



CADIS
Camillian Disaster Service
International



The Post-Pandemic Period

New Challenges and Opportunities

Bringing Health to the Most Vulnerable and Deprived

Dear Friends and Colleagues. It is a great honour and pleasure for me to address the general chapter of the Camillian congregation, the first meeting after six years of abstinence. I am very grateful for the invitation and I am speaking here on behalf of M Michael Kuhnert, the CEO of the Medical Mission Institute Wuerzburg, Germany.



My name is Klemens Ochel. I am a general practitioner with diplomas in tropical medicine and public health. In the late 80ies I worked as a district medical officer in Benin, West Africa. In 1991 I acquired a Master in International Public Health Degree at the Prince Leopold Institute in Belgium.

Since 1992, I have been working for the Medical Mission Institute, called today medmissio, in development cooperation and humanitarian aid. During the growing HIV pandemic, I joined the Caritas Internationalis/ CIDSE Task Force on HIV.

As consultant I accompanied many Church partners in Africa, Asia and Eastern Europe on behalf of Misereor, Caritas Germany, Renovabis or others.



Employed by medmissio

Member of VDÄÄ –

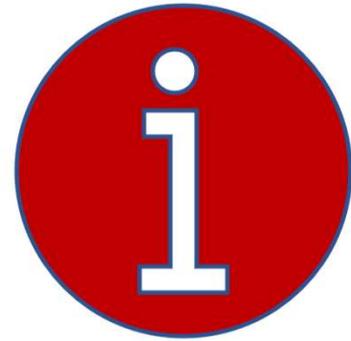
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With this slide, I declare that I do not have any particular areas of conflict of interest for this presentation.

References

- Literature
 - Livivo, BASE
 - Google Scholar
 - TheLancet
 - WHO, who.int
- Photos/ Media
 - IHME
 - Prof. A. Stich, medmisso
 - MS Office
 - Noun Project
 - Google Search CC-Licences
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This slide informs you about my sources of references, scientific literature, documentation and media I used for my presentation. I payed attention to a creative commons licence of Public Domain, permission to edit the materials and to mention the author.



The first cases of an SARS-CoV-2 infection were reported at the end of 2019 from Wuhan, China. The virus has been identified since December 2019. In the first quarter of 2020, the virus then spread to all continents.

I will first look at the status of the epidemic. Then explore some aspects of impact of the Corona pandemic. Then I would like to present the challenges the international community is working on worldwide. I would finally like to place these reflections in the context of Pope Franziskus' missionary mandate, which he gave us in his encyclical *Laudato Si'*.



Elderly female patient of COVID-19 accompanied by two nurses after being admitted to a hospital in Wuhan, China. As seen in 76 Days, directed by Hao Wu, Weixi Chen and Anonymous. Image courtesy of 76 Days LLC. (Image courtesy of 76 Days LLC.)

From the beginning, the SARS-CoV-2 virus sought its victims among the weak, vulnerable, highly exposed or socially marginalised.

But you will agree with me that this is not the only crisis of the present. The war against Ukraine, the many other conflicts in the world or the rise of totalitarian, violent regimes have in common that there is a reversal of the development progress of the last decades.

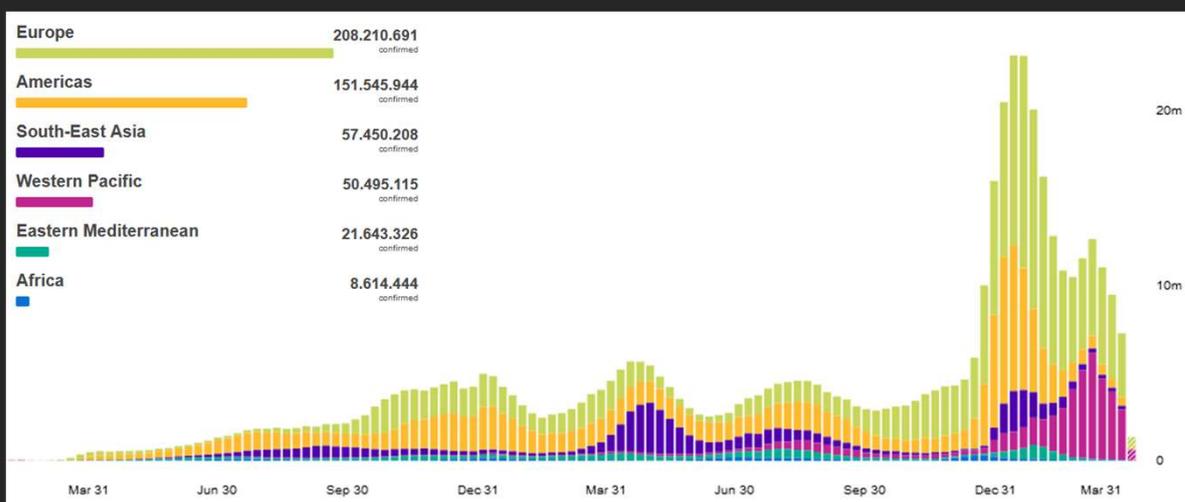
This means, for example according to the World Bank more than 150 million people have been pushed back into absolute poverty. About the same number of increase, 150 million, sum up to the 811 Mio., or in other words, a tenth of the global population, who suffer from hunger, according to the World Food Programme. The shortage of basic supplies of food and the increased prices exacerbate poverty. As a result, education, health and social progress are deteriorating. The vulnerable, weak, elderly, disadvantaged, refugees, women and unfortunately, children are affected disproportionately.

Sources:

<https://www.worldbank.org/en/news/press-release/2020/10/07/covid-19-to-add-as-many-as-150-million-extreme-poor-by-2021>

<https://www.who.int/news/item/12-07-2021-un-report-pandemic-year-marked-by-spike-in-world-hunger>

COVID-19 Pandemic: The weekly incidence



This is one of recent data projections of the number of reported infections by WHO region. You can see the wave-like epidemic spread of SARS-CoV-2. You will agree that these figures need interpretation. They certainly do not reflect the absolute real number of infections, due to underreporting in relation to lack of testing.

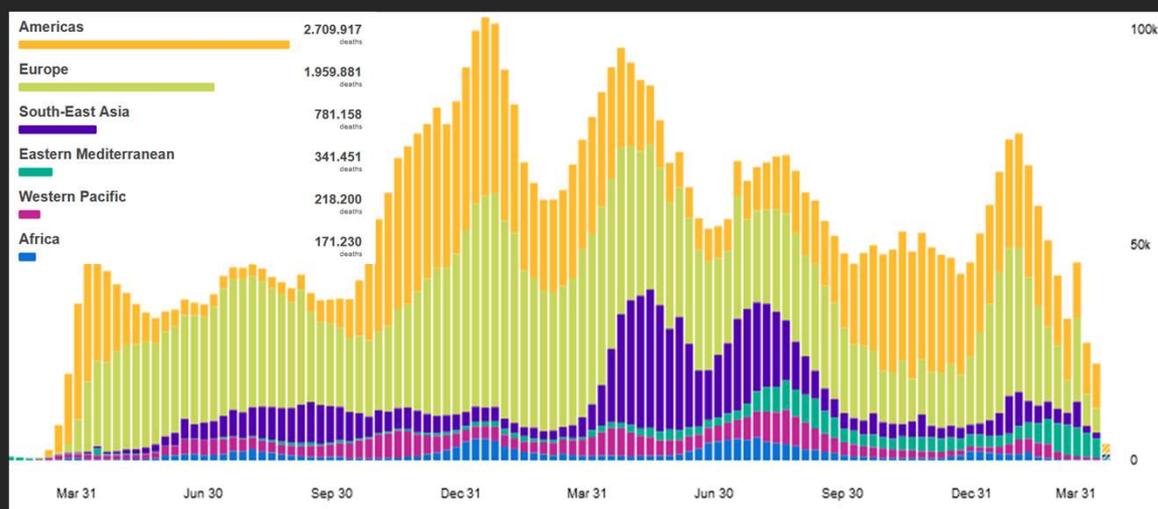
Experts were nevertheless surprised at the low infection rates reported from Africa. One explanation could be that many infections went unnoticed in the relatively young population. Another explanation could be that the people in Africa already had partial immunity.

Unfortunately, the fact of reports of low infection numbers has been instrumentalised by Corona deniers. Arguments have even been made that Corona is an instrument of the West to re-colonise the Global South. Such conspiracy narratives have demonstrably cost lives.

Sources:

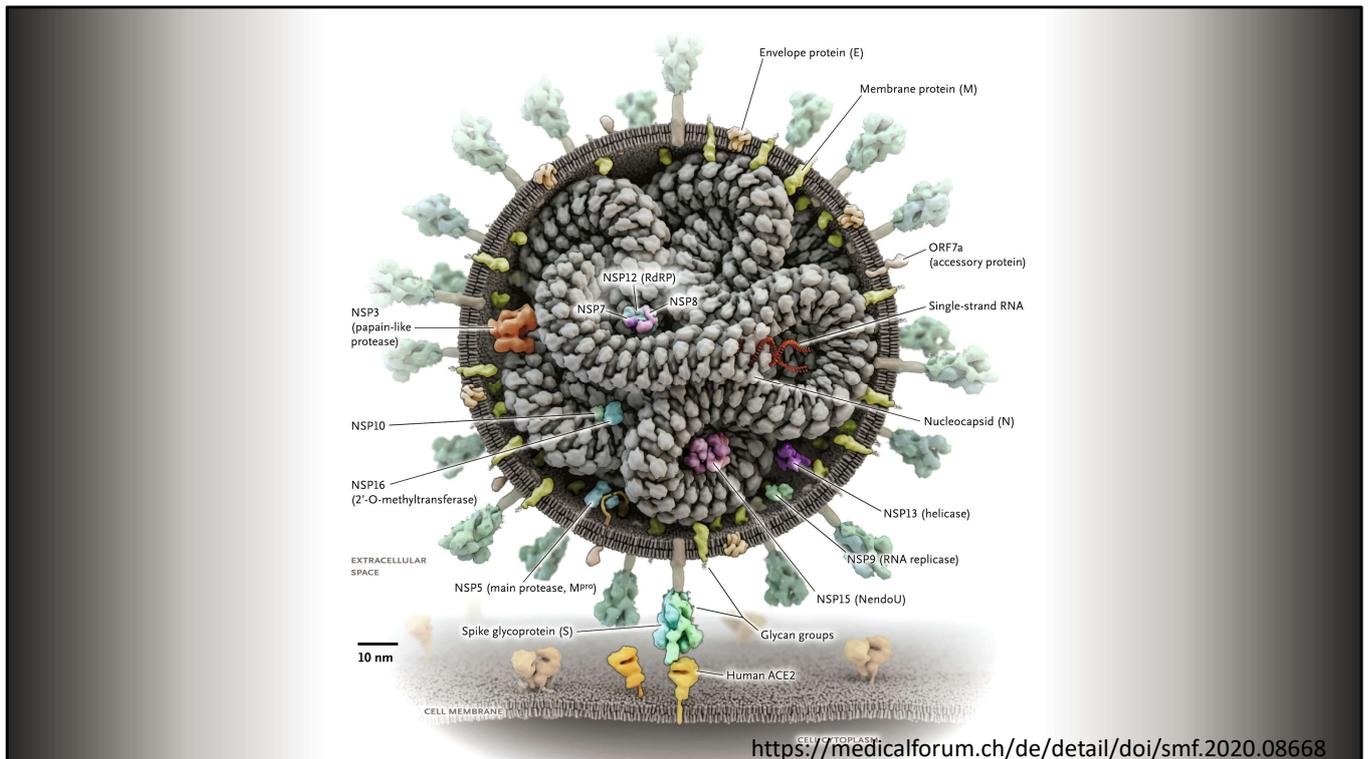
<https://covid19.who.int/>

COVID-19 Pandemic: The weekly death rate

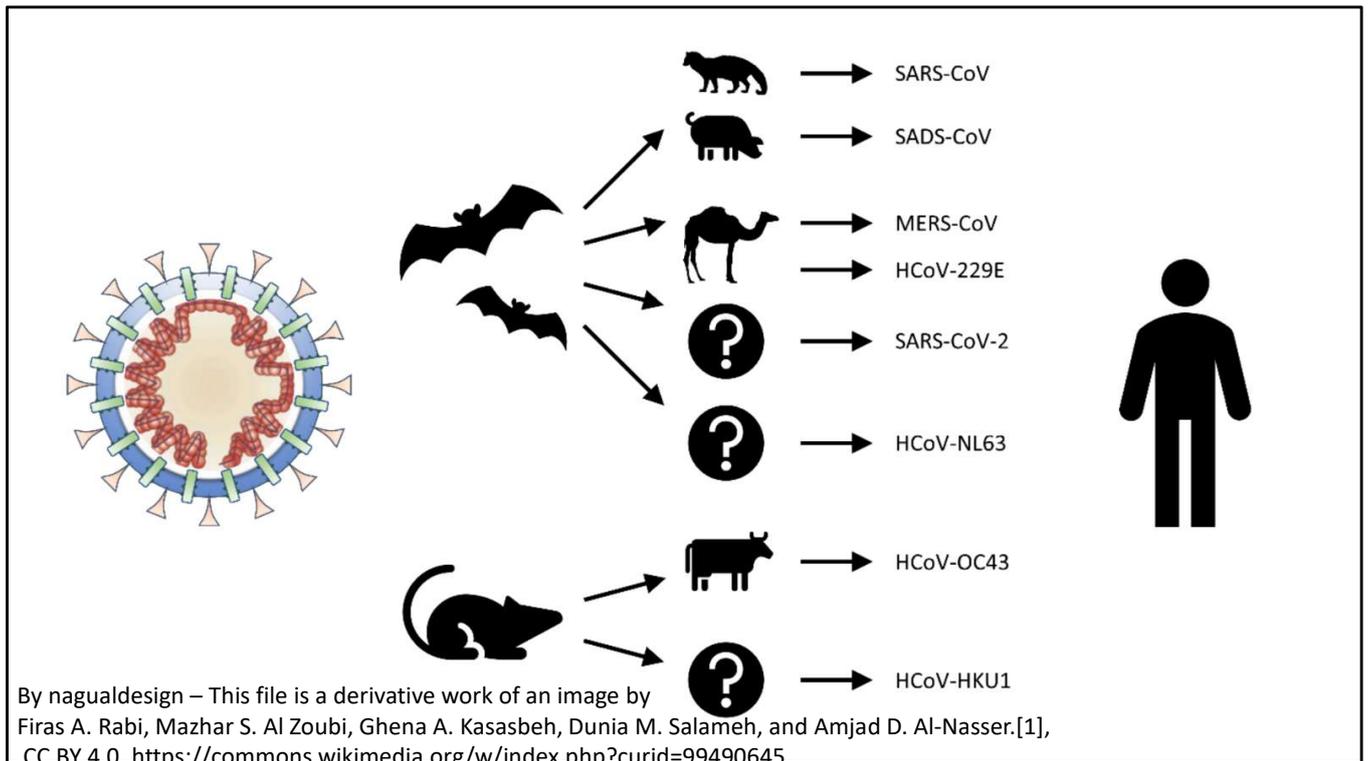


On this slide you can see the weekly death rates in the different WHO regions. In contrast to the new infections, for which consecutively higher waves were determined, the highest death rates are found from the second wave of global spread. This can be explained by the fact that Asia was still able to keep the first wave of spread small. In addition, the disease claimed most victims among the non-immune elderly. From the second year onwards, the success of vaccination campaigns can be seen.

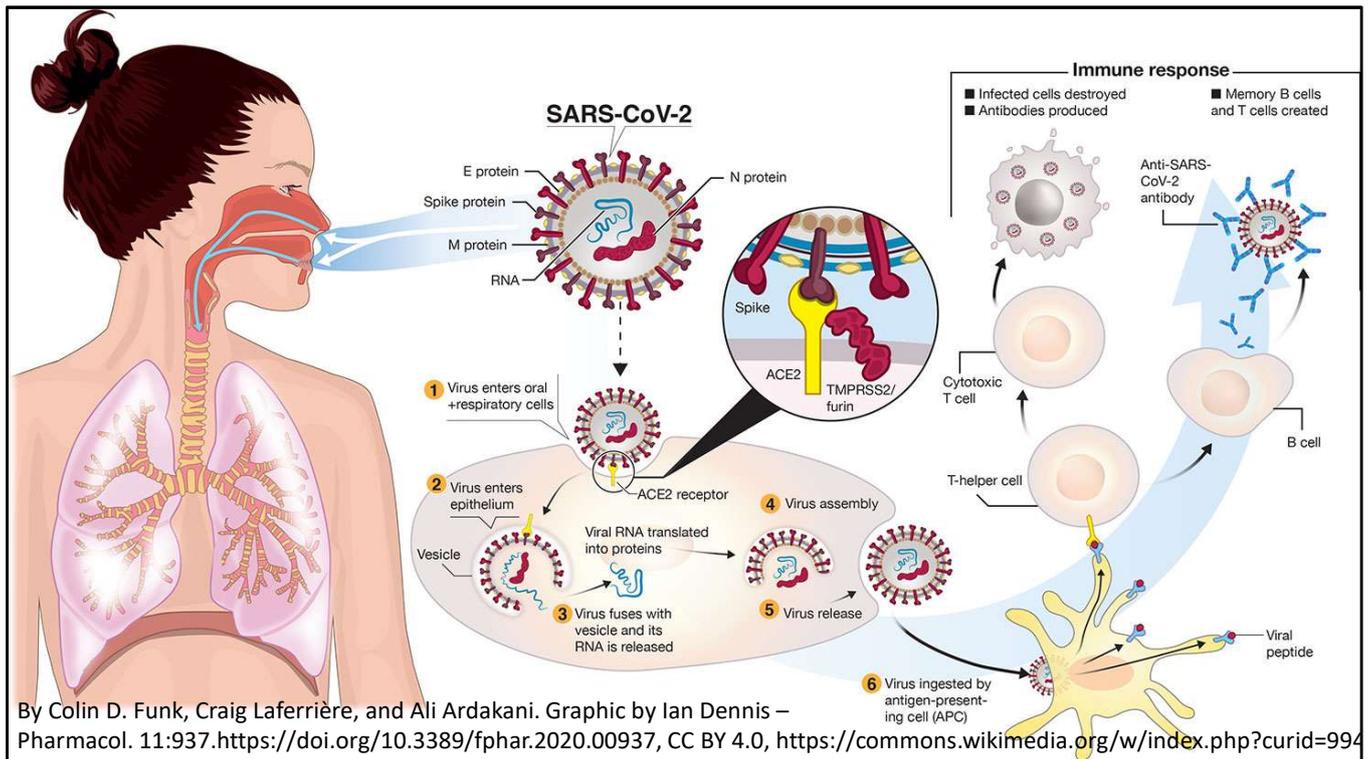
<https://covid19.who.int/>



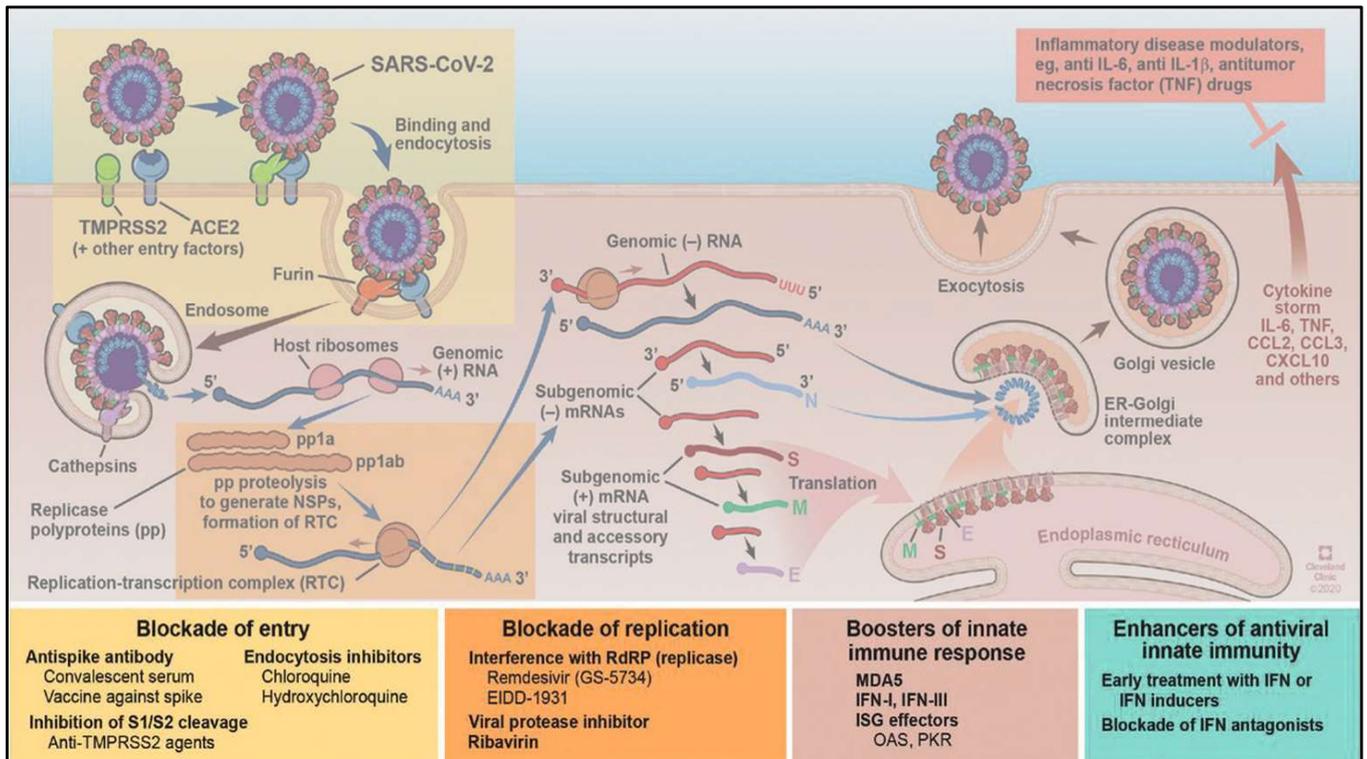
The Corona pandemic could have turned into a much worse catastrophe had it not been for a few lucky factors, all of which can be found in the field of science. The first stroke of luck is that the biochemical and genetic structure of the pathogen was largely known and quickly clarified. It is only thanks to this knowledge, for example, that vaccines could be developed in such a short time. Furthermore, this knowledge helps experts to assess whether mutations are dangerous variants. Last but not least, this knowledge is important for the targeted development of medicines.



Thanks to the genetic analysis of SARS-CoV-2, science has uncovered viral affinities in the animal kingdom. Even though the animal host from which the virus ultimately jumped from animals to humans is still unknown, it is clear that it is a zoonosis. This leads us to questions such as: How does such pathogen transmission from animals to humans occur and what can be done about it? More on this later.



Current research has not yet fully elucidated the pathophysiology, i.e. the pathogenic effects of the virus. This includes, on the one hand, the complete clarification of the defensive reactions of our immune system, especially in different groups of people, old and young, people with pre-existing diseases. Another area of research is the study of the so-called post-COVID syndrome.



Research into the replication cycle has led to many pharmacological treatments, such as monoclonal antibodies or anti-viral drugs that block the pathogen's replication enzymes. Likewise, research has shown that some drugs, such as chloroquine or ivermectin, have no effect. Unfortunately, research could not prevent many people from being taken in by false promises and profiteering by taking the latter drugs.

<https://medicalforum.ch/de/detail/doi/smf.2020.08668>



Another happy coincidence is that laboratory testing methods were known practically from the beginning. Within a few months, knowledge of the methods was shared so that tests were available in every country. But test coverage remains insufficient in resource-poor countries. As a result, coverage surveys in many countries, especially in Africa, fall completely short of reality. According to the WHO, recent random surveys have shown that 65% of Africans are already infected in early 2022. A study of deaths in Zimbabwe revealed that one in three deaths was linked to SARS-CoV-2 infection. In conclusion, we must not make false conclusion on the basis of the officially reported figures.

Source:

<https://healthpolicy-watch.news/africa-covid-19-who-new-analysis/>



Experts confirm, that the severity of the disease and the risk of dying is related to individual factors like age, disease preconditions like diabetes or hypertension or behavioural factors like smoking. Another vulnerable group are persons with cancer or pathologies of immunodepression. External factors related to dying are mainly related to timely access to quality health services and in particular access to oxygen supply.



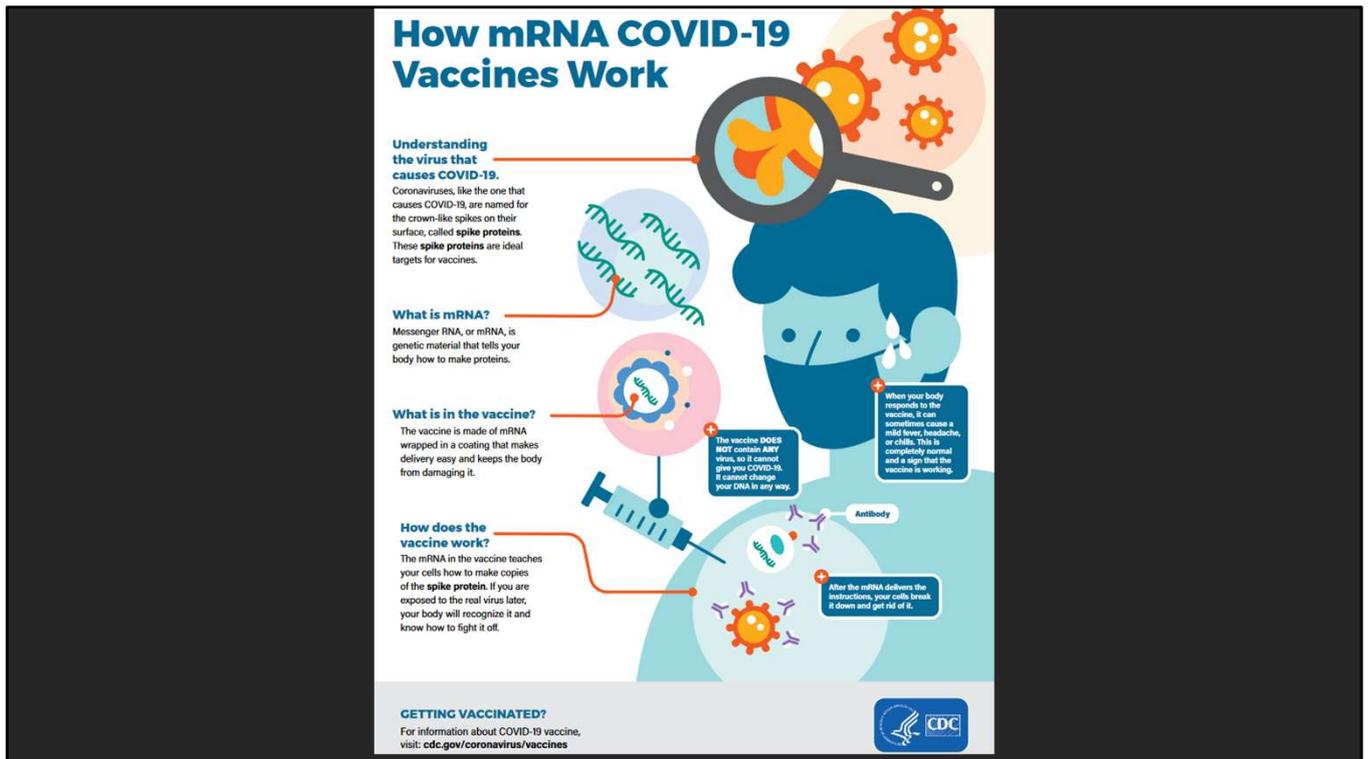
In resource rich settings, intensive care saved many lives. Even without a specific ailment, medicine could manage harmful disease effects like hyperimmune reactions or hypercoagulation. Here you see the medical technology to handle patients from such conditions.

What has fallen by the wayside are the patients' fears of death, prolonged physical weakening or loneliness, as contact with the family has been interrupted for weeks, or lonely death.

However many patients still struggle with long term effects of their disease. Physical strength takes long to come back and many patients experience mental health problems due to the dreadful experience of suffocating.



One last stroke of luck should be mentioned, namely the development of vaccines. This led to the success of technologies that had been researched for a long time but were initially developed for other areas of application, namely immunisation through messenger RNA.



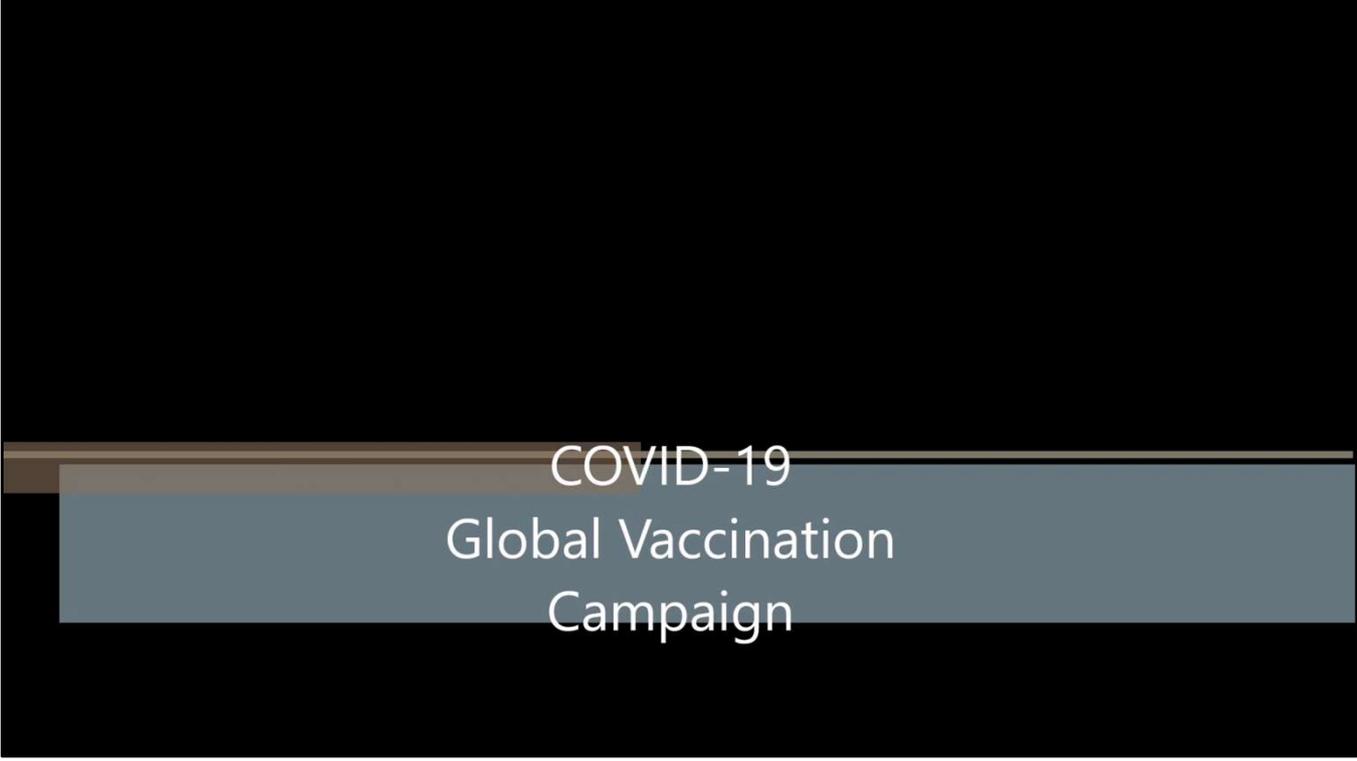
Based on a long researched technology, effective vaccines have been assembled in less than 12 months, without making sacrifices to the scientific security measures. The licencing studies in 30.000 - 60.000 volunteer revealed some minor, but also some very rare serious side effects. But the latter were largely less, with the factor 1:100, than the harmful effects of the disease.

The weighing of the harm caused by direct and indirect consequences of the disease is clearly in favour of the benefit due to the protective effect of vaccination against the infection and against a severe course of the disease.

Let us not forget that efficacy and security studies involved substantially people from the Global South. This sheds a light on the Global North prioritizing economic rights, to justify that the technology is not shared with the resource-poor countries.



Reservations about vaccination are strong in all societies. Since the beginning the health communication about the vaccines suffered in all countries. False information, doubts and harmful because hate centred news were rapidly spread in social media over the globe. WHO talked about an 'infodemic'. As a consequence several 100.000 had to pay for fake news with their lives. Some people have a lack of information or are simply afraid of the vaccine. For others, behind the rejection of the vaccine is much more a rejection of public health measures and a refusal to put the common good before self-interest.



COVID-19 Global Vaccination Campaign

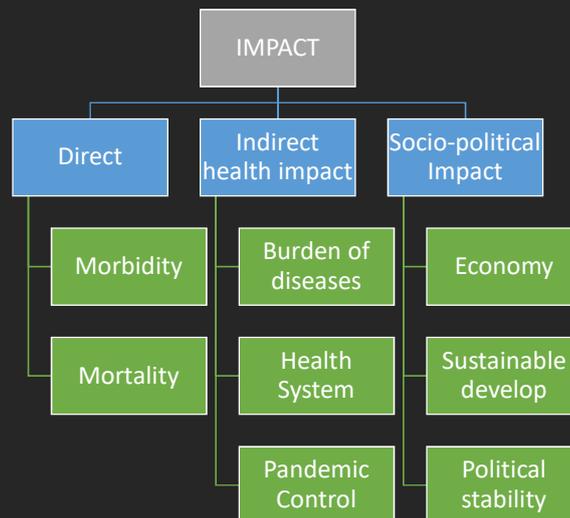
Let us watch the evolution of the global vaccination campaign.

Unfortunately, the campaign is not a story of glory for humanity, but rather one of selfishness and egoism. The governments of wealthy countries have bought up scarce vaccine resources from the beginning, thereby making the market scarce. Charitable donations were made to the COVAX initiative, the WHO's vaccination programme. They were hard to schedule, insufficient in quantity and left the impression that vaccines were donated which were rejected by people in rich countries. Efforts failed to offer vaccination to everyone around the world. Projections say it will take African countries in particular until 2024 to offer vaccination to at least 60% of their population.

Impact of the COVID-19 Pandemic

The impact of the Corona pandemic is far from clear. Instead of talking about a post-pandemic phase, we should acknowledge that the pandemic is not over yet. Although globally there are signs of a phase of relaxation, we know that the virus cannot be eradicated. Rather, we have to get used to living with the virus. There will always be phases where the virus will spread regionally and seasonally, especially because of newly emerging variants.

COVID-19 Impact: differentiated



In the sense of systematising the consideration of the effects of the Corona Pandemic, one can distinguish direct effects of the disease on a patient from indirect effects on the health system and broader socio-political effects. It is obvious that only a few highlights can be addressed in these categories during this talk.

Up to 180,000 health workers may have died from COVID-19



<https://news.un.org/en/story/2021/10/1103642>

In October 2021 the United Nations reported that up to 180.000 health and care workers may have died from COVID-19 between January of 2020 and May of 2021. The number of death among health workers was estimated on the basis of more than three million deaths last year. Today, it is twice that number. Let us hope that the figure did not double in between.

The loss of health care workers due to COVID-19 weakens health systems. In addition many health workers, who still work, are burnt out, overworked and are about to leave their profession. In the future, it will be necessary to compensate for this aggravated shortage: through training, but also by upgrading working conditions and better occupational safety measures. I assume this is also a challenge for the mission of the Camillians.

COVID-19 Excess Mortality

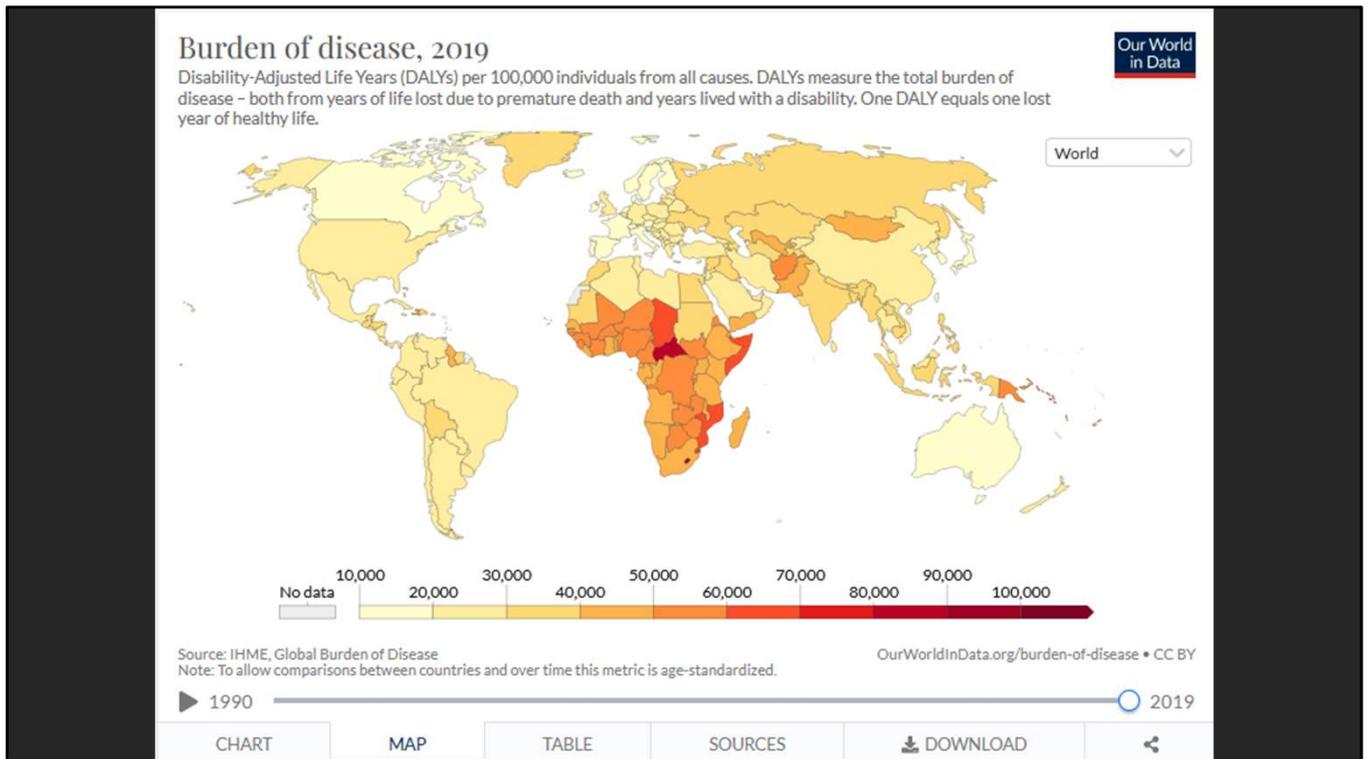
Excess mortality is a term used in epidemiology and public health that refers to the number of deaths from all causes during a crisis above and beyond what we would have expected to see under 'normal' conditions. In this case, we are interested in how the number of deaths during the COVID-19 pandemic compares to the deaths we would have expected had the pandemic not occurred.

As data are not available from all countries, I have selected Brazil, the Philippines, South Africa and Germany. Follow the high rates of excess mortality. (Let us see exemplary data from selected countries).

Excess mortality is a more comprehensive measure of the total impact of the pandemic on deaths than the confirmed COVID-19 death count alone. It captures not only the confirmed deaths, but also COVID-19 deaths that were not correctly diagnosed and reported, as well as deaths from other causes that are attributable to the overall crisis conditions.

Source:

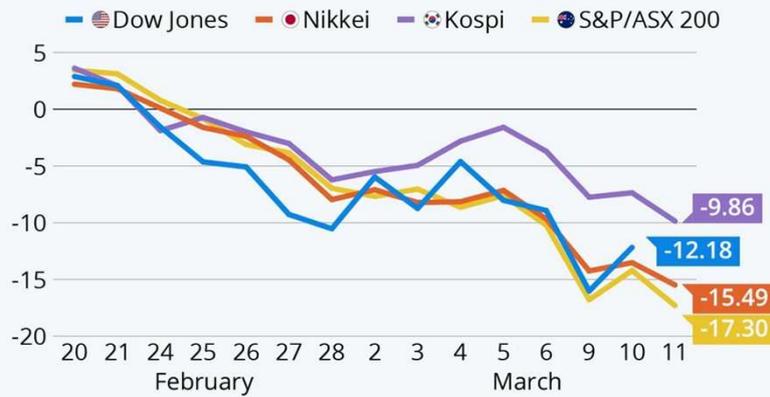
<https://ourworldindata.org/excess-mortality-covid>



Human potential that is lost due to poor health is immense: The Global Burden of Disease (GBD) project aims to quantify this loss by estimating the number of healthy life years lost globally. This metric takes into account both, the human life years lost due to early death and the life years compromised by disease and disability. One way to illustrate the loss of healthy life is to put it in relation to the global population, which was 7.53 billion in 2019. The global burden of disease, viewed in this way, sums up to a third of a year lost for each person on the planet. COVID-19 has caused an increase of 20% per person per year.

Stock Markets Drop as Global Coronavirus Spread Continues

Daily change in closing prices of stock indices (in percent)*



* Baseline/0 percent: Feb 3 closing

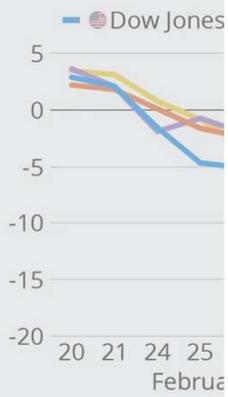
Source: Google Finance



The economic consequences can be seen in losses on the stock market. Here we see a drop in the indices in the first Corona year. Behind this are massive losses of income, jobs and opportunities for social protection.

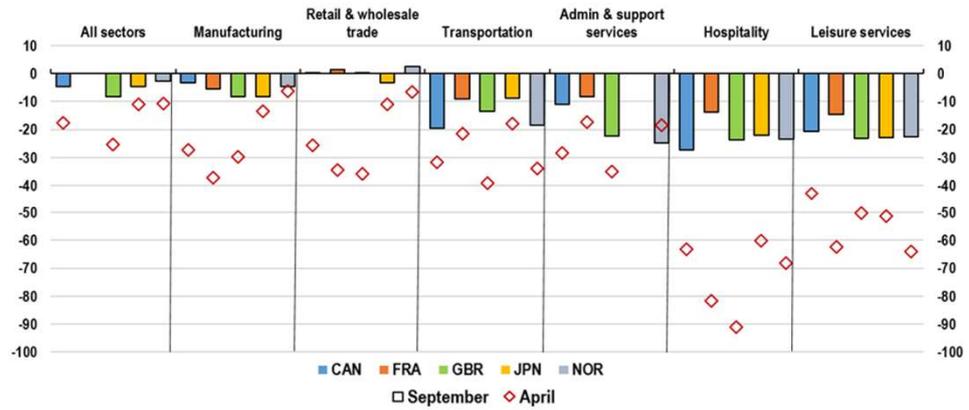
Stock Markets Drop as Global Coronavirus Spread Continues

Daily change in



The impact of the pandemic on activity remains severe in some service sectors

% difference from February 2020

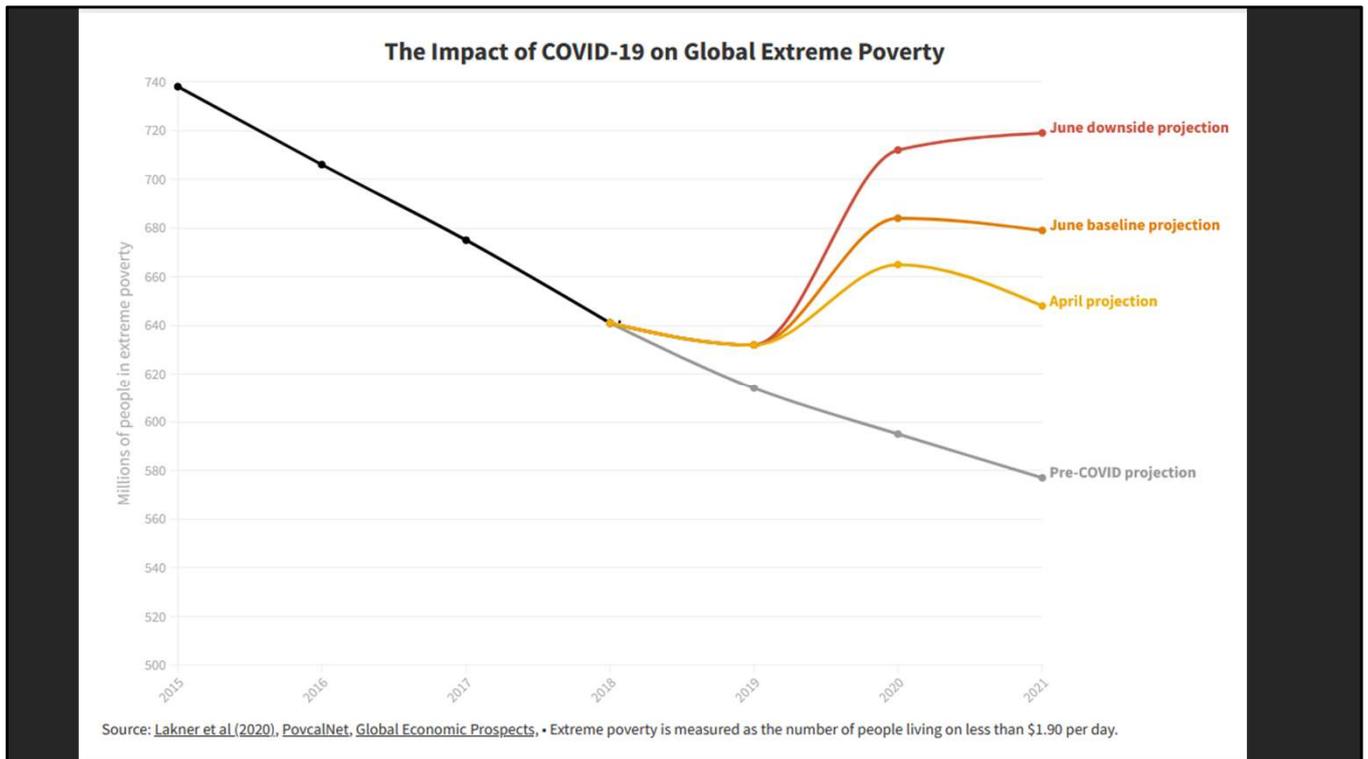


* Baseline/0 percent: February 2020
Source: Google Finance

Note: Monthly GDP in Canada, Norway and the United Kingdom, monthly output in Japan and France. Data based on national industrial classifications. Data on all sector output are not available for France, and data on administrative and support services are not available for Japan. Transportation data for Norway exclude ocean transport.

Source: Office of National Statistics, United Kingdom; Ministry of Economy, Trade and Industry, Japan; Insee, France; Statistics Canada; Statistics Norway; and OECD calculations.

Here you can see the decline in economic performance in different sectors in the UK. Whole sectors of the economy have come to a standstill.



As mentioned earlier, the diverse effects of the Corona pandemic lead to a massive increase in poverty. Especially the growing number of people living in absolute poverty is of concern. The development trends since the new millennium are reversed. The advances of the Millennium Development Agenda from 2000 until 2015 are literally melting away.

Source:
<https://public.flourish.studio/visualisation/4853927/>

(Negative) Impact on Globalisation

Mobility

- Air travel: Five airline companies lost >50% of business
- Sea travel: three major cruise lines lost >60% stock price

Industries

- Event cancellations: interruption of delivery chains
- Workforce lost income opportunities
- Health Systems strained

Food & Agriculture

- Loss of productivity because of supply disruption

Academic

- Reduction of international academic exchange by 60%
- Universities with digital means increased international co-operations

Between globalization and the pandemic we can identify a mutual reflective relationship.

Globalization has altered the way we live and earn a livelihood. Consequently, trade and travel have been recognized as significant determinants of the spread of SARS-CoV-2. But also, the rise in urbanization and the closer integration of the world economy have fueled the pandemic.

On the other hand globalisation is needed to overcome the impact of COVID-19 and to create resilience. Interconnectedness of academic institutions by means of digital technologies has facilitated vaccine development.

Source:

Nistha Shrestha et al., The impact of COVID-19 on globalization, One Health, Volume 11, 2020, 100180, ISSN 2352-7714,
<https://doi.org/10.1016/j.onehlt.2020.100180;>
(<https://www.sciencedirect.com/science/article/pii/S2352771420302810>)

COVID-19 caused 'shocking' inequalities: human rights chief Bachelet



WHO/PAHO/Karen González Abril | The Wayuu people of Colombia have been participating in the management of health care services for their community.

<https://news.un.org/en/story/2021/09/1101552>

At the beginning of the pandemic, some politicians and experts spoke of "all people being equal before the virus". They meant that everyone, rich or poor, in the Global North as well as in the South, was at risk of getting infected. But it turned out that this statement was wrong. Poor people, people in precarious living situations or people in resource-poor countries had a significantly higher risk of becoming infected, to get seriously sick, to suffer long-term and to die early. The consequences were many times more dramatic for them, as they were much less resilient. The outlook into the future is also grim. The people in the Global South will continue to be without vaccination protection for a long time.



But to tell the truth, this inequality and injustice is not only a problem of the countries of the Global South. Disparities are also readily apparent in economically emerging countries.

This picture shows how close together the realities of life can be. The luxury housing complex on the right and the slum area on the left. This naturally increases social tensions.



If you think this discrepancy does not exist in the wealthy, so called industrialized countries, you are wrong. The slide of the London Underground map shows the average life expectancy at individual Underground stations. Life expectancy sometimes differ more than 10 years, by metro-station the people are using, not because of the underground but because of the social-conditions they are living in. This underlines the importance to consider the social determinants of health. It is a socio-political obligation to counteract this inequality.



In many countries there were protests, some of them violent. State-imposed control measures were interpreted as an attack on personal freedom and a justification for all forms of opposition. On closer analysis, it turned out that the democratic state's concern for the common good and health was called into question. Corona has thus also contributed to the crisis of democracy and strengthens populists and dictators. The danger has not yet been averted. Due to social media it is a global phenomenon. WHO notes and regrets that more people in the world follow unqualified sources on social media than follow reputable, science-based sources whose claims are independently verified.

Unfortunately, some church leaders, even bishops, have also been promoters of conspiracy narratives and unscientific theories and have greatly damaged the credibility of the global health work of the Catholic Church.

Pandemic control

Efficient global structures

The question is, how to prevent that we either never face again a pandemic or minimize its impact by creating resilience. The question is, how to strengthen the global structures that are in charge of pandemic control.

The UN System



The prevention of a pandemic is actually a founding motive of the United Nations. In 1908 the League of Nations Health Office was founded to control infectious diseases. During the Spanish Flu epidemic the first pandemic preparedness plans have been developed.

When the World Health Organisation was founded in 1948, it was given the mandate to respond to global pandemics. Today, the UN system is much more complex and difficult to coordinate. The list on the slide is far from complete. This is certainly one reason why pandemic control did not work well this time either, especially considering that the WHO was not given any explicit funding for this, either preventively or during the acute phase.

Source:

<https://www.un.org/en/coronavirus/information-un-system>

International Health Regulations

INTERNATIONAL HEALTH REGULATIONS (IHR)
– from policy to people's health security

What are the IHR?
The IHR are legally binding and help countries work together to protect lives threatened by the spread of diseases and other health risks, including radiation and chemical hazards.

5 reasons why the IHR matter

- HEALTH THREATS HAVE NO BORDERS**
The IHR strengthen countries' abilities to control diseases that cross borders at ports, airports and ground crossings.
- TRAVEL AND TRADE ARE MADE SAFER**
The IHR promote trade and tourism in countries and prevent economic damage.
- GLOBAL HEALTH SECURITY IS ENHANCED**
The IHR establish an early warning system not only for diseases but for anything that threatens human health and livelihoods.
- DAILY THREATS ARE KEPT UNDER CONTROL**
The IHR guide countries to detect, assess and respond to threats and inform other countries quickly.
- ALL SECTORS BENEFIT**
The IHR prepare all sectors for potential emergencies through coordination and information sharing.

Until all sectors are on board with the IHR, no country is ready

World Health Organization Europe
www.euro.who.int/ihr

It was the outbreak of SARS in 2003 that led to the WHO being given an assumed robust mandate, binding under international law, to enforce global control measures even against the will of national governments.

However, due to the unequal balance of power between national governments in particular of the Global North and the director of WHO this turned out to be a naive illusion.

In the IHR Regulations, the national governments had received the responsibility to develop control plans and to maintain control institutions in each country. At the latest since the Ebola epidemic in West Africa, we know that this has not worked.

Source IHR:

<https://apps.who.int/iris/handle/10665/246107?locale-attribute=de&>

Pandemic control within WHO

The screenshot shows a WHO news article page. At the top, there is a navigation bar with links for Home, Health Topics, Countries, Newsroom, Emergencies, Data, and About WHO. Below the navigation bar, the breadcrumb trail reads 'Home / News / Elevating political leadership for Pandemic Preparedness and Response Meeting with the UN General Assembly'. The main heading of the article is 'Elevating political leadership for Pandemic Preparedness and Response Meeting with the UN General Assembly'. Below the heading, the sub-heading is 'The Independent Panel for Pandemic Preparedness and Response'. The article is dated '28 July 2021 | Statement | Reading time: 11 min (3058 words)'. The author is 'Ellen Johnson Sirleaf'. The article text begins with 'We thank the President of the General Assembly for enabling this briefing session to be held, and we thank all representatives of Member States who are joining us today. We are very grateful for your time.' It then discusses the role of the Independent Panel for Pandemic Preparedness and Response in ensuring the international system is better able to act against future pandemic threats. A photo of HE Ellen Johnson Sirleaf is included on the right side of the article, with her name 'HE Ellen Johnson Sirleaf' written below it. The article concludes with a global update on COVID-19 cases and deaths.

As a consequence of the COVID-19 pandemic, the world community has apparently understood the necessity to build an efficient pandemic control. As a first step, the UN has commissioned a high-ranking committee of politicians and scientists to work out a realistic plan. The so-called 'Pandemic Treaty' is taking shape and is to be agreed soon. The initiative is also approved by the Vatican, according to Msgr. Robert Vitillo.

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World Health Organization Europe
www.euro.who.int/ihr

The essential building block is the so-called Global Health Security. To explain it, I have to go into detail, because it is based on the One Health approach.

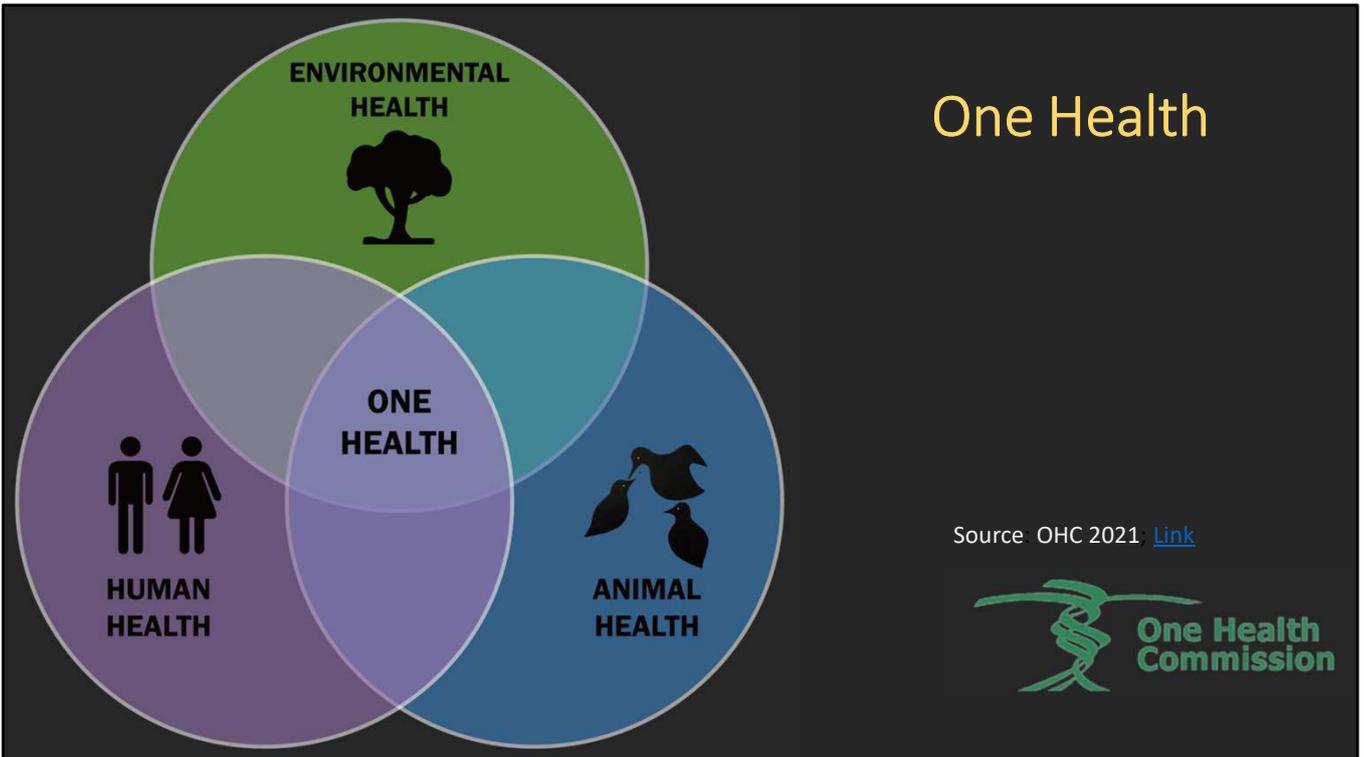
Source IHR: <https://apps.who.int/iris/handle/10665/246107?locale-attribute=de&>

One Health

A policy action approach

The ‚One Health Approach‘ is actually high on the political agenda, at least in the United Nations System and for Governments in the Global North.

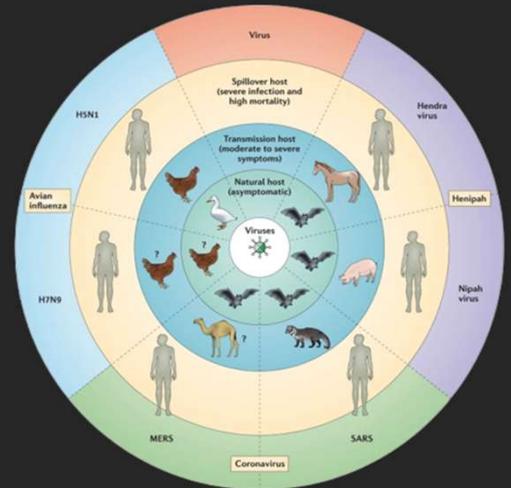
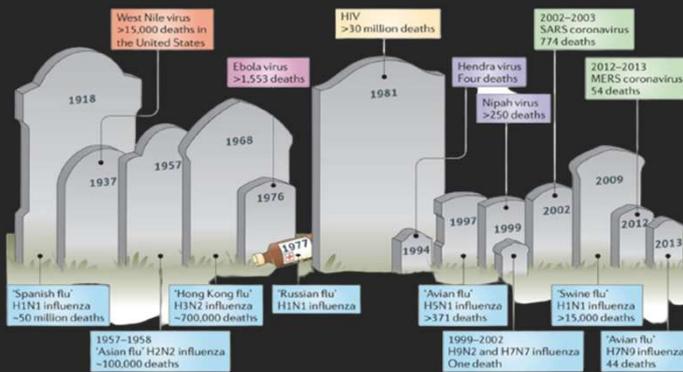
One Health



The first ideas of 'One Health' date from 1964. Calvin Schwabe, a veterinarian trained in public health, coined the term **One Medicine** in a veterinary medical textbook. He reflected on the similarities between animal and human medicine and stressed the importance of collaboration between veterinarians and physicians to help solve global health problems.

In 2004, The Wildlife Conservation Society in the US held a conference at Rockefeller University in New York called **One World, One Health**. The links between humans, animals, and the environment were highlighted and how these links are integral to understanding disease dynamics. The importance of interdisciplinary approaches have been claimed.

Emergence of 'zoonoses'



Source: Source: Li, Alice; 2017/04/01

What is the rationale behind the One Health Approach.

Epidemics and pandemics caused by human-animal contact have always been present in human history. However experts have alerted us, saying that they are increasing in frequency in the last century. There is research providing evidence that this is related to increased human pressure on the global environment.

Ebola Virus Ecology and Transmission

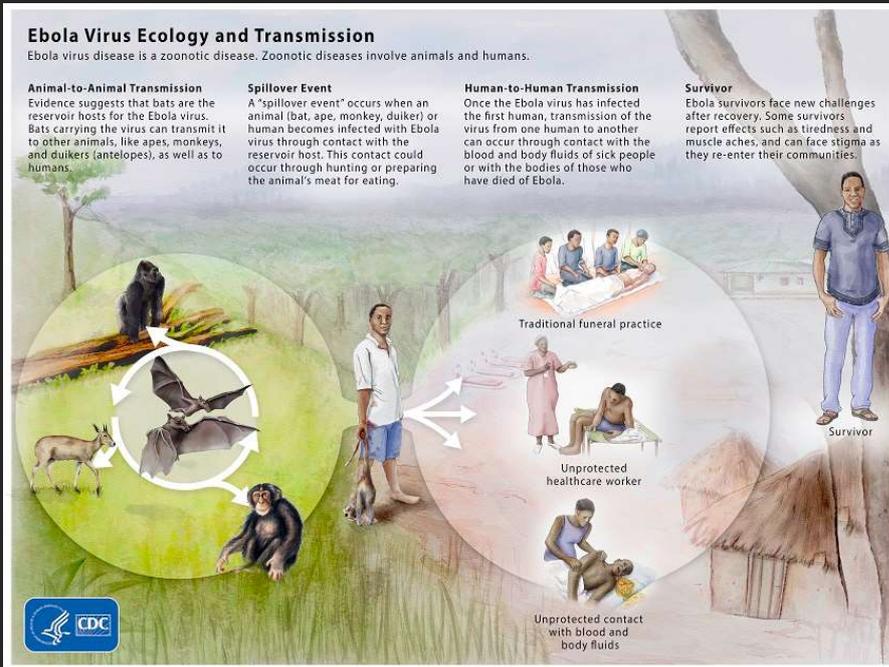
Ebola virus disease is a zoonotic disease. Zoonotic diseases involve animals and humans.

Animal-to-Animal Transmission
Evidence suggests that bats are the reservoir hosts for the Ebola virus. Bats carrying the virus can transmit it to other animals, like apes, monkeys, and duikers (antelopes), as well as to humans.

Spillover Event
A "spillover event" occurs when an animal (bat, ape, monkey, duiker) or human becomes infected with Ebola virus through contact with the reservoir host. This contact could occur through hunting or preparing the animal's meat for eating.

Human-to-Human Transmission
Once the Ebola virus has infected the first human, transmission of the virus from one human to another can occur through contact with the blood and body fluids of sick people or with the bodies of those who have died of Ebola.

Survivor
Ebola survivors face new challenges after recovery. Some survivors report effects such as tiredness and muscle aches, and can face stigma as they re-enter their communities.



Ebola

Virus Ecology Graphic
Source CDC, 2022: [Link](#)

Another example of an animal-human transmission chain that regularly causes a security-relevant outbreak, is Ebola. Contact with wild animals and human behaviour as shown in this slide lead to outbreaks. Aris and I we first met at a Vatican Meeting about the response of the Church to the Ebola outbreak in West Africa in 2015.



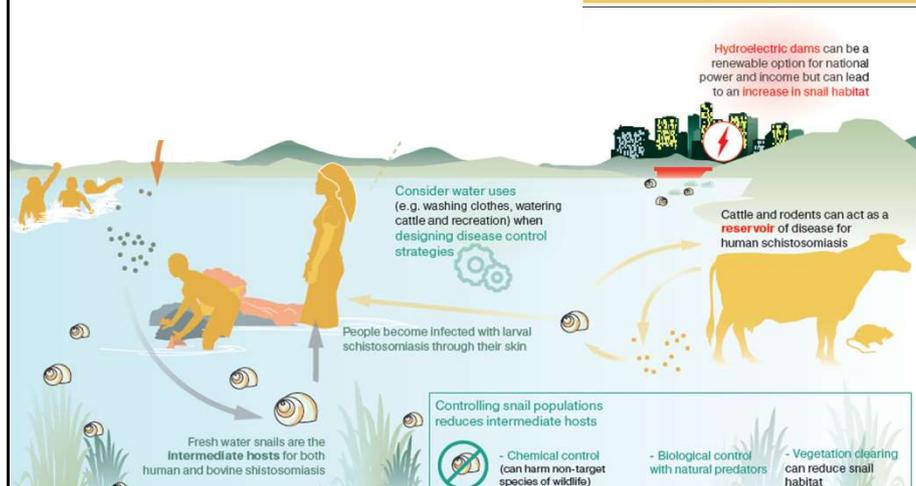
One Health (WHO)
 an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems.

The World Health Organisation (WHO) explains the One Health approach by this recently published graphic.

WHO takes the example of the infection cycle not of Ebola but of schistosomiasis. Schistosomiasis is a parasitic disease caused by fluke worms that are endemic in the tropics. It causes liver damage, inflammation and cancer in the urinary and gastrointestinal tract, where the worms of the parasites are excreted. There intermediate hosts are sweet water snails. Once humans get into contact with sweet water again, they are penetrated by infectious larvae. This is the infectious cycle, which is closely linked to missing latrines, poor WASH and lack of treated potable water sources.

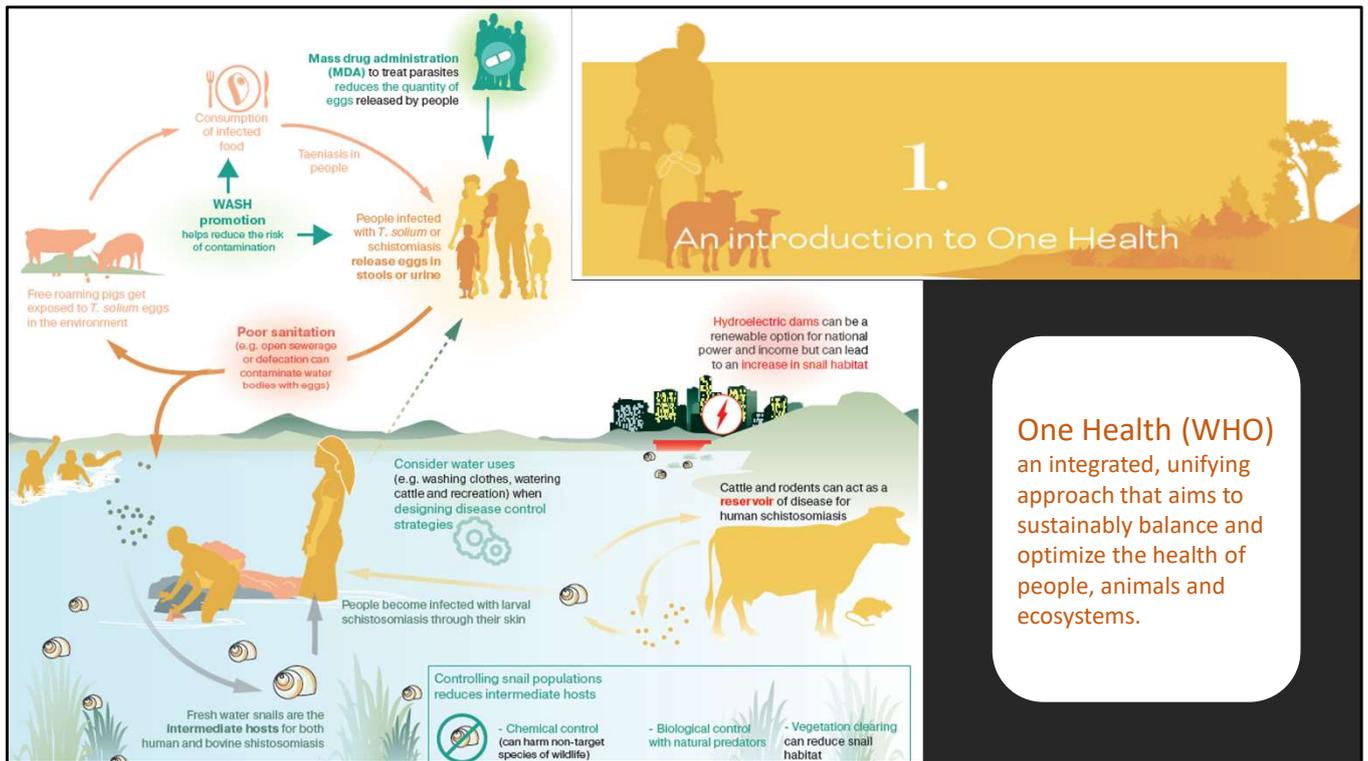
In this slide from WHO, we see that a water reservoir and dam was constructed. So population growth, urbanisation and the increased demand for drinking water, has - as consequence - an intensified transmission cycle of schistosomes. We are thus in the area of socio-ecological and economic issues of social development as a modern basis for increasing health an well-being.

1. An introduction to One Health

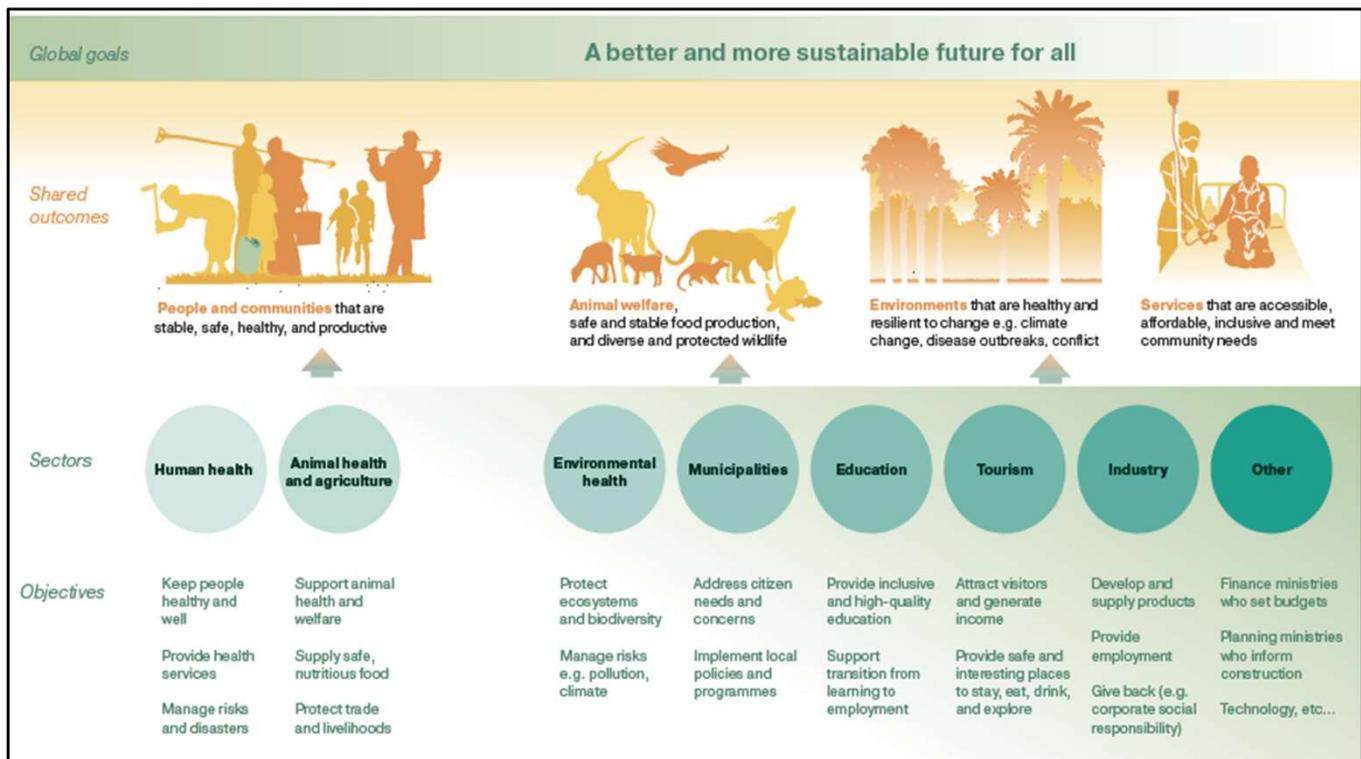


One Health (WHO) an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems.

But two completions are still important. New research has shown that life cycles are not limited to human-fluke interactions. Cows or small rodents can also be intermediate hosts. This links the life cycles and raises questions of veterinary and human medicine.



Finally, it is important to note that infection chains of parasites can be linked. Human hygiene behaviour plays a role, as does access to water, sanitation and hygiene (WASH).



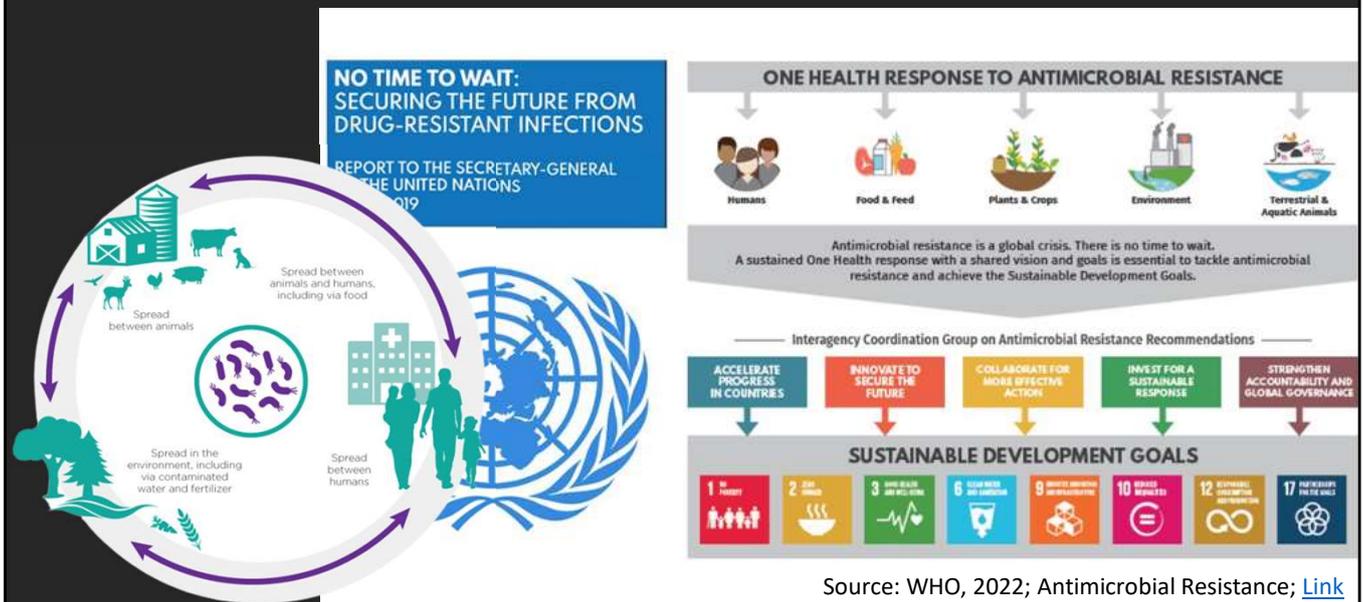
The One Health approach is a policy approach and not a technical concept.

According to WHO the approach mobilizes multiple sectors, disciplines and communities at varying levels of society to work together to foster well-being and tackle threats to health and ecosystems, while addressing the collective need for clean water, energy and air, safe and nutritious food, taking action on climate change, and contributing to sustainable development.

A first issue to raise with regards to one of the questions raised in the title of my talk - , the question of new challenges, - is: Is the Church prepared to collaborate with global and national institutions in the framework of the new One Health approach? Are the Cammillians able to bring in there expertise in the matter? Until now, when I talk about One Health with my partners, very often they don't know, what I am talking about. Thanks to the Camillians this will hopefully change.

Antimicrobial Resistance:

WHO has declared that AMR is one of the top 10 global public health threats facing humanity.

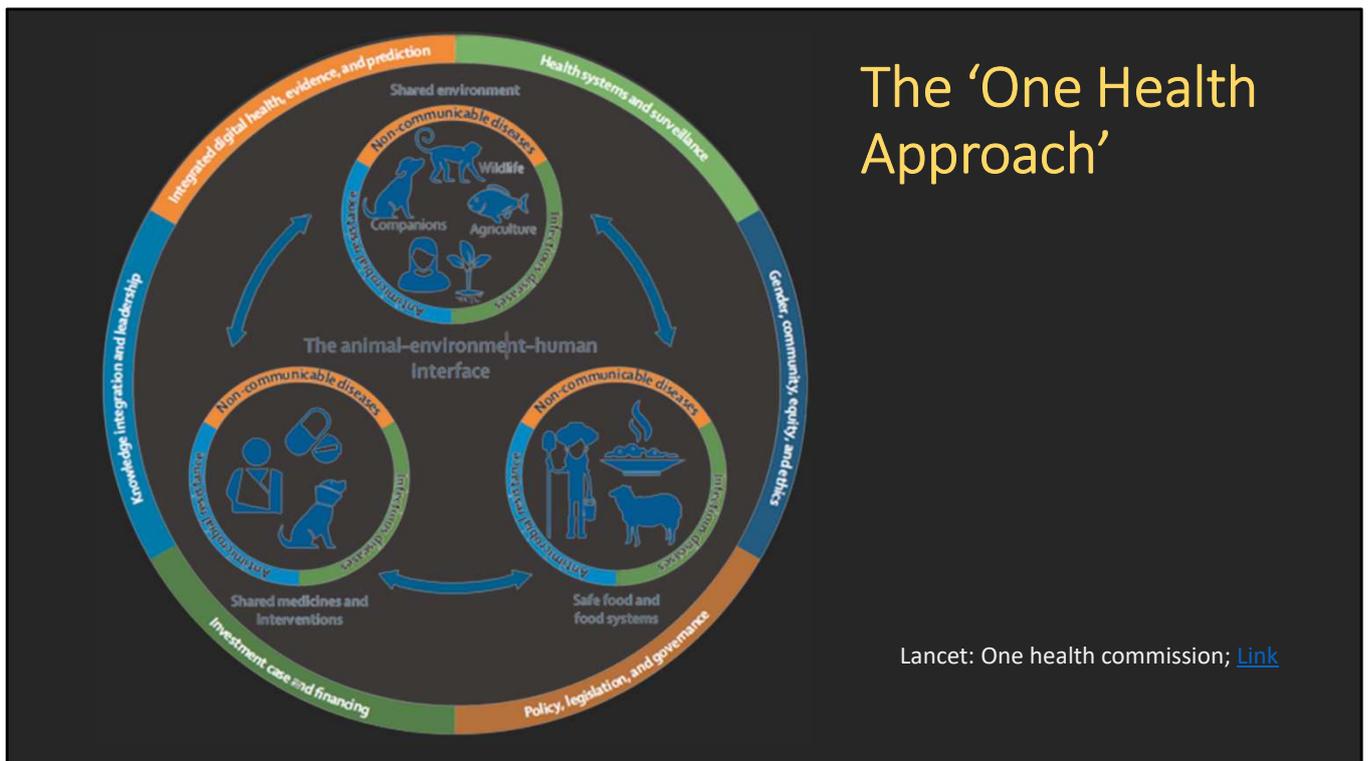


But **One Health** is not only about zoonosis. Another pandemic that caused more than 1,4 Mio. death in 2021 is the one of **antimicrobial resistance**.

It is a natural phenomenon that pathogens like bacteria, viruses, fungi or protozoa try to resist chemicals that influence their metabolism. However too frequent use at insufficient dosages selects variants and species that through mutation develop biochemical inactivation. This is called **resistance**.

Modern medicine is largely dependent on the availability of antibiotics that protect us from infection in case of complex surgical interventions or immuno-depressive diseases. Antibiotic resistance is an example of quality of care. In my consultancy work I often face irrational prescription of antibiotics by health professionals in Christian health care institutions and lacking or insufficient means of control for antibiotic resistance. This the challenges in the health care of the future are in structural and informational arena of health care. Again, are the Camillians prepared?

The 'One Health Approach'



Lancet: One health commission; [Link](#)

In summary, here is what the 'The One Health Approach' is about:

- Prevention of outbreaks of zoonotic disease in animals and people.
- Improvement food safety and security.
- Reduction of antibiotic-resistant infections and improvement of human and animal health.
- The protection of global health security.

As you have heard, a special orientation of the One Health approach is the aspect of security, which is referred to as "Global Health Security". It is important to me that you note that this is a vertical policy field approach and not a horizontal approach. The global health security agenda is a one defined by the Global North. It prioritizes medical and technological solutions. Are the Cammillians prepared to advocate for the interests of the Global South?

Aus <<https://www.cdc.gov/onehealth/basics/index.html>>

One Health Eco-Health Global Health Planetary Health

Need to put concepts and politics in perspective

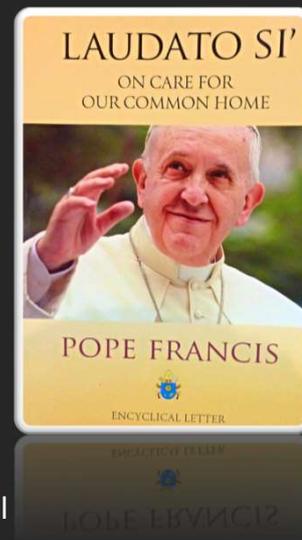
I initially planned to put the One Health Approach into **perspective** of other concepts and approaches. Due to time constraints for this presentation, I can rush through history and raise your awareness that there are more concepts and policies on the table.

On the one hand the different concepts are enriching the debate and broaden the **scope for solutions**.

On the other hand, the multitude can also be confusing. In the political arena concurrence can develop among adherents of different concepts.

Laudato si'

A Salutogenic Perspective on Promoting Health in the Encyclical



In this second part of my presentation I would like to put the response to the actual crises, in particular the health crises into a Christian faith perspective.

Dated 24 May 2015 and published in eight languages on 18 June 2015, Laudato Si' is the second encyclical by Pope Francis. It focuses on environmental and climate protection and also addresses social injustices and the depletion of natural resources. Considering the first part of my presentation you will agree that the crisis of social determinants of health and environmental threats are closely linked. I want to argue that Laudato Si' provides the perspectives to respond the post-pandemic health work.

I am sure many of you have studied the encyclical much more intensively than I have, in particular as I am neither a theologian nor an academic. I will explain as a public health physician, what I mean by a 'salutogenetic perspective' in a moment.

“De communi domo collenda”



Analysis
What happens to our house?!



Science and Wisdom
Cultural wealth to rehabilitate damage



Technology
The ambiguity between Creativity and Power

This is the structure of the encyclical.

- 1) Analysis, what happened to our house
- 2) The role of science and wisdom to rehabilitate damage
- 3) An appraisal of technology

“De communi domo collenda”



Holistic ecology
Common good and intergenerational justice



Orientation and action
Importance of dialogue and transparency



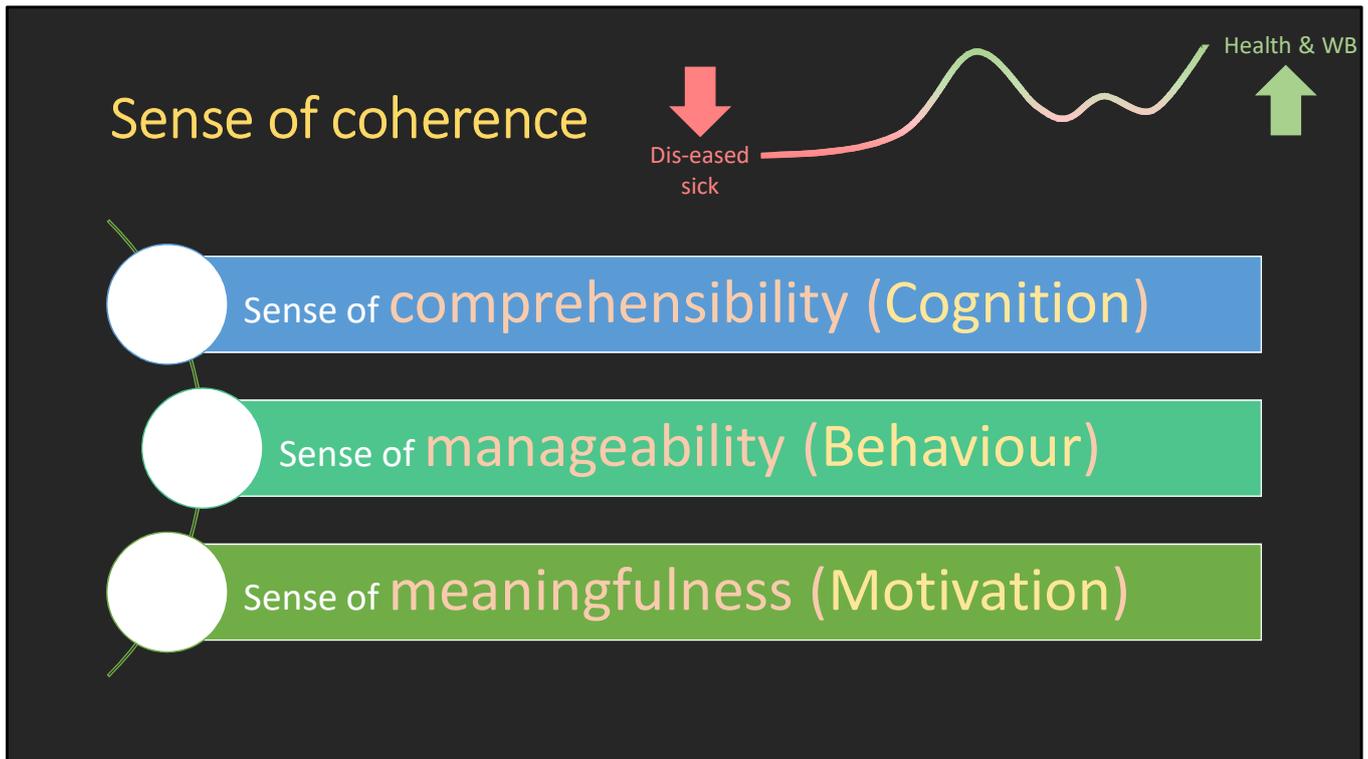
Alliance of man and environment
Capacities through education and spirituality

- 4) A view on holistic ecology
- 5) An framework of orientation and action
- 6) An appeal for the alliance of man and environment

Salutogenesis

I would like to apply an interpretation of Pope Francis' teaching that is also used by public health experts in other contexts, for example Lindström and Erikson from the Norwegian School of Public Health. They see salutogenesis as an approach to problem solving based on existing opportunities and resources. A solution succeeds with coherent interdisciplinary cooperation, something that clinical physicians still find more difficult than public health physicians.

The concept of salutogenesis was introduced into the social sciences and medicine by the American-Israeli medical sociologist Aaron Antonovsky (1923-1994). Antonovsky investigated the question of why do people remain healthy - despite many potentially health-threatening influences? How do they manage to recover from illness? What is special about people who do not become ill despite the most extreme stresses? Accordingly, the salutogenetic perspective primarily asks about the conditions of health and factors that protect health and contribute to invulnerability. People are not dichotomously healthy or ill, but work their way to a state of greater health. They achieve this through what he calls a sense of coherence.

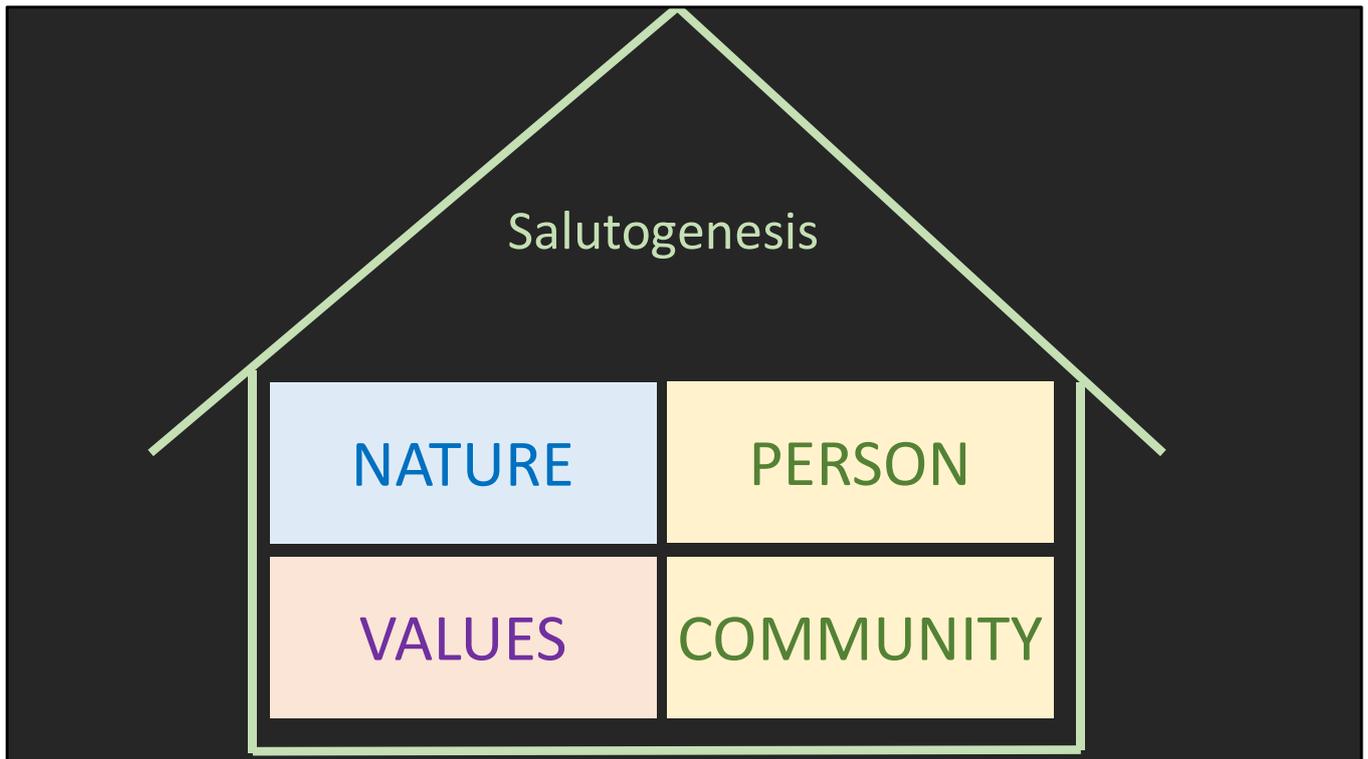


Salutogenesis sees health and well-being as an inner state of higher energy and order. Energies must be expended if the entropy of the system is not to increase and thus make them ill.

According to Antonovsky's research, this is achieved by people who 'understand the world', who can perceive and make practical use of available resources to maintain health, and who see meaning in life.

I found it helpful to see the Pope's teachings under this salutogenetic perspective, thus from the perspective of cognition, human behaviour and meaning-giving motivation.

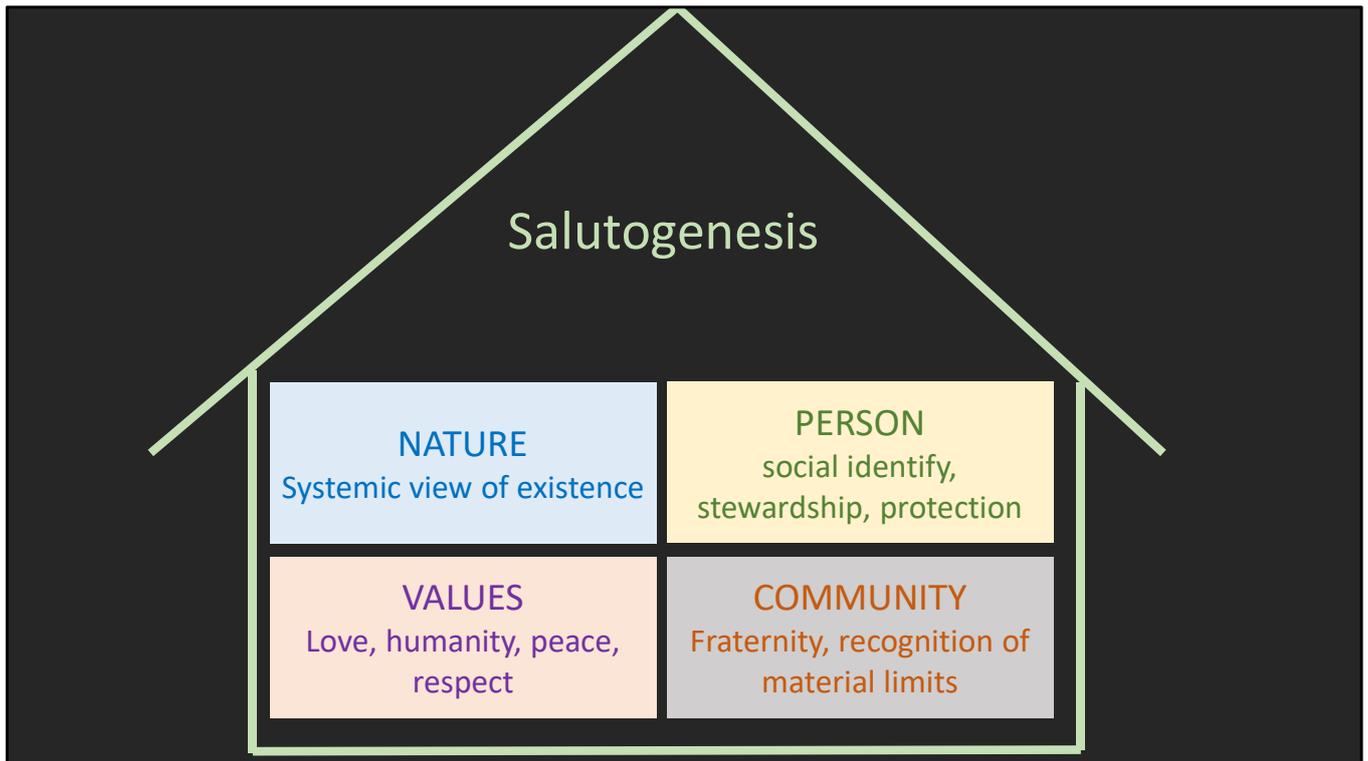
Pope Francis focuses on the question of the active factors for maintaining health. He expresses through his statements the danger that the mandate to humanity to preserve creation in the closed system of our world and our planet will come to a standstill in a state of entropy, at least for humanity.



The Pope's statements choose the context of the house. For me, this is an image for the self-contained system, the earth our planet. The psychologist Claude-Hélène Mayer describes the construction elements of this house from the perspective of salutogenesis as nature, person, values and community.

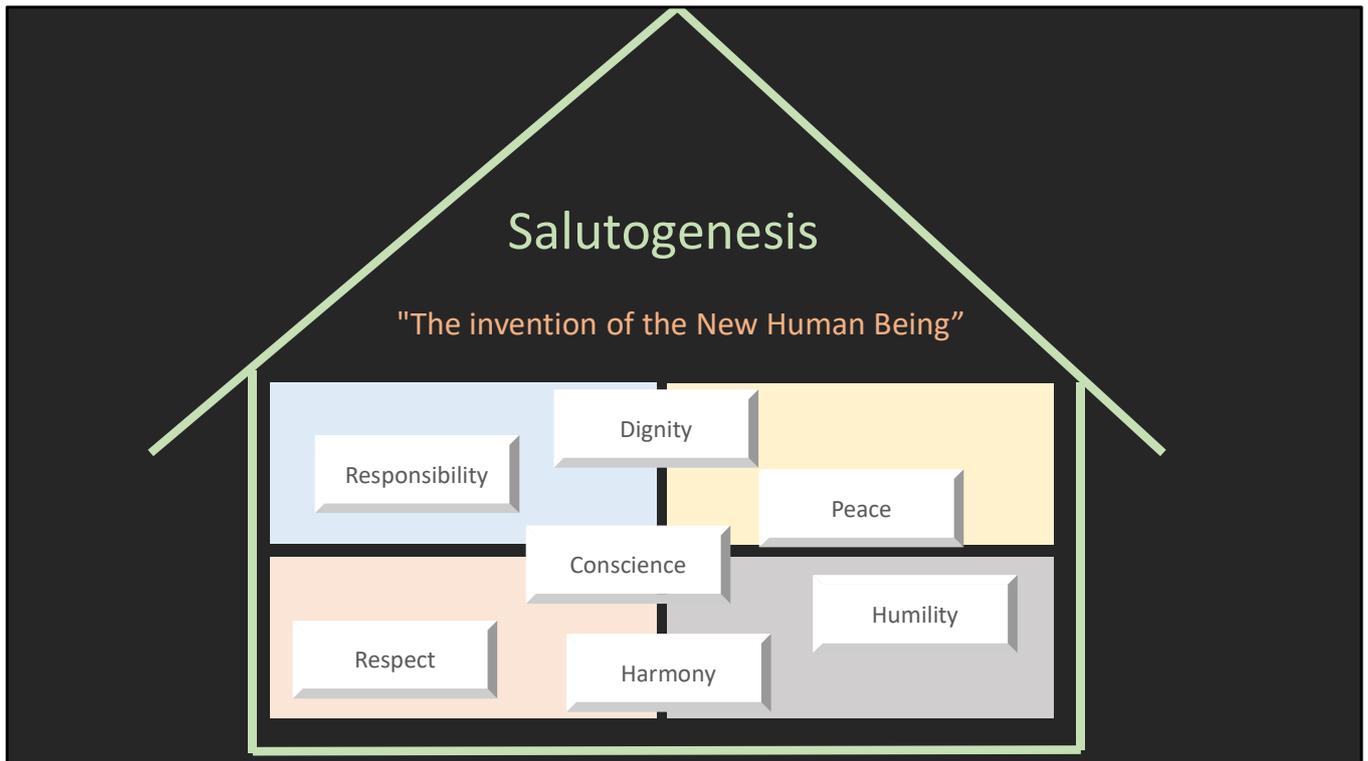
Claude-Hélène Mayer is Professor of Industrial and Organisational Psychology at the University of Johannesburg, South Africa. She participates in the Ignatian initiative for personality formation "Humanism Plus", co-ordinated by Tobias Zimmerman, SJ.

(<https://sinnundgesellschaft.de/autor/claude-helene-mayer/>) She researches on the psychology of work, organisation and culture. She deals with questions about the meaning of life and work, psychobiography, mental health and women in leadership from cultural perspectives. Her approaches come from directions of positive and existential psychology. She participates in the Ignatian initiative for personality formation "Humanism Plus". (Heinrich Pesch-Haus, Katholische Akademie Rhein-Neckar; Tobias Zimmermann SJ). Homepage: <https://sinnundgesellschaft.de/>



According to Claude-Hélène Meyer, the Pope understands nature as the basic structure, or system of our reality. According to the Pope, the ontology of our existence is the system “God - the Neighbour and the Earth”. What constitutes our personal-social identity lies in actions such as cultivating, guarding and protecting.

This can only succeed in a context of values. A healthy spirituality, humanity, love, creativity, peace, responsibility and respect for all living beings are mentioned. **We cannot be, remain or become healthy as individuals, but only in community.** According to Pope Francis, this can be achieved through fraternity, esteem, justice and above all through a demystification of the supposedly infinite material progress.



In the face of (QUOTE) "the globalisation of indifference" and an "**anthropocentric excess**", Pope Francis is concerned with the "**invention of the new man**", as it says in a press release on the publication of the encyclical.

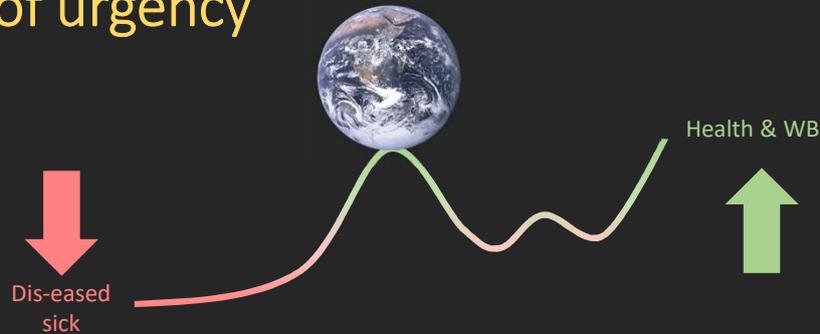
Qualities to overcome the crisis of self-destruction are responsibility, conscience, respect, dignity, peace, humility and the search for harmony.

Appraisal and Conclusion

A call for an imperative based on an ecologic ethic

I come to the final appraisal and will share my conclusions

Sense of urgency



Our **way of life** makes us sick and destroys the planet.

Healthy people only exist on a **healthy planet**.

We need to initiate a **civilizational turnaround** for planetary health.

The **One Health** policy approach can be but only a first step for a Global Health Compact.

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The challenges for the post-pandemic work for health and well-being of humans is formulated by science, some politicians and also Pope Francis. All teach us the sense of absolute urgency in this matter.

I quote the appeal of the German Government Scientific Advisory Council on Global Change and endorse it fully.

- Human health has improved worldwide in recent years, but not all people have benefited. We rapidly need to overcome the disparities.
- Our actual way of life including actual wars are making us all sick and destroy the planet.
- Healthy people only exist on a healthy planet.
- We must initiate a civilizational turnaround for planetary health.
- The **One Health** policy approach can be but only a first step for a Global Health Compact.

Planetary Health: “Ten commandments for survival of human kind”



Healthy relationships
between people and nature



Healthy habitats



Healthy planet



Healthy mobility



Healthy societies



Healthy economy



Healthy food systems



Healthy policies for planetary health and
Global Public Health Security



Healthy health systems



Education and science for planetary health

The scientific advisory council has published ten commandments for survival. I will not go into detail, but endorse and apply to all Church partners to take action to reformulate the Hippocratic Oath for health workers considering these commandments.

1. The air we breathe, the food we eat, the water we drink and the **biodiversity** that surrounds us determine our health.
2. Humans have altered 77% of the land surface and 87% of the oceans, causing massive **species extinctions**.
3. Currently, the number of people living in poverty is rising again worldwide due to the Covid 19 pandemic, violent conflicts and climate change.
4. The way we produce food and feed ourselves **destroys natural habitats** and biodiversity, pollutes air, water and soil, produces greenhouse gases, tortures animals and also directly harms our own health - e.g. through antibiotic resistance, nitrate in groundwater and malnutrition.
5. Meanwhile, lifestyle-related **chronic diseases** account for the largest burden of disease in most countries. In developing countries, **poverty-related infectious diseases** remain common, placing a double burden on health systems.
6. Today's **cities** tend to be designed in ways that promote heat islands, air pollution and lack of physical activity. Urban spaces are also central to addressing the planetary crisis due to their high demand for resources and energy.
7. The **transport sector** is responsible for a significant share of global greenhouse gas

emissions and energy consumption, and leads to air pollution and land sealing.

8. **Resource-intensive** production and consumption patterns are major drivers of climate change and ecosystem degradation. Companies' and consumers' acceptance of responsibility for the environmental and health impacts of their actions is insufficient - especially in view of supply and value chains across borders.
9. The close relationship between health and the environment requires governance strategies/practices, instruments and institutions that systemically interlink both protected goods and establish intergenerational justice.
10. Rethinking and changing everyday **individual and collective behaviour** patterns in the sense of sustainable development and planetary health require social awareness raising.



What is the role of our Christian Church and for health workers rooted in Christian faith?

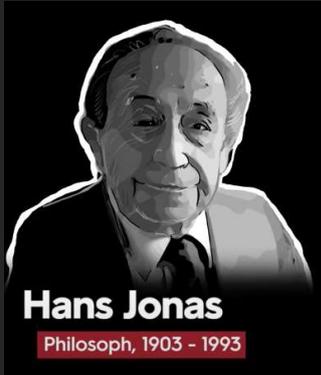
Here are my views on this question:

- Our Church and we as Christians must 're-engage' in **dialogue with science** on an equal footing to define an ethical framework for technological progress and scientific knowledge.
- Our Church and we as Christians must be an **advocate** for the marginalized and disadvantaged and call for access, acceptance, social protection or good governance.
- Our Church is already **leading by example** in caring for a healthy planet, sustainability and intergenerational justice. But it must become a constant habit questioning and testing itself.



Instead of feeling powerful, privileged or the crown of creation, I think it is very reasonable to feel vulnerable, dependent or part of creation and to abandon any anthropocentric position of power.

Plea for a new imperative for action



"Act in such a way
that the effects of your actions
are not destructive
of the future possibility of such life"

Hans Jonas

2021, ZDF-3SAT; Scobel;
Besser Leben durch Eigenverantwortung

I personally feel inspired by the, the philosopher Hans Jonas. He postulated in 1979 an **ecological imperative**: "Act in such a way that the effects of your actions are compatible with the permanence of genuine human life on earth" or, negatively, "Act in such a way that the effects of your actions are not destructive of the future possibility of such life". -
> Future Ethics



A logical consequence of this consideration is to extend the theological maxim of the Option for the Poor to the new dimension of Option for the Planet, which of course includes the original Option. Abandoning anthropocentric positions implies that we grant essential basic rights to nature at least to items of common good and value like air, water, ground or bioreserves. These items must get an elementary right to be protected and to become a common good, like human rights. This is further explained by Global Bioethics.

This is an obligation for and expression of Christianity. Isn't it the lesson to be learned by Laudato Si'?

THANK YOU

Thank you for attention. Thank you to Aris Miranda for having entrusted me with this lecture.

I deliberately wanted to instigate, not in a negative sense, but to initiate the much-needed discussion.

I look forward to your reactions.