularly the animals, is of great importance. Currently, in addition to the climate crisis and thus the illness of the earth, we have an acute human global illness of the same magnitude as the great chronic diseases of our time which can make us more awake to a necessary ecological reorientation, including in the field of medicine. In the long term we cannot just wage war on diseases and pathogens, as valuable as such skills are – we have to work with the same strength on the sustained strengthening of the human being and on the ecological balance between humans and nature in the light of our common cosmic origin.

piratory infection. Brain Behav Immun. 2016 Mar;53:255-261.

⁸ Ulset VS¹, Czajkowski NO², Kraft B¹, Kraft P¹, Wikenius E³, Kleppestø TH¹, Bekkhus M: Are unpopular children more likely to get sick? Longitudinal links between popularity and infectious diseases in early childhood. PLoS One. 2019 Sep 10;14(9):e0222222. DOI: 10.1371/journal.pone.02222222. eCollection 2019

⁹ Cohen S¹, Alper CM, Doyle WJ, Treanor JJ, Turner RB: Positive emotional style predicts resistance to illness after experimental exposure to rhinovirus or influenza a virus. Psychosom Med. 2006 Nov-Dec;68(6):809-15. Epub 2006 Nov 13. ¹⁰ Janicki-Deverts D¹, Cohen S², Turner RB³, Doyle WJ⁴: Basal salivary cortisol secretion and susceptibility to upper res-

¹¹ Steiner R: Wie erwirbt man sich Verständnis für die geistige Welt?, GA 154, Dornach 1985, Vortrag vom 5. Mai 1914.

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When a person falls ill, it requires management of the inflammation as the reasonable response of the organism to eliminate the pathogen, and not uncritical anti-inflammatory and anti-pyretic treatment. We currently do not have any evidence-based treatment for when people fall ill with life-threatening COVID-19 which is still therapeutic uncharted territory for all involved. Just as in intensive-care medicine we know about the treatment of respiratory distress syndromes, Anthroposophic Medicine also has therapeutic experience in the treatment of community-acquired pneumonia which is relatively often triggered by viruses. The therapeutic recommendations of Anthroposophic Medicine can in our judgement be of help in all stages of the disease and particularly support the treatment of pneumonia. Since several anthroposophical hospitals in coordinated action are involved also in the intensive care of patients with serious cases of COVID-19, it may perhaps soon be possible to continue to update the current recommendations on the basis of experience.

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