COVID-19 PANDEMIA AND PUBLIC AND GLOBAL MENTAL HEALTH FROM THE PERSPECTIVE OF GLOBAL HEALTH SECURITY

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SUMMARY

   The Coronavirus disease 2019 (COVID-19) pandemic emerged in Wuhan, China and has spread all over the world and has caused huge threats to health and lives. It has affected different frontiers of lives and induced many psychiatric individual and collective problems such as panic, anxiety, depression, post-traumatic stress disorders, suspiciousness, infodemia, cacophony, xenophobia, racisms, etc. The COVID-19 outbreak has induced public and global mental health crisis as well as a huge psycho-social experiment. Psychiatry and other mental health sciences can play very useful role in supporting the well-being of COVID-19 patients and their families, healthcare personnel and the society. For successful fighting with present and future pandemics we have to learn more about psychiatric and psychological aspects of COVID-19 from the perspectives of public and global mental health.

Key words: COVID-19 - infodemics - mass psychology - public & global mental health - empathic civilization

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INTRODUCTION

> *COVID-19 will reshape our world. We don't yet know when the crisis will end. But we can be sure that by the time it does, our world will look very different.*
> *Frustrations, How different will depend on the choices we make today.*
>
> *Josep Borrell*

   The Coronavirus disease (COVID-19) is a highly contagious disease caused by a severe acute respiratory coronavirus 2 (SARS-CoV-2) spreading from human to human relentlessly and rapidly all over the world. It emerged in Wuhan, China, at the beginning of December 2019, and on March 13, 2020 WHO proclaimed Europe as the center of the pandemic. Many European countries and the USA reported increasing number of patients, and the number of deaths in Italy surpassed those in China. It seems inevitably that the next wave of infections will be in Africa and Latin America with huge destructive potentials (The Lancet editorial 2020). Unfortunately, many countries have not followed WHO's clear recommendations of containment such as widespread testing ("test, test, test" every suspected case), quarantine of cases, contact tracing, and social distancing which are basic principles of public health and infectious disease control (The Lancet editorial 2020).

   The COVID-19 pandemic represents very complex events, complex in its origin, its spread, its effects and its consequences at multiple levels and fields; medical, social, political, economic, religious, cultural and civilizational. They have affected so many different frontiers of lives around the world so that they are beyond control and comprehension of any single field of knowledge. COVID-19 pandemic is not only about virus infecting people all over the world. It is also about the way how people, health care institutions, government behave and the UN, WHO and other international organizations cooperate because pandemic goes under control only when people agree to behave in a particular way. If people from various reasons refuse to practice preventive and protective measures, then the pandemic will explode. Social, political and group psychodynamics is also very important, how community and government react and cooperate. Infodemics commonly affects in detrimental way people's psychology, behaviors and everyday lives. That's why we need global transdisciplinary integrative cooperative approach. The crisis is likely to shake up geopolitics, change the way we use technology, challenge our worldviews and life values we follow and force us to redefine priorities in order to prevent or prepare for new crisis. Unfortunately, the effects of the corona virus on mental health have not yet been enough systematically studied, but it is evident that COVID-19 may have rippling effect, particularly based on current public and political reactions (Moukaddam 2020). Fear caused by COVID-19 severe clinical picture and deadliness, a strict quarantine, curfew, and legal punishment, mistrust of officials who mismanaged the outbreak and an overflowing social media with misinterpretation and theories of conspiracy all have taken their toll on mental health (see Farmer 2020). For successful fighting with present and future pandemics we have to learn more about psychiatric and psychological aspects of COVID-19 from the perspectives of public and global mental health.

INFODEMIA, MASS PSYCHOLOGY AND PANIC REACTIONS RELATED TO COVID-19

In a time of uncertainty, facts provide clarity
In a time of anxiety, facts comfort
In a time of misinformation, facts correct
In a time of division, facts unite
In a time of crisis, facts matter most
Facts first. The truth matters most. For a better world.
CNN, March 28, 2020

Human beings in general as well as health care workers in particular are feeling comfortable whenever we are able to recognize, explain, predict and control disease processes. In our Information Age, all important phenomena, ideas and information have some kind of "viral" nature, just the like corona virus. In negative sense, this increases uncertainty, confusion, dysfunctional behavior and fragility. Likewise viruses can influence on our brain and behavior, so do ideas and information. The powerful ideas are not necessary to be true. Infomania is the debilitating state of information overload in community. At the individual level infomania refers to an obsessive need to constantly check social media, online news and frantically exchange e-mails to acquire information and make sense of what happens. The rapid spread of infectious disease to a large number of people is usually followed by a specific kind of epidemic known as an infodemic: the rapid spread of information of all kinds, including rumors, gossip, unreliable information, misinformation, theories of conspiracy, etc. According to Ioannidis (2020) the COVID-19 "may be a once-in-century evidence fiasco". Massive infodemic and collective perceptual bias has undermined and disrupted global efforts to fight COVID-19 and sowed pathogens of fear, prejudice, disgust, and xenophobia (Hu et al. 2020). Due to infodemics everyone has a private opinion and alternative truth, people may become confused, irrational, anxious, fearful, suspicious, xenophobic and prone to extreme behaviors.

At the beginning the COVID-19 had been compared with an ordinary flu. The Chinese doctor Li Wenliang was the first who alarmed that situation was serious, but he was accused by the Public Security Bureau as a whistleblower for spreading rumors (Hegarty 2020). Unfortunately, dr. Li Wenliang, 33 years old, died on February 7, 2020 as a victim of COVID-19. At the end of January, 2020 Chinese authorities quarantined the city of Wuhan with 11 million of inhabitants and several other areas involving over 60 millions of people. The World Health Organization declared COVID-19 pandemic on March 11, 2020.

In Europe the pendulum has swung from general denial, levity and jokes in January to mass hysteria and panic reactions near pandemonium now in March 2020. We have witnessed how mass hysteria and "panic can easily become self-fulfilling prophecy with demoralization and economic chaos cascading into a life-threatening catastrophe" (see Bursztajn 2020). A unique "infodemic" overflowing mis/information in social media and internet increases a major risk to public and global mental health during this COVID-19 crisis (Dong & Bouey 2020). According to Dong & Bouey (2020) mass psychological problems and major risks to public and global mental health are related to 1. the uncertain incubation period of the severe acute respiratory syndrome coronavirus and its possible asymptomatic transmission cause additional fear and anxiety; 2. the government's initial downplaying of the epidemic's severity eroded public trust in the government's decision-making transparency and competency; 3. the unprecedented large-scale quarantine measures in all major cities, which confine residents to their homes, are likely to have a negative psychosocial effect on residents; 4. the reports of shortages of medical protective supplies, medical staff, and hospital beds. According to the Chinese experience the significant decrease of distress was associated with the nationwide quarantine, medical supports and resources from all over the country, public education, strengthening individual protection, medical isolation, controlling of population mobility, reducing gatherings to stop the spread of the virus (Qiu et al. 2020). Social and spiritual capital in a community are very important elements of community resilience and anti-fragility during COVID-19 crisis periods.

Public relations and creative communication are crucial for pandemic management. Infodemiology as an important field of information science and epidemiology should address in time the pressing concerns for public health and policy decisions (Hu et al. 2020). According to the WHO (2018) there are 10 things important for successful communication: 1. build trust, 2. communicate uncertainty proactively, 3. engage communities, 4. message well, 5. establish and use listening and feedback systems, 6. use social media as appropriate, 7. risk communication operations require resources, 8. trust emergency risk communication as a strategic role, not an add-on, 9. establish coordination and information systems; 10. build capacity for the next emergency.

Stigma, xenophobia and racism related to COVID-19

It's easy to blame, it's easy to politicize, it's harder to
tackle a problem together and find solution together.
Tedros Adhanom Ghebreyesus WHO Director-General

Stigma and xenophobia are two social and psychological aspects of the detrimental impact of pandemic infections. The links between epidemic risk, xenophobic behavior and the global economy have been described many times throughout history, as well as today. As the coronavirus spreads, so does xenophobia and racism. Stigmatized individuals and/or groups are usually objects of social avoidance, rejection, isolation, criticism, chicanery, physical violence and even elimination as well as refusing of healthcare, employment, education

and housing. Increased prejudice, xenophobia and racism in the forms of fear, suspicion, and hostility towards people from China have been registered in many countries, particularly in Europe, North America, and Asia-Pacific region (Wikipedia 2020). In the United Kingdom, Chinese people complain that they are victims of increasing levels of racist abuse, with cases of assaults reported. The Chinese Embassy in Germany informed a rise in cases against its citizens since the corona virus outbreak. In some middle schools near Paris children of Asian descent were ostracized and mocked over their origins. In China many residents of Wuhan and Hubei have reported experiencing discrimination based on their regional origin. Stigma may also occur after an individual has been released from quarantine. In some countries even some doctors who had travelled abroad were stigmatized at first, although their dignity was later protected. In many European countries, people from Italy, the center of Europe's corona virus expansion, have also experienced suspicion and xenophobia. Misinterpretations can also induce xenophobia and hostility. President Trump was criticized that his using the term "Chinese virus" could unfairly have stigmatized an entire nation and might encourage hostility toward Asian-Americans. Later he explained that he was not racist at all and that the corona virus came from China and that the Chinese government had some responsibility for the COVID-19 outbreak by hiding and then minimizing the outbreak. Stopping stigma and xenophobia is crucial issue because stigma affects individual and community resilience and mental health.

DIETROLOGIA, THEORIES OF CONSPIRACY, HYBRID WARS AND COVID-19

Global processes have become too complicated for
any single person to understand. How then can
you know the truth about the world, and avoid
falling victim to propaganda and misinterpretation
Yuval Noah Harrari 2018

Dietrologia (dietrology, behindology) depicted as the culture of suspicion ("key of the truth is in the secret history"), the philosophy of mistrust, the detection of true and hidden designs and meaning behind the apparent causes is an indispensable sport for many people producing different theories that postulate and indicate conspiracy and plot. However, dietrologia as a real search for the truth in the manner of preventive rationality and scientific thinking would be welcome. In our post-truth age with alternative truths and fake news, the many of the truths people cling to depend greatly on their own point of view. Conspiracy theory is an explanation of an event which involves sinister, powerful, and often hidden actors pulling the strings and manipulating events and public opinion for their own benefit. In most cases the word has negative connotation as it implies paranoia, prejudiced thinking and mistrust in institutions. Research has shown that belief in conspiracy

theories, or conspiracist ideation, is associated with various pathological traits such as a paranoia, schizotypy and psychopathy. Furthermore, people with poorer socio-economical status are more likely to believe in conspiracy theories which reflects their mistrust in the system. Some of those theories are clearly bizzare and indicate underlying psychopathological condition (Goreis & Voracek 2019). But is it fair to generalize everything that goes against the mainstream narrative as pathological? It is important to keep in mind that we live in a world of propaganda. All media sources have their agendas, and in matter of politics the truth usually takes second place to acquisition of political power. As such all news sources are biased and need to be consumed critically. In addition, it is important to have in mind that some "irresponsible politicians have deliberately undermined trust in science, in public authorities and in the media" (Harari 2020b).

COVID-19 conspiracy theories seem to be predicated on epistemic, existential, social and political motives. Power depends on creating and believing fictions and different political powers have different interpretation of events. For example, Russian news sources are pushing the narrative that the virus is an extension of trade war with China started by president Trump. According to one version, the virus was created by the CIA in order to further destabilize China and replace the leadership with those who are more pro-West. This is in line with typical Russian narrative of trying to portray the US as the global "bad guys" (Glenza 2020). In Iran some explain high mortality rate by claiming that the virus was designed to target primarily Shiites (Momeni 2020). Others claim that the virus is a product of international elite whose goal is to produce a financial crisis which would lead to a crash of currencies. Governments over the world are responding to the virus by printing money or taking loans in order to stimulate local economy. This can lead to hyperinflation which would make paper currency valueless and this would pave way for introduction of an international digital currency controlled by the banking elite. Anti-vaxxers claim that the whole virus pandemic is a farce whose goal is to introduce mandatory vaccination which will be used for control of world population. Some say that diagnostic test for Corona virus came too soon and seems to have been prepared in advance. Some other scientific institutions have supposedly been running virus simulations (Table 1).

YouTube, a media platform which acts as a centralized news source giving voice to small, independent creators is often used to spread conspiracy theories. It is important to keep in mind that content creators have financial incentives for producing highly viewed content and thus they are more inclined towards the controversial and conspiratory interpretation of events which guarantees high view count. When consumer of such content is presented with only one side of the story then conspiracy theory might look convincing. It is important therefore to remain critical and search for evidence of the opposite. Failing to consider all narratives and evidence

Table 1. The COVID-19 pandemic within US-China-Russia strategic, political, and economic competition – some examples

Hudson Institute hudson.org
- John Lee: Combating China's COVID-19 propaganda offensive to undermine the United States on the global stage
- Peter Rough: How China is exploiting the coronavirus to weaken democracies
- Lewis Libby: To protect the future, hold China to account
- Nate Sibley: Failure to confront China's corruption will exacerbate coronavirus crisis

Other sources
- Jessica Glenza: Coronavirus: US says Russia behind disinformation campaign
- Iranian Scholar Hossein Momeni: COVID-19 Is Man-Made, A Weapon That Targets Shiites, Muslims, Iranians
- AS English: Covid-19: Who is Charles Lieber, the man conspiracy theorists say created the coronavirus. April 5, 2020   https://en.as.com
- Service RF: Why did a Chinese university hire Charles Lieber to do battery research? Posted in: Asia/Pacific, People & Events, Scientific Community doi:10.1126/science.abb1644   https://www.sciencemag.org
- Conspiracy theories (Wikipedia 2020):
  - *Chinese biological weapon:* Accusation from United States, United Kingdom, India, Ukraine;
  - *US biological weapon:* Accusation from Russia, Iran, China, some Arab countries, Philippines, Venezuela

they present leads to prejudiced thinking. Best cure for negative sides of conspiracy theories isn't censorship but open mind for all interpretations and aversion to prejudiced thinking. It is widely recognized that conspiracy theories may be very detrimental for social relations, peace and harmony as well as for public and global mental health. They can influence people's health choices, instigate xenophobia and racism in societies and trigger violent social behavior (Abaido & Takshe 2020). In addition, they may also instigate psychological war. The COVID-19 crisis is an important test: to trust scientific data and healthcare experts or unfounded conspiracy theories and self-serving politicians (Harari 2020b). Winning the war against COVID-19 pandemic requires control of narratives regarding its scientific and clinical attributes and pandemic containment efforts (Garret 2020).

COVID-19 as a hybrid warfare

The changing dynamics of our world also changes the war modalities adding the new modes such as hybrid war, bio-war, cyber war, etc. The COVID-19 as a hybrid warfare has two different meanings, as a war between countries using coronavirus and a war against coronavirus. The concept of hybrid warfare emerged just after the 2006 Lebanon War as a way to categorize and define unforeseen threats on that battlefield (Bauman 2020). The COVID-19 has instigated many earth-shattering geopolitical effects opening immensely serious questions about biopolitics, bio-weapon, and hybrid-war. The story about COVID-19 as a hybrid warfare started when some Chinese and Iranian officials declared that the coronavirus was created in the US military laboratories as a biological weapon in order to undermine economy of these countries (Savin 2020). Chinese hefty humanitarian support to Iran using Mahan Air, an airline under Trump administration sanctions can be mis/interpreted as a provocation to US politics. The Chinese foreign ministry spokesman Zhao Lijian claimed that the US military brought coronavirus to China during the Military World Games in Wuhan, China, in October 2019 where the Pentagon sent 17 teams with more than 280 participants and other staff members (Savin 2020, Mahar 2020). It is interesting that in 1981 an American fiction author Dean Koontz described in his book "The Eyes of Darkness" the virus Wuhan-400 as the most dangerous biological weapon which spread throughout the world (see Mahar 2020). According to Dany Shoham, a former Israeli military intelligence officer said that Wuhan Virology Institute is involved in Beijing's covert bio-weapon program (Mahar 2020). CBC News published the story that two Chinese spies stole the coronavirus from Canada's Infectious Disease Facility Laboratory (see Mahar 2020). Mis/information appeared on Facebook that George Soros was the owner of the WuXi Pharma Lab located in Wuhan where COVID-19 was developed and conveniently broke out.

The COVID-19 hybrid warfare was depicted as a confrontation between Malthusianism and social Darwinism political philosophy led by the Trump-Johnson-Bolsonaro axis and the requalification of public health as a fundamental tool promoted by China, South Korea and Italy (see Escobar 2020).

The coronavirus is defined as a hybrid warfare threat because humans carry and spread the virus which wages war against humans so that we can design defeat mechanisms to neutralize the threat (Bauman 2020). Defeat mechanisms involve 1. attrition: quarantine operations and self-isolation to minimize the spread of viruses, 2. dislocation: offensive operations to prevent the enemy to seize the initiative, e.g, closing borders, city lockdown, curfew, shutdowns of schools and public gatherings, etc. and 3. disintegration: vaccine operations which provide a more permanent solution to bioweapon (Bauman 2020). We share Bauman's (2000) hope that "by working together and cross-sharing strategies and knowledge, we as a nation and global community can quickly eradicate this threat".

We are still not able to comprehend the COVID-19 consequences for the future of our world. The whole global economy has been undermined by corona virus of unknown origin. The question is: Is it just a coincidence or part of a possible, the hybrid-war's massive psy-op creating the geopolitical and social engineering environment for full-spectrum dominance (see Escobar 2020). Xenophobia, isolationism, conflicts, divisions and global distrust and disunity are dangerous characteristics of the international system.

GLOBAL PROBLEMS NEED GLOBAL SOLUTIONS: COMPASSIONATE SOCIETY AND EMPATHIC CIVILIZATION

We can reasonably quarantine infected individuals, but we should not squander our social and moral capital by quarantining whole communities
Bursztajn 2020

Humankind has always been divided into diverse civilizations characterized with different, commonly irreconcilable views on world (Harari 2018). The fundamental question now is: Why Europe and US, not Asia are the epicenters of COVID-19 pandemic?

COVID-19 crisis can reorder our world in dramatic ways, for better or worse. It may force us to reconsider ourselves and our world, who we are and what values we follow, it could incite us to rediscover better version of ourselves. It may induce the rising of human goodness: empathy, compassion, altruism, generosity of spirit and action in order to improve the world that is commonly a hostile place, full of conflicts and dangers.

Efficient protection from COVID-19 comes from the global solidarity and sharing of reliable scientific information and knowledge that prevent theories of conspiracy and psychological battles. The spread of epidemic in any country endangers the whole humankind inducing pandemic.

COVID-19 crisis can be effectively overcome only in spirit of mutual respect, trust and global co-operation (see also Harari 2020b). All countries need to share information globally and humbly seek advice and help. Global co-operation is crucial in production, clinical trials and distribution of medical equipment like anti-COVID-19 drugs and vaccines, testing kits, respiratory machines, etc. Rich countries should be willing to help poorer countries sending them medical equipment and drugs. Countries currently less affected should send medical resources to the worst-hit countries like Italy and Spain, like China did it. Given the long-lasting global nature of the economy and supply chains, there is an urgent need for a global plan of action. International travels should be only in function of fighting against COVID-19 crisis. As every crisis is also an opportunity for better future let's hope that COVID-19 pandemic will help humankind realize the importance of public and global health and building of compassionate society and empathic civilization. Humankind is at the cross-roads: to travel down the route of global disunity, selfish society, and narcissistic and paranoid psycho-cultures or to choose the path of global solidarity, humanistic psycho-culture, and empathic civilization (see Jakovljevic et al. 2019).

Resilience, not panic, in a time of pandemic

Wind extinguishes a candle and energizes fire
Nassim Nicholas Taleb, 2012

Enduring COVID-19 outbreak is one thing, what about benefiting from it? Fortunately, on the internet one can find papers like "Resilience, not panic, in time of pandemic" (Bursztajn 2020) inspiring a model of communal resilience, hope and empathy.

In the crisis like this one with COVID-19, people are prone to discover hidden resilience potentials of altruism, empathy, trust and amity and help one another. Resilience is individual and group/community ability to withstand, recover and even grow and be stronger after stress, adversity, crisis, disease and disaster (Jakovljevic 2018). In COVID-19 context one can think on four levels: on the individual level, on local community level, on national level, and at the global level. Different communities and cultures have different inherent characteristics and mechanisms which determine how well they can resist the negative effects. Resilient societies, like resilient families, depend on their members' ability to create and maintain good relationships based on human dignity, respect, cooperation, compassion and empathy. Moral psychology shows that empathy acts as social glue, increases cohesiveness and cooperation between individuals as well as between communities and societies.

Due to COVID-19 pandemic many people are afraid, anxious, in panic, angry, uncertain, depressed, and without confidence in their national leadership. Criminals of all species, involving cyber criminals, take advantages of the crisis. But opposite the dark side of selfishness, individualism, disunity and evil, we have witnessed the images of solidarity, altruism, empathy. Health workers have shown an incredible commitment to their patients, sometimes in apocalyptic conditions. In Italy 51 doctors have died from COVID-19. Ordinary people have organized to help vulnerable, poor and helpless neighbors. Examples of international solidarity, with the sharing of resources, information, and expertise from countries further ahead in the epidemic, or with better results in controlling the spread (The Lancet editorial 2020) are encouraging. Medical staff from China, Russia and Cuba came to Italy to help their colleagues. China sent 2,300 big boxes full of masks followed by the message: "we are waves from the same sea, leaves from the same tree, flowers from the same garden". WHO has launched the COVID-19 Solidarity Response Fond which has raised more than 70 million US dollars (The Lancet editorial 2020). In a pandemic, the best approaches and measures are those that protect all members of the population and promote collective resilience and antifragility. Now is right time to see an opportunity to rise up and make the world a better place moving forward

and start creating anti-fragile humans and humankind based on education, confidence/trust, thoughtfulness, empathy and good leadership. The concept of global health security represents a new determination by, or on behalf of, human society to protect itself from the health impact and social disruption caused by outbreaks of infectious diseases (WHO 2018). The WHO has the six mains functions within the United nations 1. providing leadership on matters critical to health and engaging in partnerships where join action is needed; 2. shaping the research agenda and stimulation the generation, translation and dissemination of valuable knowledge, 3. setting norms and standards and promoting and monitoring their implementation, 4. articulating ethical and evidence-based policy options, 5. providing technical support, catalyzing change, and building sustainable institutional capacity, and 6. monitoring the health situation and assessing health trends.

Different cultures, involving psychoculture, underlying beliefs, values, practices, traditions play one of crucial roles in public and global security.

Story about empathic civilization and COVID-19

Cooperation and partnership are the only route that offers any hope of a better future of all humanity
Kofi Annan

Despite the intensive globalization and an attractive idea of global humanistic self/mind and empathic civilization the world is still divided into rival nations, religions, states and alliances, with confronting ethics and interests and many war conflicts (Jakovljevic et al. 2019). From global mental health perspective one can say that our world is suffering from divided self (us versus them in many forms) and multiple identity disorder with multiple identifying confrontations at political, economic, military, religious and psycho/cultural levels (Jakovljevic et al. 2019). COVID-19 pandemics as global joint enemy strengthen growing feeling that our world has got to change, but the question is how. Humans are story-tellers, narrators who live their lives in relationships and connect with one another and cooperate through the stories they create, tell and live (see Jakovljevic & Jakovljevic 2019). The stories human beings tell about themselves not only describe themselves, their experiences and life values and philosophy but also shape their lives, telling and listening stories they recognize themselves in the stories of others, and others in their stories. Our ability to create, live and tell a coherent, hopeful and self-actualizing story of our life as well as to create world-views or models of the world, based on knowledge, intelligence, beliefs, and social relationships (see Gilbert 2013) are fundamental components of our collective well-being and mental health. We also give meaning to our lives, our families, our nations and the world by the stories we tell ourselves and each other, hence we define our experiences, history, culture, civilization and destiny at both material and symbolic levels. At symbolism level it is interesting that Saint Corona was a Christian killed in 165 AD during the rule of Marcus Aurelius and has been respected for centuries as one of the patron saints of pandemics (Escobar 2020). So, the question is whether global fighting against coronavirus is going to instigate pawing the path to the global mind, compassionate societies and empathic civilization. Here is useful to remind on Victor Hugo's quote that "nothing is more powerful than an idea whose time has come" and ask about the concepts of global mind and global brain (see Malone 2019).

We agree with Harari's (2020) opinion that "today humanity faces an acute crisis not only due to the coronavirus, but also due to the lack of trust between humans. To defeat an epidemic, people need to trust scientific experts, citizens need to trust public authorities, and countries need to trust each other". Without global solidarity, empathy, trust, cooperation and unity, humankind will be the victim of pandemics like COVID-19, and even the worse ones. At present the fundamental battle takes place within humanity itself for compassionate society and empathic civilization. We are used to thinking about public health in national terms, but it is quite clear now that we should think in terms of global health and global mental health together. Now we face two options for the future. The first one is "Big brother is watching you" totalitarian surveillance and control with harsh punishments, and the other one is global solidarity based on compassionate society and empathic civilization. With regards to the COVID-19 one method, due surveillance technology, is for the government to monitor people and punish those who break the rules of guidelines. The other way that seems now as utopia is to educate, cultivate and empower people in spirit of compassion and empathy of humanistic self and collective/global mind. A self-motivated and well-educated empathic population in compassionate democratic community should have been more efficient and powerful than a policed, ignorant population in autocratic, selfish and tyrant society (see also Harari 2020b).

Successful, resilient anti-fragile global world without scapegoating and conspiracy as well as successful, resilient and-anti-fragile families, depend on their members' ability to repair relationships when there have been ruptures and conflicts between people. When this fails, fight, clashes and wars, including those with bioweapons erupt and some parts of the world become hostile places full of dehumanized enemies, dangers and deaths. The foundation to resolving the crucial problems is to use empathy, restorative justice and mentalization to understand the other party what means that both or all sides have values, dignity and respects and their attitudes and actions have meaning (see Gerhardt 2010).

The family model sounds attractive, but it is not easy to be applied to the society, particularly to the future global world society. The question "can we really all be one big family" (Gerhardt 2010) has been asked by many humanistic scientists and intellectuals and followed with different answers: Impossible, it is an utopia; Maybe yes; Perhaps not, or Perhaps not yet. What is certain and sure at present we are in an urgent need to work on

building a more compassionate, and less selfish communities and societies (Gerhardt 2010). Possible pillars or cornerstones of future compassionate society and empathic civilization could be *agape*, a gentle, unselfish, dutiful, all-giving, altruistic, often spiritual love and *storge*, an affectionate companionate, deep and special friendship, brotherly, sisterly, friendly kind of love (see Fisher 2004). Concepts like empathic civilization, noosphere, global brain and global mind sound to many as science fiction, vague mysticism or naïve wishful thinking. According to the concept of "the logic of human destiny" there has been a general tendency for humans to form larger and larger communities that lead to a net improvement in human welfare (Wright 2000). The artificial intelligence and computer super-minds are growing dramatically every year what could support forming global super-mind and noosphere as global-scale integration of the people, computers, and other forms of intelligence (Malone 2019). The concept of empathic civilization and global mind involves "the greatest good for the greatest number" and "serving the purpose larger than yourself" (see Malone 2019).

What can we learn from COVID-19 crisis for the better future?

> *Knowledge is telling the past, wisdom is predicting the future*
>
> *W. Timothy Garvey*

Knowledge, empathy, solidarity, cooperation and unity are the key factors to long-term survival and flourishing of humankind. Crisis (greek krinein – to separate and decide) is commonly depicted as a moment of truth, a decisive moment in which we need to make judgments about what is truly important and what is not, about right and wrong, and about molding the present situation into a brighter and more positive future. COVID-19 crisis will fundamentally change our world stressing us to rethink our political, information/media, health-care, and economy systems, social and religious norms and psycho-cultures, our science and our relations to nature and environment (see Panwar 2020). The COVID-19 is a cruel but crucial lesson for the future of humankind reminding us on humanity's biosphere consciousness, an awareness of humans as parts of the earth's system (see Rifkin 2010). Now we have the opportunity to create a new narrative to make the more resilient world and life sustainable and valuable. The Covid-19 shows us that only collective national, international and global efforts can convert zero sum games into positive sum games.

Science and technology are a collective endeavor. The COVID-19 pandemic has revived still utopian dream about the Holy Grail of the open science where research data is shared freely over the Internet. This dream can be achieved only within empathic global society and civilization. Institutions and regulation rules should be changed, psycho-cultures and social habits are to be transformed, the world needs to move forward together as a single unite and cohesive system. The COVID-19 pandemic has provided the perfect backdrop for a renewed clash of civilization (see Macaes 2020). The false dilemma between the two moral systems related to autocracy and democracy; an obeying the authorities moral system that emphasizes duties before rights (Chinese model, Confucian mindset) or a liberal moral system that puts rights before duties (Euro-American model) has appeared (see Macaes 2020). The answer is the both matter, rights associated with duties within global society and empathic civilization where politics, science, religions and people/citizens work together. Everybody has a moral duty to respect life and protect himself/herself, others/neighbors and community. Looking from the public and global mental health perspective empathic human civilization may be achieved "by realizing that Survival of the Most Loving is the only ethic that will ensure not only a healthy personal life but also a healthy planet" (Lipton 2008) (Table 2).

Science alone is not enough to bring the progress (Pinker 2018). The classical philosophy may also aid humanity to regain equilibrium since disaster like COVOD-19 applying the 5 factors model (table 2). It is very important to recognize logic/cognitive biases, particularly so called confirmation bias seizing upon information that confirms own preferred hypothesis or proposal. Systematic approach should be preferred over partial solutions in order to prevent virus transmission instead following its spread. There is no time "to wait and see" when the progression of virus is exponential because wait means waste of time. The COVID-19 requires a war-like decision-making, massive and prompt mobilization, identification of priorities and activities.

Table 2 . What to do in order to prevent and overcome pandemics What could we learn from the COVID-19 (Cheung 2020, Jakovljevic & Jakovljevic 2019, Lipton 2008)

- **Telos** (teleology); clearly define goals of collective protection of life and health; make vision of the desirable future
- **Logos** (logic of transdisciplinary integrative science); a tool for reason and effective systems thinking and network theory to determine causes, possible courses, and how to achieve desired outcome - take all seriously, and act quickly; make test extensive and affordable, trace and isolate, practice early physical distancing
- **Pathos** (emotions): optimism, trust, compassionate, empathy and altruism to prevent fear, panic, untrust, theories of conspiracy
- **Mythos** (new narrative, compassionate society and empathic civilization's story; effective public relations keep the people well-informed and on side. show that policies are based on scientific evidence)
- **Ethos** (cohesive ethics of pluralism) define what are good and desirable virtues and values, as well as what is bad (what to escape); global, universal ethics "Survival of the Most Loving" (Lipton 2008), ethics of duty associated with rights)

The approach should be coordinated as a coherent system of the measures taken simultaneously and complementary. The art and practice of learning organization with quickly recognizing, both successes and failures and the readiness to change actions and policy accordingly is crucial issue. Experiences from Italy (see Pissano et al. 2020) as well as from other EU countries including Croatia confirm former observations and recommendations. Only multi-disciplinary and trans-disciplinary efforts and multidimensional activities can convert zero sum games into positive sum games. Empathy is a fundamental ingredient that makes cooperation and civilization wishful, possible and necessary. Coronavirus has pointed to the dark side of globalization which has facilitated dangerous viruses to travel quickly in humans anywhere in the world with devastating effects. Humanity has to take responsibility for its actions, so globalization, as we have known it, must be tamed and turned into glocalization (see Ali 2020), the individual and collective behavior and practice of business according to both local and global considerations. COVID-19 is a wake up call for greater global empathic solidarity, good scientific education, trust between people and public authorities, and better international cooperation, all that because of new emergencies and false dichotomies rolling on the horizon.

CONCLUSIONS

The crucial message of this paper is that we should reexamine and improve our basic understanding of how human society and global world operate from the multi-disciplinary and trans-disciplinary scientific approach. Mental health sciences could help to make progress in building compassionate society and empathic civilization which would be more effective in preventing and overcoming epidemics and other global threats to humankind. Humankind survival will depend on how we treat each other and cooperate on the family, state and global world level. Promotion of global mental health is related to the promotion of humanistic self and empathic civilization as well as promotion of public mental health is related to the promotion of compassionate society. The both involve principles "the greatest good for the greatest number" and "serving a purpose larger than yourself". It is probably not possible to create a perfect world, but there is no limit for making it better if we use transdisciplinary integrative scientific knowledge and create global humanistic ethics and minds.

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Miro Jakovljevic: concept and design of article, literature searches, writing manuscript, approval of final version.

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