

# TURKIC STATES HEALTH ORGANIZATION

## AGENDA ITEM:

**Precautions that can be taken against viruses which are a danger for the human kind**

**CO-USG: YIĞİT CİRİM**

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## I. Letter From Secretary General

Dear Participants,

I welcome you all to the Model Organization of Turkic States 2025 conference.

For the second time, this conference will provide an opportunity to embody and simulate the roles of leaders, diplomats, and international decision-makers of the Turkic world.

Throughout this experience, you will develop fundamental skills such as critical thinking, negotiation, and public speaking. Additionally, you will gain a deeper understanding of current global issues, become more familiar with the structure of the Turkic States Organization, and acquire knowledge that will serve you in your academic and professional endeavours through research on our shared history.

Our academic team is here to enhance and facilitate your experience in the beautifully selected committees by our Secretariat, ensuring an unforgettable conference. I hope that your valuable ideas presented at the conference will contribute to solving both present and future problems and provide you with new perspectives.

Thank you for being part of this journey.

Sincerely,

Muhammet Gökhan YILDIZ

Secretary General of the Model Organization of Turkic States

## II. Letter From Co-Under Secretary General

Dear Delegates,

I welcome all of you to MTDT'25. It's a big honor to serve as Co- Under Secretary General of the Health Committee, which is a committee that you will enjoy a lot and think furtherly while taking actions.

My name is Yiğit Cirim and I am a high school student at Antalya Anatolian High School. I can not express my feelings for finding myself in that amazing academic team. Furthermore, the dear executive team worked for you to have good memories and experience. You can be sure of that and also we worked hard at night and in the morning in order to make you experience a wonderful committee with my teammate, my sister and your dear Co-Under Secretary General Yasemin Dilek.

Last but not least, **I highly recommend you to read the Study Guide** which we prepared for you by mixing our nights and mornings with Yasemin. It would provide you the best understanding for the topic and show you possible ways that you will follow. **If you have any and any and any kind of questions about the committee or problems with the guide please do not hesitate to get contact with me via my number:**

**0542 180 48 70**

Best regards,

Yigit CİRİM

### III. Letter From Co-Under Secretary General

Dear participants,

I welcome you all with a warm hug to the second annual session of MTDT'25. It is an honor to be a Co-Under Secretary General of this prestigious conference which I feel very hopeful and grateful about. I am looking forward to this fun and amazing committee with my whole heart.

I am Yasemin Dilek, an 11th grader in Adem Tolunay Anatolian High School. Words will not be enough for my gratitude for being in this academic team. Our Executive team worked really hard for this conference, so I am thanking them in advance for the fun we are going to have during the conference. Secondly, my dear little brother, one of my closest friends, your Co-Under Secretary General Yiğit Cirim; we had hard times because of our schedules but we managed to get ourselves together once more while working together, so I thank him for his determination.

And finally, I would like to remind all my precious delegates that **you are required to read the Study Guide** thoroughly and fight for your position in the committee to achieve our goal of finding a conclusion for the epidemics that might affect the Turkic world. If you have any kind of question marks on your head, feel free to contact us without any hesitation.

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*May the best one win,*

#### **IV. Introduction of the Organisation of Turkic States**

The Organization of Turkic States (OTS), formerly called the Turkic Council or the Cooperation Council of Turkic Speaking States, is an intergovernmental organization comprising all but one of the internationally recognized Turkic sovereign states: Azerbaijan, Kazakhstan, Kyrgyzstan, Turkey, and Uzbekistan; while Hungary, Turkmenistan and Northern Cyprus are observers. Its overarching aim is promoting comprehensive cooperation among the Turkic people.

Nominally, the Preamble of the Nakhchivan Agreement reaffirms the will of Member States to adhere to the purposes and principles enshrined in the Charter of the United Nations, and defines the main objective of the Organization of Turkic States as further deepening comprehensive cooperation among Turkic Speaking States, as well as making joint contributions to peace and stability in the region and in the world. Member States have nominally confirmed their commitment to democratic values, human rights, the rule of law, and principles of good governance.

#### **V. Introduction of the Health Committee**

The Health Committee of the Turkic States Organization (Turkic Council), formed to enhance healthcare cooperation, plays a vital role in addressing public health challenges across its member states: Azerbaijan, Kazakhstan, Kyrgyzstan, Turkey, and Uzbekistan. Established in 2009, the committee focuses on health crisis management, capacity building, joint research, and policy harmonization. During the COVID-19 pandemic, for example, it facilitated the exchange of medical resources among member countries. It also organizes training programs and workshops to share best practices in disease prevention and healthcare management. In addition, the committee promotes joint research on regional health issues such as cardiovascular diseases and diabetes. By aligning health policies across member states, it ensures consistent care standards and enables cross-border healthcare services. Public health awareness campaigns on vaccination, nutrition, and mental health are also a key aspect of its work. Moreover, the committee collaborates with international organizations like the WHO to access additional expertise and resources. Recent efforts include developing a joint framework for controlling infectious diseases and addressing mental health concerns. Ultimately, the committee plays a central role in strengthening healthcare systems, fostering regional collaboration, and improving health outcomes across the Turkic-speaking world.

## **VI. Understanding the Agenda Item : Precautions That Can be Taken Against Viruses Which Are a Danger for the Human Kind**

Deadly viruses have the potential to cause severe harm to human population, affecting not only public health but also social, economic, and political stability. When highly contagious viruses spread, they can lead to rapid outbreaks that overwhelm healthcare systems, causing a high number of infections and fatalities.

The primary threat posed by deadly viruses is their ability to mutate, making them harder to control and predict. This means that vaccines, treatments may become less effective over time, complicating efforts to decrease the spread. Additionally, some viruses can lead to long-term health complications for survivors, further burdening the healthcare systems.

Economically, viral outbreaks can cause significant losses. Lockdowns and travel restrictions disrupt industries and supply chains, leading to job losses and financial instability of millions. The impact is especially severe in countries with weaker healthcare systems or limited resources to respond effectively.

The psychological effect is also considerable. Fear, anxiety, and grief spread alongside the virus, affecting mental health on a larger scale. Social distancing measurements, isolation, and the loss of loved ones can lead to a rise in mental health issues, such as depression and anxiety, which persist long after the physical health crisis finishes.

In conclusion, deadly viruses are not only a threat to human health but can also have far-reaching effects on society as a whole. Their potential to disrupt lives, economies, and mental well-being highlights the importance of global preparedness, swift response, and cooperation in preventing and managing such health crises.

## VII. Deep History of Fatal Epidemics

### i) Spanish Flu

One of the most monumental of twentieth-century epidemics, the “Spanish flu” influenza pandemic in 1918, infected 25–30% of world’s population and resulted in death of almost 40 million people. The world had seen flu epidemics before. The influenza epidemic occurred in Europe in 1580s, started in Russia and spread to Continental Europe and Africa followed by another epidemic in 1743.<sup>5</sup> A more devastating flu epidemic happened in 1830–1833. The term “Spanish flu” was a misnomer because the disease did not originate in Spain. The disease was rampant in Germany, Britain, France, and the United States; wartime censors minimized early reports of illness and mortality in these countries. During the 1918 flu pandemic, Spain’s king, Alfonso XIII (1886–1931), became very ill. His illness and recovery from the disease was reported to the world because Spain was neutral and was not under wartime censorship restrictions, while outbreaks of flu in other belligerent countries were concealed. This created the wrong impression that Spain was most affected and caused the pandemic dubbed as the “Spanish flu.” Even President Woodrow Wilson (1856–1924) reportedly contracted the flu in early 1919 while negotiating the Treaty of Versailles, which ended World War I. The epidemic appeared in two phases. The first one appeared in late spring of 1918, known as the “3-day fever,” without any warning and resulted in few deaths and victims recovered after a few days. The typical symptoms of the flu were chills, fever, and fatigue resulting in a low number of deaths. During that same year in the fall, however, a highly contagious and deadly wave of influenza emerged. Victims died within hours or days of symptom onset. Their skin turned blue, and patients’ lungs filled with fluids. The flu did not discriminate between rural and urban areas ranging from densely populated East Coast to sparsely populated parts of Alaska. Young adults were among the hardest hit group, a group that usually remains unaffected by this type of epidemic. About 25% of the United States was affected within 1 year and resulted in a drop of 12 years in United States life expectancy.

### ii) Black Death

Black Death, pandemic that ravaged Europe between 1347 and 1351, taking a proportionately greater toll of life than any other known epidemic or war up to that time.

The Black Death is widely believed to have been the result of plague, caused by infection with the bacterium *Yersinia pestis*. Modern genetic analyses indicate that the strain of *Y. pestis* introduced during the Black Death is ancestral to all extant circulating *Y. pestis* strains known to cause disease in



humans. Hence, the origin of modern plague epidemics lies in the medieval period. Other scientific evidence has indicated that the Black Death may have been viral in origin.

### **Cause and outbreak**

Having originated in China and Inner Asia, the Black Death decimated the army of the Kipchak khan Janibeg while he was besieging the Genoese trading port of Kaffa (now Feodosiya) in Crimea (1347). With his forces disintegrating, Janibeg used trebuchets to catapult plague-infested corpses into the town in an effort to infect his enemies. From Kaffa, Genoese ships carried the epidemic westward to Mediterranean ports, whence it spread inland, affecting Sicily (1347); North Africa, mainland Italy, Spain, and France (1348); and Austria, Hungary, Switzerland, Germany, and the Low Countries (1349). A ship from Calais carried the plague to Melcombe Regis, Dorset, in August 1348. It reached Bristol almost immediately and spread rapidly throughout the southwestern counties of England. London suffered most violently between February and May 1349, East Anglia and Yorkshire during that summer. The Black Death reached the extreme north of England, Scotland, Scandinavia, and the Baltic countries in 1350.

There were recurrences of the plague in 1361–63, 1369–71, 1374–75, 1390, and 1400. Modern research has suggested that, over that period of time, plague was introduced into Europe multiple times, coming along trade routes in waves from Central Asia as a result of climate fluctuations that affected populations of rodents infested with plague-carrying fleas.

The rate of mortality from the Black Death varied from place to place: whereas some districts, such as the duchy of Milan, Flanders, and Béarn, seem to have escaped comparatively lightly, others, such as Tuscany, Aragon, Catalonia, and Languedoc, were very hard-hit. Towns, where the danger of contagion was greater, were more affected than the countryside, and within the towns the monastic communities provided the highest incidence of victims. Even the great and powerful, who were more capable of flight, were struck down: among royalty, Eleanor, queen of Peter IV of Aragon, and King Alfonso XI of Castile succumbed, and Joan, daughter of the English king Edward III, died at Bordeaux on the way to her wedding with Alfonso's son. Canterbury lost two successive archbishops, John de Stratford and Thomas Bradwardine; Petrarch lost not only Laura, who inspired so many of his poems, but also his patron, Giovanni Cardinal Colonna. The papal court at Avignon was reduced by one-fourth. Whole communities and families were sometimes annihilated.

### **Effects and significance**

The consequences of this violent catastrophe were many. A cessation of wars and a sudden slump in trade immediately followed but were only of short duration. A more lasting and serious consequence was the drastic reduction of the amount of land under cultivation, due to the deaths of so many labourers. This proved to be the ruin of many landowners. The shortage of labour compelled them to substitute wages or money rents in place of labour services in an effort to keep their tenants. There was also a general rise in wages for artisans

and peasants. These changes brought a new fluidity to the hitherto rigid stratification of society.

The psychological effects of the Black Death were reflected north of the Alps (not in Italy) by a preoccupation with death and the afterlife evinced in poetry, sculpture, and painting; the Roman Catholic Church lost some of its monopoly over the salvation of souls as people turned to mysticism and sometimes to excesses.



Anti-Semitism greatly intensified throughout Europe as Jews were blamed for the spread of the Black Death. A wave of violent pogroms ensued, and entire Jewish communities were killed by mobs or burned at the stake en masse.

The economy of Siena received a decisive check. The city's population was so diminished that the project of enlarging the cathedral was abandoned, and the death of many great painters, such as Ambrogio and Pietro Lorenzetti, brought the development of the first Siennese school to a premature end.

In England the immediate effects of the epidemic of 1349 seem to have been of short duration, and the economic decline which reached its nadir in the mid-15th century should probably be attributed rather to the pandemic recurrence of the plague.

### iii) Tuberculosis

Tuberculosis has claimed its victims throughout much of known human history. It reached epidemic proportions in Europe and North America during the 18th and 19th centuries, earning the sobriquet, "Captain Among these Men of Death." Then it began to decline. Understanding of the pathogenesis of tuberculosis began with the work of Théophile Laennec at the beginning of the 19th century and was further advanced by the demonstration of the transmissibility of *Mycobacterium tuberculosis* infection by Jean-Antoine Villemin in 1865 and the identification of the tubercle bacillus as the etiologic agent by Robert Koch in 1882. Clemens von Pirquet developed the tuberculin skin test in 1907 and 3 years later used it to demonstrate latent tuberculous infection in asymptomatic children. In the late 19th and early 20th centuries sanatoria developed for the treatment of patients with tuberculosis. The rest



provided there was supplemented with pulmonary collapse procedures designed to rest infected parts of lungs and to close cavities. Public Health measures to combat the spread of tuberculosis emerged following the discovery of its bacterial cause. BCG vaccination was widely employed following World War I. The modern era of tuberculosis treatment and control was heralded by the discovery of streptomycin in 1944 and isoniazid in 1952.

#### iv) COVID-19

The coronavirus, which first emerged on December 1, 2019, in Wuhan, China, spread to Europe, America, and all other regions of the world in 2020 and continues to have an impact today. On March 11, 2020, it was declared a global pandemic by the World Health Organization. The virus, which can be transmitted from person to person and survive on inanimate objects for varying periods, presents symptoms such as high fever, difficulty breathing, dry cough, and sore throat. Particularly deadly for individuals with weakened immune systems and the elderly, the most recent data as of April 8, 2023, shows 684,906,699 confirmed cases worldwide, 657,635,742 recoveries, and 6,837,598 deaths caused by the virus.

When compared to pandemics in history, Covid-19 is considered one of the most serious outbreaks of the last century. Many conspiracy theories have emerged regarding the virus, including its potential to be a biological weapon. However, none of these claims have been proven true or supported by concrete evidence.

Covid-19 remained highly impactful for approximately 3-4 years and caused the death of many individuals. However, with the development of vaccines and the majority of the world's population contracting and recovering from the disease, immunity has been achieved. As a result, the impact of the virus has significantly diminished in recent times.

#### **The Emergence of the Covid-19 Pandemic and Its Global Spread**

On December 31, 2019, the World Health Organization's China Country Office reported pneumonia cases of unknown cause in the city of Wuhan, Hubei Province, China. On January 5, 2020, a new coronavirus, previously unidentified in humans, was classified. Initially referred to as 2019-nCoV, the disease was later named Covid-19. After emerging in China, it rapidly spread worldwide, affecting the entire globe in just three months.

#### **The Global Damages Caused by the Covid-19 Pandemic**

##### **a) Economic Damages:**

The Covid-19 pandemic caused one of the most significant economic contractions in modern history, affecting even developed countries. According to the International Monetary Fund (IMF), the U.S. economy contracted by 3.4%, and the Eurozone economy shrank by 6.6% due to the pandemic. However, China's economy grew by 2.3%, and Turkey's by 1.7% in

2020. The International Labour Organization (ILO) reported that globally, between 5 and 25 million people lost their jobs during this period.

To mitigate the effects of this crisis, global economies took measures such as providing liquidity support to markets, deferring tax and loan payments for businesses, and launching financial aid programs for small and medium-sized enterprises (SMEs). International financial institutions like the IMF, European Central Bank (ECB), and World Bank also announced credit support packages. For instance, the ECB introduced a €1.35 trillion support package in June 2020, while the World Bank allocated \$12 billion to assist developing countries in combating the coronavirus. IMF Managing Director Kristalina Georgieva announced a \$50 billion fund for Covid-19 response efforts.

### **b) Psychosocial Damages:**

Pandemics are not only medical phenomena but also social events that affect individuals and communities on many levels, causing disruptions. As the perceived threat of infectious diseases increases, people experience panic and stress, leading to behaviors unlike those seen in normal circumstances. Managing the emotional and psychosocial impacts of the pandemic is crucial for individuals and society.

Key psychosocial issues identified in the book *The Psychology of Pandemics* include:

1. **Panic Buying:** People stockpiling food and cleaning supplies due to fear of infection and mortality risk.
2. **Discrimination and Stigmatization:** Racist attitudes toward groups believed to be the source of the virus or responsible for its global spread.
3. **Unnecessary Use of Healthcare Systems:** Health concerns leading individuals to overwhelm medical systems, potentially delaying treatment for genuinely ill patients.
4. **Resistance to Restrictions:** Difficulty adhering to isolation measures, social distancing, and stay-at-home orders, resulting in noncompliance.
5. **Misinformation and Conspiracy Theories:** An increase in false claims, such as vaccines containing microchips or the virus being engineered to reduce global population.

### **c) Damages to Education:**

The pandemic severely disrupted education globally, impacting over 1.5 billion students, 63 million teachers, and numerous support staff due to lockdowns and school closures. The lack of access to computers, internet, and online platforms in many countries limited the feasibility of digital classrooms. Even students with digital access missed valuable interactions with teachers and peers. Online education during the crisis served only as a temporary substitute, unable to replace the benefits of physical presence.

The closure of schools also affected health support, as approximately 368 million children globally rely on school meal programs. Prolonged isolation and the pandemic's impact on families further harmed students' mental health. Additionally, young people disconnected from schools exhibited riskier behaviors, and adolescent fertility rates increased.

The effectiveness of online education during school closures is debatable. Many students faced distractions at home and engaged in non-educational activities during classes. Providing the necessary materials for online education posed a financial burden on families, exacerbating inequalities among students. To address these challenges, governments' financial support for families and students was vital for ensuring educational continuity and safeguarding future prospects.

In conclusion, it is critical for states to establish robust economic and social infrastructures to respond effectively to potential future pandemics.

## **What Is HIV?**

HIV (*human immunodeficiency virus*) is a virus that attacks cells that help the body fight infection, making a person more vulnerable to other infections and diseases. It is spread by contact with certain bodily fluids of a person with HIV, most commonly during unprotected sex (sex without a condom or HIV medicine to prevent or treat HIV), or through sharing injection drug equipment.

If left untreated, HIV can lead to the disease AIDS (*acquired immunodeficiency syndrome*).

The human body can't get rid of HIV and no effective HIV cure exists. So, once you have HIV, you have it for life.

Luckily, however, effective treatment with HIV medicine (called antiretroviral therapy or ART) is available. If taken as prescribed, HIV medicine can reduce the amount of HIV in the blood (also called the viral load) to a very low level. This is called viral suppression. If a person's viral load is so low that a standard lab can't detect it, this is called having an undetectable viral load. People with HIV who take HIV medicine as prescribed and get and keep an undetectable viral load can live long and healthy lives and will not transmit HIV to their HIV-negative partners through sexual intercourse.

In addition, there are effective methods to prevent getting HIV through sex or drug use, including pre-exposure prophylaxis (PrEP), medicine people at risk for HIV take to prevent getting HIV from sex or injection drug use, and post-exposure prophylaxis (PEP), HIV medicine taken within 72 hours after a possible exposure to prevent the virus from taking hold. Learn about other ways to prevent getting or transmitting HIV.

## What Is AIDS?

AIDS is the late stage of HIV infection that occurs when the body's immune system is badly damaged because of the virus.

In the U.S., most people with HIV do not develop AIDS because taking HIV medicine as prescribed stops the progression of the disease.

A person with HIV is considered to have progressed to AIDS when:

- the number of their CD4 cells falls below 200 cells per cubic millimeter of blood (200 cells/mm<sup>3</sup>). (In someone with a healthy immune system, CD4 counts are between 500 and 1,600 cells/mm<sup>3</sup>.) OR
- they develop one or more opportunistic infections regardless of their CD4 count.

Without HIV medicine, people with AIDS typically survive about 3 years. Once someone has a dangerous opportunistic illness, life expectancy without treatment falls to about 1 year. HIV medicine can still help people at this stage of HIV infection, and it can even be lifesaving. But people who start HIV medicine soon after they get HIV experience more benefits—that's why HIV testing is so important

**Prevention:** HIV is a preventable disease. Reduce the risk of HIV infection by:

- using a male or female condom during sex
- being tested for HIV and sexually transmitted infections
- having a voluntary medical male circumcision
- using harm reduction services for people who inject and use drugs.

Doctors may suggest medicines and medical devices to help prevent HIV infection, including:

- antiretroviral drugs (ARVs), including oral Pre-Exposure Prophylaxis (PrEP) and long acting products
- dapivirine vaginal rings
- injectable long acting cabotegravir.

ARVs can also be used to prevent mothers from passing HIV to their children.

People taking antiretroviral therapy (ART) and who have no evidence of virus in the blood will not pass HIV to their sexual partners. Access to testing and ART is an important part of preventing HIV.

## **VIII. PRECAUTIONS THAT TAKEN BY TURKIC STATES IN COVID-19 PANDEMIC**

### **a)Turkiye**

Turkey encountered the COVID-19 pandemic on March 11, 2020. Since that day, it has gradually started implementing measures, but the disease spread rapidly. Although the measures reduced the speed of the spread to some extent, they could not completely stop the disease. The measures taken in Turkey can be summarized as follows:

#### **Restrictions on Entertainment, Arts, Culture, and Social Activities:**

As of 00:00 on March 17, 2020, the activities of theaters, cinemas, performance centers, concert halls, engagement/wedding halls, restaurants/cafes with music, casinos, taverns, coffeehouses, cafeterias, internet cafes, gaming salons, all indoor playgrounds (including those inside malls and restaurants), tea gardens, association clubs, amusement parks, swimming pools, Turkish baths, saunas, thermal spas, massage parlors, spas, and sports centers were temporarily suspended.

#### **Restriction on Barbers, Hairdressers, and Beauty Centers:**

According to a circular issued by the Ministry of Interior on March 21, 2020, the activities of barbers, hairdressers, and beauty centers were temporarily suspended starting from 18:00 on the same date, due to the close physical contact involved and the gathering of people.

#### **Restrictions on Restaurants and Cafes:**

A circular issued by the Ministry of Interior on March 21, 2020, mandated that, starting at 24:00 on the same date, all restaurants, cafes, patisseries, and similar establishments, whether serving alcohol or not, could only provide takeaway or delivery services without allowing customers to sit inside.

#### **Curfew for Individuals Aged 65 and Above and Those with Chronic Illnesses:**

A circular issued by the Ministry of Interior on March 21, 2020, prohibited individuals aged 65 and above, as well as those with weakened immune systems and chronic illnesses, from going outside after 24:00 on March 21, 2020. An additional circular dated March 22, 2020, outlined exceptions to the curfew for these groups.

#### **Weekend Curfew in 31 Provinces:**

On April 10, 2020, the Ministry of Interior declared a weekend curfew in 30 metropolitan provinces (Adana, Ankara, Antalya, Aydın, Balıkesir, Bursa, Denizli, Diyarbakır, Erzurum, Eskişehir, Gaziantep, Hatay, Istanbul, Izmir, Kahramanmaraş, Kayseri, Kocaeli, Konya,

Malatya, Manisa, Mardin, Mersin, Muğla, Ordu, Sakarya, Samsun, Şanlıurfa, Tekirdağ, Trabzon, Van) and Zonguldak. This curfew was effective from 24:00 on April 10, 2020, to 24:00 on April 12, 2020.

### **Economic Measures:**

To mitigate the economic impact of the pandemic, Turkey implemented several measures to support businesses:

- Deadlines for income tax and corporate tax declarations and payments were extended.
- Payment of withholding tax, VAT, and premiums for sectors affected by the pandemic was postponed for six months.
- Loan principal and interest payments of firms facing cash flow disruptions were deferred for three months, with additional financing support provided for up to six months without repayment.
- All companies affected by the pandemic, provided they did not reduce the number of employees, were offered "Employment Continuation Credit Support" ranging from 10 million to 100 million Turkish Liras.

Among the 20 countries with the highest number of cases, except for Brazil, Switzerland, and Israel, all provided tax deferral facilities to the private sector. In most countries, financial aid was provided to damaged businesses, and credit and financing support were offered. Apart from Turkey, countries like Spain, France, Germany, China, Iran, Russia, the Netherlands, Switzerland, and India provided credit support to firms.

## **b)Azerbaijan**

### **Capacity Expansion:**

The Azerbaijani government initially anticipated that hospital capacities would be insufficient and thus undertook capacity expansion efforts. According to a decree signed by the President of the Republic of Azerbaijan on April 7, 2020, 11 modular hospitals dedicated to COVID-19 patients were constructed within six months as part of additional measures. These modular hospitals provided an additional 4,100 hospital beds. Subsequently, seven more modular hospitals were built.

### **Social Measures:**

Azerbaijan did everything possible to ensure that its citizens did not suffer socially. Measures were taken to prevent unfair dismissals or reductions in the number of jobs. By creating new employment opportunities, 50,000 people were employed in public sector roles. Payments

were made to 600,000 unemployed citizens. The coverage of unemployment insurance was expanded to include an additional 20,000 people. Annual tuition fees for students from socially and economically vulnerable families were covered by the state budget (amounting to 24 million USD). Discounts were also provided for electricity usage.

### **Economic Measures:**

A comprehensive Action Plan was adopted and successfully implemented to ensure sustainable development, including mitigating the negative effects of the pandemic. Measures included:

- Direct financial support (47 million USD) to 300,000 individual entrepreneurs in the affected sectors of the economy.
- Financial assistance (165 million USD) to vital passenger transportation systems.
- Temporary exemptions from customs duties on essential food and medical supplies needed by the population.
- Salary increases of 3 to 5 times for primary healthcare workers during the pandemic.

### **Educational Measures:**

To curb the spread of COVID-19, all educational institutions in Azerbaijan were temporarily closed from March 2, 2020. Schools and educational facilities reopened gradually starting on September 15, with primary schools opening first, followed by other classes after October 1. Live and interactive lessons were provided on the Ministry of Education's online platform. TV programs covering the curriculum in detail were also broadcast.

The "Stay Home, Create at Home" campaign was launched, including a virtual competition among school students through STEAM classes to motivate and encourage creativity. Online extracurricular activities were also provided for schoolchildren, including a chess tournament, art competitions (painting, singing, playing musical instruments), and the "Scientist of the Day" program in collaboration with NASA.

## **c) Kazakhstan**

### **Increasing the Number and Capacity of Medical Facilities:**

In 2020, a total of 16 modular infectious disease hospitals were constructed and put into operation in cities across Kazakhstan. Additionally, 44 outpatient facilities, including 30 in rural areas, were reconstructed. Three infectious disease hospitals, 64 oxygen stations, and 63 outpatient facilities were brought into operation. Outpatient and polyclinic organizations were activated. Measures were taken to provide the population with medicines, medical equipment, and personal protective equipment.

### **Measures for Healthcare Personnel:**

All healthcare workers were mobilized to combat the new type of coronavirus infection. It became evident that the efforts of healthcare workers not only had a direct impact on lives but also on social and economic stability. Special attention was paid to social support measures in the form of financial aid for healthcare workers involved in pandemic response measures. Allowances were paid to all employees directly engaged in COVID-19 response, categorized into three risk groups. Additionally, under the President's directives, the Ministry of Health ensured a gradual increase in doctors' salaries, raising them by 2.5 times. Social support for doctors was provided through accommodations, compensation for public utilities, communication services, social payment of rent, allocation of places in kindergartens, and employment of spouses. Grants for specialized training were provided within local budgets, depending on the characteristics and needs of each region. A distribution system was implemented for young specialists.

### **Production and Application of the Domestic Vaccine:**

On March 23, 2020, the Republican State Enterprise "Research Institute for Biological Safety Problems" under the Ministry of Education and Science of the Republic of Kazakhstan began developing a vaccine upon the directive of the President of Kazakhstan. On May 9, 2020, scientists presented the domestic inactivated vaccine, QazCovid-in, based on preclinical results. QazCovid-in was included in the World Health Organization's list of candidate vaccines against the coronavirus. According to the Phase I and II clinical trial results of QazCovid-in, good tolerance and safety were observed with single and double intramuscular administrations. The vaccine demonstrated high immunogenic activity against the SARS-CoV-2 virus, which became more pronounced after the second dose. On December 19, 2020, Phase III clinical trials of the domestically developed inactivated QazCovid-in began, and these trials were completed in April 2021. Additionally, scientists produced another vaccine, the subunit vaccine QazCov-P.

### **d) Kyrgyzstan**

#### **General Situation and Measures:**

On March 18, 2020, the test results of three citizens returning from a pilgrimage in Saudi Arabia were positive. Kyrgyzstan implemented comprehensive measures to prevent the spread of the virus immediately after the first cases. Starting from March 22, 2020, checkpoints were established in every city; cafes, shopping malls, and other entertainment venues were temporarily closed; only essential services like markets, pharmacies, and medical centers were allowed to remain open. Worship in places of mass gathering, such as mosques and churches, was also banned. People were advised to maintain a social distance of 1 meter, avoid physical activities requiring contact like handshakes, and wear masks.

The government closed the country's borders to all except its citizens and banned the export of medicines, medical equipment, some food products, and other essential goods. Except for

healthcare workers, all other employees were required to work from home. Education in universities and schools was suspended. Patients with a fever below 38°C were treated at home and were not admitted to hospitals due to capacity shortages.

One out of every four new cases began to be healthcare workers, and the healthcare infrastructure started to collapse. To combat this, the government opened new hospitals. Many medical students were mobilized to address the shortage of healthcare workers.

### **e) Uzbekistan**

#### **General Measures:**

In a briefing held on March 15, 2020, the spread of COVID-19 was officially announced. As a result, starting from March 16, 2020, Uzbekistan terminated cross-border traffic with foreign countries as well as railway, road, and air transportation through its local railway company (JSC). A 14-day quarantine became mandatory following the announcement of a charter flight program for Uzbek expatriates. Other measures included canceling Navruz (a local public holiday scheduled for March 21) and halting local cinema activities. Students from local medical universities were invited to provide preventive consultations with residents in regional areas.

#### **Capacity Increase:**

Believing that the number of existing hospitals and healthcare facilities was insufficient, Uzbekistan announced plans to construct a hospital with a capacity of 10,000 beds dedicated solely to COVID-19 patients. Additionally, local student accommodations were converted into quarantine centers for residents of Uzbekistan. Due to the lack of internet infrastructure, almost no online education took place, leaving students at home.

#### **Mask Usage:**

To ensure people wore face masks, authorities implemented a fine system starting from March 25, 2020. The fines included an initial warning, followed by a fine of 223,000 som for a second offense and 669,000 som for a third offense. Considering the average income level of approximately 2.5 million som at that time, the proposed fines were considered highly punitive for local citizens.

## **IX. The Effects of Epidemics on Countries**

## a) **Economic Effects**

An epidemic can spread to the real economy in different ways. It can impact supply (via the labour force, hours worked and productivity) and demand (via changes in households' consumption behaviour and firms' investment decisions). Demand effects can be exacerbated by voluntary social distancing, or by the economically restrictive nature of containment measures. These effects can vary significantly across countries, depending on their specific characteristics, even if they experience comparably severe outbreaks.

### Public policy measures and behavioural changes

Labour supply effects may be exacerbated by behavioural changes in response to the outbreak, for example not going into work as a prophylactic measure. Avoidance behaviours can also contribute to a drop in domestic demand. If aggregate consumption falls as a direct result of the epidemic and the measures introduced to contain it, it will also be indirectly affected by the voluntary choices made by households to limit their risk of exposure. The epidemic may also result in increased levels of personal savings, partly as a precautionary measure in response to greater uncertainty, and partly as a consequence of public health measures (e.g. shops forced to close). Border closures may lead to a near total shutdown of air traffic and have an impact on foreign trade, in particular via tourism. Firms may also become aware of potential vulnerabilities and dependencies to the rest of the world, motivating them to secure their value chains and relocate production systems.

Epidemic-related macroeconomic shifts can influence permanent changes in behaviour, with impacts that may outlast the end of the outbreak. In the short run, a combination of lingering uncertainty, excess savings and demand shortage can lead to hysteresis in the labour market, with a persistent rise in unemployment, particularly among younger age groups, leading to negative socioeconomic effects in the long run (the scarring effect as well as a loss of confidence in institutions). The same uncertainty may cause firms to put off investment decisions or to temporarily accept higher financing costs for short-term borrowing, via increased risk premiums. However, in the long run, epidemics appear to lead to a decline in interest rates, due in part to plentiful savings. They can also cause a persistent change in the perceived probability of extreme events occurring in the future.

### Methods for measuring the economic impact of an epidemic

1- The enumerative approach adds up all the direct costs (healthcare, vaccine R&D, etc.) and indirect costs (income lost by infected workers) of an epidemic over a given period of time. To measure the effect of public policy, the monetary value of these combined costs is compared, depending on the case, to:

(i) the epidemiological effectiveness of the policy measure, which can be quantified, for example, by the number of avoided deaths;

(ii) the utility value derived from the policy measure, which can be quantified, for example, by the number of years of good health gained; or

(iii) the monetary value corresponding to the number of lives saved. Notwithstanding the ethical issues raised by these methods, a significant limitation is that they do not effectively take into account the impact, severity or cost of containment measures, or the behavioural changes they may cause, and are therefore ill-suited to measure the economic costs of an epidemic beyond healthcare expenditure.

**2-** The non-structural approach uses regressions to explain the economic growth rates of different countries by the prevalence of a given disease and a set of control variables, in order to establish a direct measure of the impact of the disease on economic growth. The drawback of this approach is that it requires exact econometric specifications and numerous control variables to avoid estimation biases. Additionally, it cannot be used to identify the transmission channels to the real economy or the impact of public policy measures.

**3-** The structural approach links the epidemiological parameters of an epidemic to the macroeconomic effects of their trajectory. In contrast to the other two approaches, this one can be used to measure, via general equilibrium models, the indirect effects caused by behavioural changes in response to the epidemic or containment policies. For some types of epidemics, it can also be used to identify transmission channels. In SIR-macro models, households adapt their consumption and work decisions based on the severity of the outbreak and its mortality rate, and the social planner determines the optimal public health policy based on externalities and healthcare capacity. These models, in conjunction with others, have been used to model the COVID-19 pandemic. A significant limitation to this approach is that it uses theoretical assumptions that are empirically difficult to verify, particularly when it comes to linking the trajectory of epidemiological parameters to economic behaviours.

Diseases requiring urgent research and development attention, 2018

DISEASE	DESCRIPTION	BIOMEDICAL COUNTERMEASURES
Crimean-Congo hemorrhagic fever (CCHF)	Hemorrhagic fever caused by virus transmitted through ticks and livestock, with case-fatality rate of up to 40%. Human-to-human transmission is possible.	No vaccine available; ribavirin (antiviral) provides some treatment benefit.
Ebola virus disease	Hemorrhagic fever caused by virus transmitted by wild animals, with case-fatality rate of up to 90%. Human-to-human transmission is possible.	Experimental vaccine available
Marburg virus disease	Hemorrhagic fever caused by virus transmitted by fruit bats, with case-fatality rate of up to 88%. Human-to-human transmission is possible.	No vaccine available
Lassa fever	Hemorrhagic fever caused by virus transmitted through contact with rodent urine or feces, with case-fatality rate of 15% in severe cases. Human-to-human transmission is possible.	No vaccine available Vaccine development funded by CEPI
Middle East respiratory syndrome coronavirus (MERS-CoV)	Respiratory disease caused by a coronavirus transmitted by camels and humans, with case-fatality rate of 35%.	No vaccine available Vaccine development funded by CEPI
Severe acute respiratory syndrome (SARS)	Respiratory disease caused by a coronavirus transmitted from human to human and from animals (possibly bats), with a case-fatality rate of 10%.	No vaccine available
Nipah and henipaviral diseases	Disease caused by a virus transmitted by fruit bats, pigs, and humans; can manifest as an acute respiratory syndrome or encephalitis. Case-fatality rate can reach 100%.	Vaccine development funded by CEPI
Rift Valley fever (RVF)	Disease caused by a virus transmitted by contact with the blood or organs of infected animals, or by mosquitoes. Up to 50% case-fatality rate in patients with hemorrhagic fever. No human-to-human transmission has been reported.	Experimental, unlicensed vaccine available
Zika	Disease caused by a flavivirus transmitted by mosquitoes. Can result in microcephaly in infants born to infected mothers and in Guillain-Barre syndrome. Human-to-human transmission is possible.	No vaccine available
Disease X (pathogens currently unknown to cause human disease)	N/A	CEPI is funding the development of institutional and technical platforms that allow for rapid R&D in response to outbreaks of pathogens for which no vaccine exists.

b) **Social Effects**

**THE SPANISH FLU**

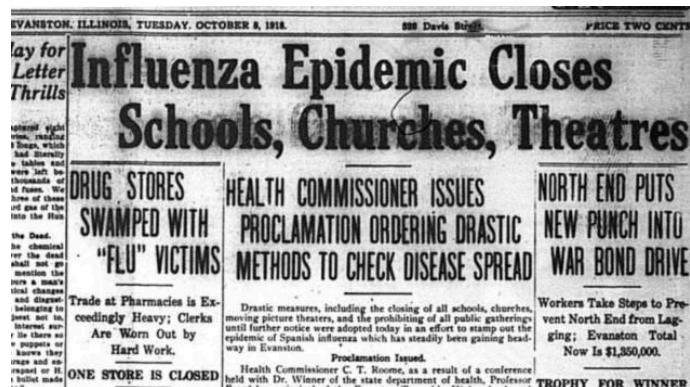
The Spanish Flu, which struck a century ago, remains one of the deadliest pandemics in human history, infecting about a third of the global population and causing an estimated 50–100 million deaths. While much of the research on the pandemic has focused on its immediate health impacts, less attention has been paid to its long-term social consequences, particularly its effect on social trust. The Spanish Flu, similar to earlier pandemics like the Black Death, contributed to a significant erosion of trust in society. The scale of death and social disruption created an environment of fear, uncertainty, and mistrust. Communities were torn apart as individuals grappled with the high mortality rate and the pervasive threat of infection. The widespread fear of contagion also led to individuals withdrawing from social interactions, undermining the cohesion of families, neighborhoods, and communities at large.

Researchers investigating the long-term effects of the pandemic have used data from the

**General Social Survey (GSS)**, which examines social trust in the United States. By focusing on descendants of immigrants from countries that were heavily affected by the Spanish Flu, the researchers were able to estimate changes in social trust before and after the pandemic. They found a marked decline in social trust, with each additional death per thousand people in a given country leading to a 1.4

percentage point decrease in social trust among descendants of those who experienced the pandemic. This decline was more pronounced in countries that were neutral during World War I, such as Sweden and Spain. In these countries, there was less censorship of the media, allowing citizens to more fully comprehend the scale and devastation of the pandemic. The greater exposure to the harsh reality of the pandemic, combined with the lack of wartime propaganda, may have contributed to a stronger sense of fear and a breakdown in the trust that binds societies together.

This erosion of social trust had far-reaching implications. Trust is a key component of social capital, influencing not only interpersonal relationships but also broader societal functioning, such as cooperation, civic engagement, and even economic development. Lower levels of social trust can result in greater social fragmentation and reduced willingness to collaborate in times of need. Furthermore, the study suggests that the social effects of the Spanish Flu likely reverberated for generations, as attitudes and behaviors related to trust are passed down through families and communities. The impact of the pandemic on trust can therefore be seen as a long-lasting alteration of societal norms and values, affecting social cohesion and economic outcomes long after the pandemic itself had passed.



The findings of this study underscore the importance of understanding how pandemics and large-scale public health crisis the health of populations but also the fabric of society. The social consequences of such events are profound, affecting how people interact with one another and how they engage with larger social and economic structures. The erosion of trust caused by the Spanish Flu highlights the need for effective communication, media transparency, and the rebuilding of social capital in the aftermath of such crises. These insights are crucial for understanding how future pandemics might affect societies in the long term, particularly in terms of social trust and cooperation, which are vital for economic recovery and societal resilience.

## **BLACK DEATH**

Historical records attribute the Black Death to an outbreak of bubonic plague, an epidemic of the bacterium *Yersinia pestis* spread by fleas with the help of animals like the black rat. The result of the plague was not just a massive decline in population. It irrevocably changed Europe's social and economic structure and was a disastrous blow to Europe's predominant organized religion, the Roman Catholic Church. It caused widespread persecutions of minorities like Jews and lepers, and created a general morbid mood, which influenced people to live for the moment, unsure of their daily survival. The Black Death had many long-term consequences. One was a series of vicious attacks on Jews, lepers, and outsiders who were accused of deliberately poisoning the water or the air. Lepers were singled out and persecuted. Anyone with a skin disease such as acne or psoriasis was thought to be a leper, and leprosy was believed to be an outward sign of an inner defect of the soul. They were, for the most part, exterminated throughout Europe. The attacks against Jews began in the south of France, but were most dramatic in parts of Switzerland and German areas with a long history of attacks on local Jewish communities. Massacres in Bern, Switzerland were typical of this pattern; after weeks of fearful tension, Jews were rounded up and burned or drowned in marshes. Sometimes there were attacks on Jews even where there was no plague. This persecution was often done, not solely out of religious hatred, but as a way of attacking the Kings or the Church who normally protected the Jews. Jews were often called the King's property and it was a way for people to lash out at the institutions who they believed had failed them. Fewer Jews died from the Black Death, in part due to rabbinical law which called for a lifestyle that was, in general, cleaner than that of a medieval villager. Also, Jewish ghettos kept them more separate from the general population. This made Jews look suspicious. The Pope, the leader of the Catholic Church, and most public officials condemned the massacres and tried to stop them. In the face of mob fury, however, they were often unsuccessful. Renewed religious fervor and fanaticism bloomed in the wake of Black Death. Fierce pogroms (massacres of helpless people) frequently resulted in the death or banishment of most of the Jews in a town or city. By 1351, 60 major and 150 smaller Jewish communities had been exterminated, and more than 350 separate massacres had occurred.

## **TUBERCULOSIS**

The social effects of tuberculosis (TB) have been far-reaching, significantly impacting individuals, families, and communities. One of the most enduring consequences is the stigma associated with the disease, as TB has historically been linked to poverty, poor living

conditions, and crowded urban spaces. This stigma often led to social isolation and discrimination against those infected, with individuals frequently being ostracized by family, friends, and even society at large. Fear of contagion also contributed to the breakdown of social relationships, as communities distanced themselves from affected individuals. Additionally, families of TB patients often faced economic hardship, as the illness could incapacitate individuals for extended periods, leading to lost income and further marginalization. The social isolation and mental health toll on both patients and their families was profound, contributing to feelings of despair and anxiety. In areas with high TB prevalence, the disease could also lead to widespread public health concerns, causing fear, distrust in healthcare systems, and creating divisions within communities. Overall, TB not only affected the physical health of individuals but also strained social connections and contributed to broader societal inequality.

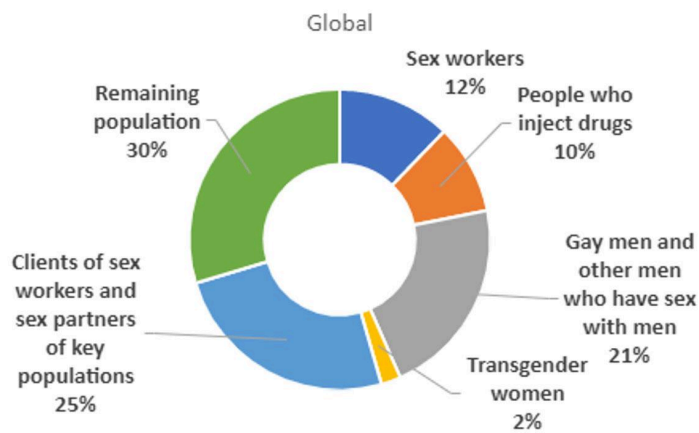
## **COVID-19**

The social effects of COVID-19 have been far-reaching and have impacted many aspects of daily life across the world. One of the most significant consequences was social isolation, as governments implemented lockdowns, stay-at-home orders, and restrictions on public gatherings to curb the spread of the virus. These measures led to increased feelings of loneliness and disconnection for many people, particularly for those who lived alone or were already vulnerable. Social interactions, whether with family, friends, or colleagues, were limited to virtual meetings or phone calls, which made it difficult to maintain meaningful relationships or support systems. The shift to online education and remote work also created challenges, as students and workers struggled with the lack of in-person connection, lower motivation, and the blurred lines between home and work life. Many students faced difficulties in adapting to online learning, while parents had to balance work and childcare, which led to added stress and frustration. Additionally, the pandemic brought to light and often worsened existing social inequalities. Marginalized groups, including low-income families and communities of color, were disproportionately affected by both the virus itself and the economic fallout, facing higher infection rates, limited access to healthcare, and greater financial instability. This led to a deepening of the social divide in many places. Furthermore, the fear of the virus caused some people to harbor prejudice or discrimination, especially against those from areas that were early hotspots of the disease, contributing to instances of racism and xenophobia. In some cases, the pandemic also created a "us versus them" mentality, where people from different regions or social backgrounds were blamed or stigmatized. Mental health issues also saw a dramatic rise during the pandemic, with many individuals experiencing increased levels of stress, anxiety, and depression, either due to isolation, economic uncertainty, or fear of illness. Overall, the social effects of COVID-19 have reshaped how people interact with each other, highlighting the importance of community support, mental health, and access to resources. The long-term social consequences may take years to fully understand, but the pandemic has certainly changed how people view public health, social connections, and societal inequalities.

## HIV/AIDS

The social effects of HIV and AIDS have been significant, impacting both individuals and entire communities in many ways. One of the most notable social consequences of the disease is the stigma and discrimination faced by those living with HIV. In the early years of the epidemic, people with HIV and AIDS were often ostracized, blamed, and treated as outcasts, especially because of the disease's association with behaviors like drug use or same-sex relationships. This discrimination made it difficult for many to seek help or even talk about their status, leading to isolation and mental health struggles such as depression and anxiety. Families and friends of those affected also experienced emotional strain, with many feeling helpless or ashamed, which sometimes caused rifts in relationships. In some cultures, HIV and AIDS further deepened existing social inequalities, as marginalized groups such as the poor, LGBTQ+ communities, and racial minorities were disproportionately affected by the virus. Additionally, the fear and misinformation surrounding HIV and AIDS led to widespread panic, further isolating those who were infected. The epidemic also had a significant economic impact, especially in regions with high infection rates. As more people

**Distribution of new HIV infections by population group, global | 2021**



became ill, many lost their ability to work, and families were often left without financial support, deepening poverty. In some countries, HIV/AIDS also placed a heavy burden on healthcare systems, especially where resources were already limited. Despite the challenges, the response to the epidemic has led to important changes in public health and awareness, and

progress in medical treatment has improved the lives of many living with HIV. However, the social effects of the disease are still felt, and the stigma continues to be a barrier to prevention, testing, and treatment in many parts of the world.

### **c) Effects on Healthcare**

The COVID-19 pandemic is a healthcare crisis that has led to unprecedented impact on healthcare services. At the heart of the unparalleled crisis, doctors face several challenges in treating patients with COVID-19. The psychological burden and overall wellness of healthcare workers (HCWs) have received heightened awareness, with research continuing to show high rates of burnout, psychological stress, and suicide. Detrimental effects include high rates of infection and death, excessive financial hardships, stress related to known and particularly unknown information, and fear of uncertainty regarding continued impact. Some researchers focused specifically on COVID-19's impact on HCW sleep. Anxiety and stress were significantly increased, leading to negative impacts on both self-efficacy and sleep. Stress is an important factor in drug use. Efforts should be made to explore the factors that are associated with psychological distress, which may lead to symptoms of anxiety, depression, or provoke suicidal ideation, and efforts should be made to control the factors that are modifiable. There needs to be more awareness among doctors and further long-term studies focusing on their mental health as adverse mental health conditions will further affect them as the disease advances.

COVID-19, one of the major catastrophes of this century, started as a mere local transmission from the city of Wuhan in China and spread throughout the world. The COVID-19 pandemic is a healthcare crisis, leading to unprecedented impact on healthcare services, notable morbidity and mortality of the public and healthcare workers (HCWs), economic repercussions, and significant psychological effects. To reduce the risk of viral transmission from person to person during the pandemic, the Indian government introduced various measures such as “lockdown” on March 23, 2020, along with strategies such as “social distancing” and “self-isolation” and shielding of at-risk individuals.<sup>[1,2,3]</sup> Doctors who are responding to a global health crisis – trying to protect individuals, families, and communities in adverse situations with stretched resources and shortage of personal protective equipment (PPE) and other – have become targets in the fight against the pandemic which was always unexpected. At the heart of the unparalleled crisis, doctors face several challenges treating patients with COVID-19: reducing the spread of infection; formulating some suitable short-term strategies and long-term plans. The overall wellness and especially the psychological burden on doctors have received heightened awareness in media and research publications.

HCWs must also continue to maintain their personal responsibilities and treat non-COVID patients. Detrimental effects include high rates of infection and death, excessive financial hardships, stress related to known and particularly unknown information, and fear of uncertainty regarding continued impact. Doctors experience emotional exhaustion, which may lead to medical errors, lack of empathy at times, decreased productivity, and higher turnover rates. The ability of doctors to adequately cope with stressors is important for their patients, families, and themselves. The levels of psychological resilience and the ability to

positively adapt to adversity and to protect themselves vary considerably from person to person, in general.

Before COVID-19, wide-ranging research had established the multifactorial nature of stressors for doctors: electronic health record duties; insurance and billing issues; any patient dissatisfaction; and balancing busy work–life schedules. They must continue to balance these existing obstacles to wellness while facing the unique challenges of a pandemic. Despite the challenging situation the HCWs realized that it was a part of their duty to care for the affected patients, thus demonstrating immense dedication to their profession. The authors noted that workplace safety including access to PPE was a top priority. Women and individuals in high-risk areas may have more negative psychological health outcomes. Moreover, both doctors and other HCWs on the forefront of caring for COVID-19 patients are prone to anguish and negative health outcomes, including loneliness, anxiety, and disturbed sleep. It is interesting to know that some HCWs who were working as front-liners experienced better mental health outcomes. The explanation could be control over the environment while they were at work and a sense of satisfaction from their vocation.

From experience, we know that in the face of situations like these, HCWs play a major role and push their limits every day. Being in the frontline, doctors take brunt the most. Due to complete uncertainty, the situation is further complicated. Lack of proper fixed guidelines, unprepared and overburdened infrastructure, as well as the fear, stigma, anxiety, and marginalization toward the disease add to the burden. Overall, doctors have a high prevalence of mental health morbidities, but the topic is very less researched.

Moreover, it affects their work output which, in the pipeline, affects the healthcare delivery to the whole nation. We align effects of COVID-19 on healthcare workers below;

## **Burnout**

Burnout in 220 medical staff working in oncology medical in Wuhan, China, was measured using the Maslach Burnout Inventory-Medical Personnel. Burnout in the frontline was compared to other groups of HCWs. Surprisingly, the frontline HCWs had significantly lower levels of burnout and were way less worried about becoming infected when compared to the ones in the usual wards. There were two possible explanations that were deduced; the first being that the frontline HCWs perceived more control over the situation and second being that they appear in proximity to decision-making compared to other HCWs. Another explanation is that they are provided with more realistic scenarios and timely information.

## **Sleep**

Under conditions of psychological distress, sleep is usually disturbed. A survey was carried out among 180 medical staff members on social support, anxiety, stress, self-efficacy, and sleep quality to determine the effects of COVID-19. It was found that social support correlated significantly with both self-efficacy and quality of sleep. Anxiety and stress were significantly increased, leading to negative impacts on both self-efficacy and sleep.

## **Addictions**

Stress is an important factor in drug use. Researchers have shown that major stressors increase the risk of developing an addiction, as well as the risk of relapse. Stress, fear, and anxiety have increased, too, for people on the frontlines as they faced the gravest danger.

## **Stress, anxiety, and depression**

It was reported in March 2020 that, among doctors in China, up to 40% had mild-to-moderate depressive symptoms. However, another survey on a small number of HCWs in China found that the workers showed signs of psychological distress during the pandemic. The data are sparse when it comes to the effect of the pandemic on health of doctors in developing countries, but a recent survey done in 2016 among doctors working in a tertiary care hospital in Pakistan reported an association of female gender and more service years with anxiety and depression. Moreover, younger physicians (aged 35 years or less) were more liable to be depressed than older doctors. Having children at home was another factor associated with anxiety and depression, and younger doctors were more likely to have children at home and hence more likely to be worried and anxious about taking the infection back home and hence distressed by this fact.

**Note:** *Delegates we tried to give you limited information at the most of that study guide in order to make you more productive and ambitious about our committee so make your further researches, find your amazing solutions against*

*these fatal epidemics. You will not be limited about the topics you want to talk about.*

#### **X. Questions to be Addressed**

- 1- What can be mutual precautions that Turkic States can take against fatal epidemics?
- 2- How can Turkic States interfere with economic instabilities that can be caused by epidemics?
- 3- How can progress be made in the field of vaccines in the fight against epidemics?
- 4- How can cooperation and solidarity between Turkic states be increased?
- 5- How can the problems resulting from insufficient healthcare workers and insufficient healthcare technology be eliminated?

## **Bibliography**

<https://pmc.ncbi.nlm.nih.gov/articles/PMC9052715/>

[https://www.researchgate.net/publication/354844301\\_The\\_Social\\_Effects\\_of\\_COVID-19\\_Pandemics](https://www.researchgate.net/publication/354844301_The_Social_Effects_of_COVID-19_Pandemics)

<https://pmc.ncbi.nlm.nih.gov/articles/PMC10088618/>

<https://pmc.ncbi.nlm.nih.gov/articles/PMC3052350/>

<https://www.unibocconi.it/en/news/social-effects-spanish-flu>

<https://www.tresor.economie.gouv.fr/Articles/2586c990-c9de-4f3d-b1a5-c0a7888d97c9/files/d78ec862-1450-4dd2-a93d-803d9202460a>

<https://my.clevelandclinic.org/health/diseases/21777-spanish-flu>

<https://www.history.com/topics/middle-ages/black-death>

<https://www.news-medical.net/health/History-of-COVID-19.aspx>

<https://www.cdc.gov/museum/online/story-of-cdc/aids/index.html>

<https://www.britannica.com/science/AIDS/The-origin-of-HIV>

Gupta N, Dhamija S, Patil J, Chaudhari B. Impact of COVID-19 pandemic on healthcare workers. *Ind Psychiatry J*. 2021 Oct;30(Suppl 1):S282-S284. doi:

10.4103/0972-6748.328830. Epub 2021 Oct 22. PMID: 34908710; PMCID: PMC8611576.

Birkmeyer JD, Barnato A, Birkmeyer N, Bessler R, Skinner J. The Impact Of The COVID-19 Pandemic On Hospital Admissions In The United States. *Health Aff (Millwood)*. 2020

Nov;39(11):2010-2017. doi: 10.1377/hlthaff.2020.00980. Epub 2020 Sep 24. PMID:

32970495; PMCID: PMC7769002.