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Corona exhaustion (CORONEX): COVID-19-induced exhaustion grinding down humanity

Jaime A. Teixeira da Silva

P. O. Box 7, Miki-cho post office, Ikenobe 3011-2, Kagawa-ken 761-0799, Japan

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ABSTRACT

The constant presence and reminder of COVID-19, as well as persistent measures to control, test, measure or otherwise monitor this pandemic are taking an eroding psychological toll on the global population, even as select populations begin to receive a vaccine. This daily “presence” is exhausting humanity in ways akin to times of war or extreme financial strife, and its long-term impact on human mental health is referred to in this paper as CORONEX, or exhaustion caused by the coronavirus, in this case COVID-19. This term is based on broad observations, but not on clinical data. Prolonged fear, insecurities, and radical changes to lifestyles can erode psychological defenses while fortifying mental frailties. Particularly vulnerable to both health and mental health impacts of COVID-19 are older individuals, those with pre-existing conditions, minorities, and healthcare workers. Even with vaccines, COVID-19-induced fatigue (CORONEX) will likely continue in the foreseeable future as humanity learns to coexist with this pandemic. Suitable and robust economic, psycho-emotive and healthcare support structures are needed for those that survive, even more so for communities living in under-privileged conditions.

1. Introducing CORONEX, long-term COVID-19-induced exhaustion

The day-to-day long-term “presence” of the respiratory coronavirus disease 2019 (COVID-19) is taking a heavy emotional and psychological toll on many citizens around the world. The grinding fatigue that comes with this constant negative presence has sapped individuals around the world of their energy, inspiration, and motivation for work, family, and even life, leaving some with an entrenched sense of desperation and hopelessness. Corona exhaustion, or CORONEX, is a new term proposed in this paper, and is defined as long-term exhaustion induced by COVID-19. It is similar to, and likely not dissimilar to, other terms that might be observed in the media or literature, such as quarantine, pandemic or COVID fatigue, but there is one distinguishing feature: in CORONEX, excessive fatigue is herein proposed to accumulate over time. This suggested term is not based on any clinical data. In the following sections, relying mainly on published literature, possible factors that may be contributing to CORONEX singly, or collectively, are discussed.

2. CORONEX: possible primary and secondary influencing or inductive factors

2.1. Fear, depression, and anxiety

In the initial stages of the pandemic, even before it was officially indicated as being one by the World Health Organization in March of 2020, there was a distinct set of emotions that was being felt by those

living and observing the expansion of COVID-19, and the way in which it was rapidly taking lives, namely panic and fear of the unknown, literally caused by ignorance of this new medical threat (Yao et al., 2020), compounded with unique forms of racism, stigmatization and discrimination, primarily against Asians or Asian communities, given that the virus had emerged from Wuhan, in China (Lin, 2020). Fear, especially of the unknown, and in this case of the invisible, and ultimately the fear of death, i.e., “coronaphobia”, including among healthcare providers and medics at the frontline of the pandemic (Dubey et al., 2020), fortified by not knowing if there is sufficiently robust medical assistance, may have psychological and/or psychiatric repercussions, allowing mental frailties to exacerbate physical ones, or reinforce already existent insecurities (Ornell et al., 2020).

Depression and anxiety may be exacerbated among socially vulnerable individuals, including (but not exclusively) immigrants, families with children, the unemployed, or minorities, and as the number of cases and fatalities increase, and a health and mental health crisis emerge (Fitzpatrick et al., 2020), resources that were originally destined for non-COVID-19 patients may have had to be rerouted to assist in alleviating the pressures of overcrowded hospitals, and equally stressed and anxious health workers (Barello et al., 2020) and caregivers (Sun et al., 2020). Fear-induced anxiety and depression go hand in hand with stress, denial, and anger (Torales et al., 2020).

Select cases of geographically divergent responses to COVID-19-induced fear are highlighted. In a study involving Israeli subjects, and

E-mail address: jaimetex@yahoo.com

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applying a modified version of the Fear of COVID-19 scale (FCV-19S; Ahorsu et al., 2020), five factors (gender, sociodemographic status, chronic illness, being in an at-risk group, and having a family member dying of COVID-19) were shown to be associated with fear of COVID-19 (Tzur Bitan et al., 2020). In Bangladesh, despite that fear, respondents were mostly positive, indicating that they believed the disease was “controllable and containable” (Hossain et al., 2020). In a small sample of Americans, depending on the “dark” personality trait (narcissism, Machiavellianism, psychopathy, and sadism), COVID-19 was perceived either as a threat of instability or as a positive protective measure (Hardin et al., 2020). In the Balkans (Bosnia and Herzegovina), fear was associated with older individuals, and depression with younger ones (Šljivo et al., 2020). In Spain, university students were fearful (Martínez-Lorca et al., 2020). Fear impacted the “social networks (interaction, friendship, social support, co-studying) and mental health indicators (depression, anxiety, stress, loneliness)” of university students in Switzerland (Elmer et al., 2020). In India, among a small set of 69 suicide cases related to COVID-19, fear of the disease was indicated as the most common reason for suicide, followed by financial strain, work pressure or the inability to return to work (Dsouza et al., 2020). Fear of COVID-19 thus appears to be independent of, while ranging across, cultures.

2.2. Lockdowns, distancing, isolation, and intimacy

CORONEX also appears to exist indirectly due to secondary effects that may have been induced by lockdowns (Schippers, 2020). With each death, surrounding individuals are also impacted, physically, or emotionally, including the fear and anxiety of the risk of transmitting COVID-19 to a colleague or family member (Ruiz-Frutos et al., 2020). That emotion, mixed with a state of constant anxiety, comes about by the never-ending sense of having to be protected, or needing to be prepared. The energy required to be prepared against an invisible threat is exhausting, thereby inducing CORONEX, which may be particularly acute for parents who need to adjust – thereby disrupting – daily schedules, lifestyles and work schedules to adapt to often evolving health-based education policies, including online studies from home, modified home or work schedules, and reduced social contact (Kubb and Foran, 2020). Readiness may take the form of new and unknown adjustments, such as wearing masks, rearranging or adapting schedules, following social distancing or lockdown requirements or, more recently, decisions pertaining to a COVID-19 vaccination.

The effectiveness of being able to adapt to these changes, and adopt them, also relies on the strength of social capital, which needs solid bonding, bridging and linking (Pitas and Ehmer, 2020). Even when all of these adjustments are triangulated, workplace-related stress is bound to increase, exacerbating the mental stress of workers (Giorgi et al., 2020). Social isolation among older people, who are also among the most vulnerable in terms of health, can amplify loneliness (Berg-Weger and Morley, 2020). Amplified loneliness as a result of the isolation can also increase suicide rate in the elderly population (Shuja et al., 2020).

Even quotidian tasks, such as work, school, commuting to work, use of public places, shopping, or even greeting people – aspects of life that were once taken for granted – might involve radical adjustments to new environments crammed with barriers of plastic sheets, face shields hazing eye-to-eye contact, or muffled communication through seemingly difficult-to-breathe masks. Except perhaps for some nations, for example in Asia, such as China, South Korea or Japan, where face masks tend to be a regular annual feature during the flu season (Nakayachi et al., 2020), for the first time perhaps in the history of humanity, citizens around the globe have had to use a face covering, shield or mask to protect themselves against the transmission of this virus, or to protect against infecting others, although the effectiveness of these methods also depends on reducing culture-based stigmatization, and effective, proper and disciplined use (Wang et al., 2020). A state of lockdown and the mandatory use of a mask in public requires an extraordinary level of

energy to implement self-discipline, even more so when in the presence of family members, friends or known individuals where the temptation to break artificial barriers exists. Physical barriers also carry an emotional component of restriction. For many nations where greeting is an intimate act that may involve physical touch, the need to forcefully maintain a physical distance, even between loved ones, and where cultural habits are forced to adapt, may also induce a cultural form of CORONEX.

2.3. Media and politics

CORONEX is amplified by constant reminders of the presence or impact of COVID-19 in the media and by its omnipresence in public spaces, inducing stress (Taylor et al., 2020). The constant reminder of COVID-19 grinds down even the most emotionally or psychologically resilient. On occasion, fluidly adapting regional and national health policies may demand a sudden change in lifestyle, and where jobs and work are at stake, this might involve a radical transition to an economic state of uncertainty, solidifying CORONEX.

Compounding CORONEX, and also posing practical risks caused by the mass accumulation of people in physical locations, may be an enshrouding buzz of political and social instability, such as riots, looting and racial-based tensions, such as the uncertainties of the presidential election – and its aftermath – in the USA, anti-presidential protests in Belarus, protests by rice farmers in India, territorial disputes between Azerbaijan and Armenia, and even socio-religious friction in abortion protests in Poland. Such additional social tensions and societal instability may fortify CORONEX because they involve collective social instabilities (Censolo and Morelli, 2020) and the creation of physical spaces where COVID-19 might proliferate.

3. Socio-economic costs of COVID-19 and CORONEX

The massive current and projected future financial toll of COVID-19 is clear, in the trillions of US\$ (Cutler and Summers, 2020), as is its impact on mental health (Simon et al., 2020), particularly in underprivileged and minority groups (Cooper and Williams, 2020). What is less known is how societies will emerge from COVID-19 on the other side of the current vaccination campaigns taking place globally, even when not all are destined to receive the vaccine, with some groups receiving preference over others, others yet likely unable to receive the vaccine due to allergic reactions, while others yet resisting the efficiency or importance of vaccines, i.e., “vaccine non-adopters” (Su et al., 2020), and those who may be willing to pay to be vaccinated (Lin et al., 2020). Will there be cases of post-traumatic stress disorder at the scale of whole communities or populations as was evident in previous global disease outbreaks (Lee et al., 2020)? Psychologists should scrutinize cases of communities ravaged by wars or irrevocably traumatized by radical events (Munjiza et al., 2017) to prepare for community-based support that might be needed in the eventuality that CORONEX becomes a permanent feature of life and societies in the future.

4. The future of COVID-19: hope versus realism

The pandemic need not be interpreted as apocalyptic, but special attention should be drawn to its side-effects (Schippers, 2020). Hope is a helpful emotion to overcome CORONEX, but it is not always a tangible solution, and will require sustained empathy of vulnerable groups (Saladino et al., 2020), as well as positive role-models and innovative solutions to prevent emotional and educational scarring in children that may suffer from long-term exposure to COVID-19's social effects (Szabo et al., 2020). Discipline is essential, but this involves thoughtfully imposed rules that might clash with freedoms, reducing them, making “resilience” challenging, especially where social activities that require physical interaction are involved (Killgore et al., 2020). To avoid being forced to select between sacrificing freedom or sacrificing life,

community-based economic, psycho-emotive and healthcare support solutions are needed. Useful lessons may be learned from the psychological impact and trauma of previous disasters and global health threats (Osofsky et al., 2020). For psychological evaluation of the impact of COVID-19 on mental health, there is the Coronavirus Anxiety Scale (CAS) (Lee et al., 2020). More research is needed about the impact of the consumption of antiviral drugs and repurposed drugs when combined with psychotropic (e.g., antipsychotic, antidepressant, and anti-anxiety) drugs on the stability of psychiatric patients (Kontoangelos et al., 2020).

Special attention needs to be paid to the risks of suicide that might emerge from individuals struggling to deal with the social isolation caused by lockdowns and social distancing, the economic stress resulting from job losses or lay-offs, emotive weight associated with prolonged or serious health problems and death, and in turn the burden of costs associated with healthcare and health solutions (Reger et al., 2020). National suicide detection, prevention and mitigation strategies vary widely, and the absence of increased suicides in some countries may serve as a learning point for improved suicide surveillance strategies for countries suffering from a hike in suicide rates as a direct result of COVID-19 (Moutier, 2020).

Nation-wide government-implemented stimuli and bailouts might serve, and save, businesses and individuals, but community-scale solutions for those affected by CORONEX might reduce personal and national austerity. More attention is needed to drug abuse (Haley et al., 2020) and alcohol abuse (Teixeira da Silva and Testino, 2020) that may arise absent suitable support infrastructures to deal with losses caused by COVID-19 and CORONEX. Academics, medics, policy makers and mental health practitioners also need to be able to discern validated facts from misinformation, and fact from opinion, when wading through thousands of papers, including pseudo-science, published in a sometimes indistinguishable *milieu* of preprints, peer-reviewed journals, and predatory venues (Teixeira da Silva, 2020a; Teixeira da Silva et al., 2020a, 2020b).

A rational response to fear can be mitigated by responding rationally to that fear (Ng and Kemp, 2020), reducing misinformation, including by improving the reliability of published information (Teixeira da Silva, 2020b), by better preparedness, including through lessons learned from prior pandemics (Deming and Chen, 2020), a better understanding and appreciation of the burnout, emotive weight and moral stress associated with long-term challenges faced by healthcare workers and care providers (Fried and Fisher, 2016), better and more robust economic and political management and leadership (El Keshky et al., 2020), and through the availability of effective, reliable and trustworthy health solutions, including robust and safe testing and detection methods (Tang et al., 2020) as well as vaccines (Haynes et al., 2020).

A return to normality, post-COVID-19, will not be a quick or easy path, and it will involve many sacrifices, including to some freedoms and established norms. While traversing that path, awareness is needed of system free-loaders and those abusing the weaknesses and frailties of others and health systems under stress to obtain unjustified gains or benefits, and of those who use the pandemic or COVID-19 as an illegitimate excuse (Teixeira da Silva, 2020c). An intense and detailed post-publication scrutiny of COVID-19 literature will be needed to assess its validity and robustness (Teixeira da Silva, 2020a), but this will also require post-truth assessment, i.e., of hindsight bias (Redelmeier and Shafir, 2020).

COVID-19 clearly defined, in the minds and lives of so many around the globe, 2020 (Teixeira da Silva, 2021), but that need not be the case in 2021.

Author contributions

The author contributed to the intellectual discussion underlying this paper, literature exploration, writing, reviews and editing, and accepts responsibility for the content and interpretation.

Disclaimer

The author is not a psychologist or mental health specialist, and as such, the views in this paper should not be considered as clinical or medical advice, simply as a viewpoint. The observations made herein exclusively reflect personal experiences with, and general observations about, Covid-19.

Data and Code Availability Statement

Author confirms that no data has been used in the article.

Declaration of Competing Interest

The author declares no conflicts of interest.

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