Novel Coronavirus and Emerging Mental Health Issues—A Timely Analysis of Potential Consequences and Legal Policies Perspective

Mehran Idris Khan^{1,2} · Hafiz Abdul Rehman Saleem³ ·
Muhammad Fahad Anwar⁴ · Yen-Chiang Chang¹

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Abstract

The present outbreak of coronavirus disease 2019 (COVID-19) has swiftly crossed borders, and inflicted the global mental health issues. It is also affecting peoples' daily behaviours, economics, prevention strategies and decision-making among policymakers, healthcare organisations and medical centres that may unintentionally weaken COVID-19 control strategies and lead to increased morbidity, as well as mental health care needs globally. Ultimately, this outbreak is leading to further health complications worldwide, such as stress, fear of the unknown, anger, anxiety, denial, depression symptoms, and insomnia. Notwithstanding all the resources used to counter the spread of the virus, further universal strategies are desirable to address the associated mental health problems. The present study uses the qualitative means to investigate the potential impact of COVID-19, the consequences and legal aspects, then recommend policy implications, in an attempt to cover any apparent loopholes. It presents a unique analysis of its kind on the policy and legal aspects of the ongoing pandemic, as regards mental health. It concludes that there is an acute need to prioritising the health care and curative issues, strengthen awareness and address the psychological syndromes or similar complications afflicting members of the general public during this pandemic.

Keywords COVID-19 · Mental health · Potential consequences · Legal aspects

1 Introduction

As the World Health Organisation (WHO) declared, there is a public health emergency of global importance concerning the present outbreak of COVID-19 that was initially appeared in China (Holshue et al. 2020; WHO 2020a). The internationalised

✉ Yen-Chiang Chang
ycchang@dlmu.edu.cn

Extended author information available on the last page of the article

COVID-19 epidemic has now been characterised as a pandemic, with the total confirmed cases reaching 42,055,863, on 25 October 2020 (WHO 2020a), which represents significant and unusual growth. In addition, health professionals, including those providing psychosocial services for patients, among others, as well as members of the general public, who are not yet directly affected by this pandemic, are suffering from mental health issues and similar challenges (Cui et al. 2020). To this end, countries across the globe are issuing guideline documents and enforcing newly amended laws and regulations concerning strengthening the management of the pandemic for the general public, COVID-19 patients and people with severe mental disorders, who are considered as most likely to be affected by the virus during this outbreak. China is a leading country in taking this approach since the virus initially affected Chinese citizens and there was no example or guidelines available to tackle this health challenge (State Council PRC 2020). However, later, other countries also developed appropriate strategies as these challenges spread globally.

The outbreak of the pandemic has been experienced around the world for more than six months. Many of the problems arising can be addressed not only by the provision of health care to confirmed cases as well as suspected COVID-19 patients but also by providing mental healthcare. In addition, health professionals must offer psychiatry and specific public health amenities, preclinical and clinical research, prevention and control, revising the existing health policies and, where appropriate, by amending the health laws and governing regulations. This study, therefore, seeks to draw attention to the various challenges associated with COVID-19 physical health provision, not only for patients but also to the general public, including treating those who are already showing mental health symptoms. Interestingly and perhaps surprisingly, there may be various common mental health issues that occur in such environments. Most of the healthcare workers who work in general hospitals and isolation units have not always received appropriate training for the adequate delivery of mental healthcare (Xiang et al. 2020), and this matter requires addressing by the key stakeholders.

The current COVID-19 pandemic would be considered as a ‘crisis’, by most generally accepted definitions. Although crises can be devastating and often reveal gaps and weaknesses in any earlier preparation, they can, equally, also be considered as opportunities for adaptation, innovation and rapid learning—a strategy to inhibit stress and anxiety, while maintaining positive growing at the same time. Timely relevant decisions and measures during a crisis can, therefore, minimise potentially serious consequences. The effects of the COVID-19 pandemic are sweeping across all aspects of society, including health, trade and economy, academia and education, several basic rights by the curtailment of fundamental freedoms, inadequate preparedness and tardy political decisions, may all worsen the situation (McFarlane et al. 2020). There are growing concerns and fears among the public concerning the potential to become infected by COVID-19. As a result, there is a greater need to address potential mental health problems. During this pandemic, it is necessary to strengthen the awareness programmes and address people’s mental health problems. It is crucial to examine the effects on mental health in different population groups (general population groups, COVID-19 cases, close contacts of COVID-19

and healthcare professionals), in order to plan effective intervention strategies (Roy et al. 2020).

Besides, racial discrimination (Allport 1954), tardy political decisions concerning pertinent healthcare policies, laws and administrative regulations and fear of the unknown (Pager and Shepherd 2008) may lead to mental impairment of some, which can then weaken the immunity of a person, thus increasing the threat of infection or in infected, to respond to the attack. The fears arising during a pandemic may result in the requirement for treatment as regards personality disorders and social psychology-related issues (Sellers and Shelton 2003); Criminology (Unnever et al. 2017); workplace behaviour (Triana et al. 2015); Politics (Peffley et al. 2017); mental and physical health issues (Carter et al. 2017); and the Law (Wintemute 2017). Scientists have studied the history and likely impact of such crisis environments from different perspectives. Similarly, online social media and television news also disseminate information about managing strategies for psychological self-help; however, such psychosocial services, which are evidence-based, are preferable and the quality of psychosocial services needs to be assessed (Aarons et al. 2012). This study, thus, explores the mental health conditions of the general public, irrespective of whether they are directly or indirectly (with increased anxiety) affecting, the effectiveness of the psychological care accessed, coupled with the needs of the psychological care services.

Mental health consequences have been devastating during the COVID-19 outbreak, which dictates prompt action from the key stakeholders, to devise relevant legal policies to complement the health-related action (Kang et al. 2020a). Researchers across the world have presented their perspectives concerning COVID-19, i.e. Smith et al. 2020; Lai 2020; Blumenstyk 2020; Huang et al. 2020; Rubin and Wesely 2020; Xiang et al. 2020; Shigemura et al. 2020; Kennedy et al. 2020; Cui et al. 2020; Roy et al. 2020; Wen et al. 2020; Tim R. Winda et al. 2020 and Mcfarlane et al. 2020, as well as various institutions, such as the WHO, which have contributed in considering a variety of aspects of this virus, together with indications regarding state practices and responsibilities; the World Meteor Organisation (WMO) providing updated statistics; the United States (US) Centres for Diseases Control and Prevention; National Health Commission (NHC) of Peoples Republic of China (PRC); and Global Investigative Journalism Network (GIJN). All these researches have been focused more on highlighting the various impacts, causes, prevention and cure, medical or biological treatments and similar notions. Only a few studies can, however, be found which specifically consider the impact of COVID-19 on mental health, as well as providing pertinent laws or policy implications, coupled with the potential consequences. For example, there is a study conducted by Ransing et al. (2020), which considered the mental health consequences of COVID-19, but it was limited to the 'early career Psychiatrists' only, thus still encouraging further study, to address the research gap. This study, therefore, aims to consider the gap, by investigating the necessary conditions, consequences, as well as highlighting the mental health issues arising from COVID-19, together with potential legal policy implications. For this purpose, firstly, the study systematically reviews the literature, to develop a conceptual understanding and the relevant factors concerning COVID-19, by considering engagement with the organisational, societal, government and individual levels.

Secondly, this study uses a conceptual model, to systematically study the potential impact of COVID-19 on the mental health of the people and highlights the legal perspectives implicated. It presents a unique analysis of its kind concerning the effects COVID-19 on mental health, concerning policy and legal aspects. It concludes that there is an acute need to, in addition to prioritising health care and cure issues, strengthen awareness concerning the relevant laws and regulations, plus, address the psychological syndromes or similar complications of the general public during this COVID-19 pandemic. While some researches on the general impacts or consequences do exist, there is little available which considers the impact of the ongoing pandemic on mental health and furthermore contemplates the legal position. The present study is, therefore, designed to fill this gap and also explain how changing or amending the laws can save lives, while inappropriate enforcement can have an adverse impact on people.

2 Relationship Between COVID-19 and Mental Health

According to a study by Xiang (Xiang et al. 2012), China has about 173 million people with mental syndromes, and the related stigma and neglect of the issue still prevail in society (Li et al. 2018). Similarly, the number of such unfortunate people is significant throughout the world. When pandemics, such as the ongoing COVID-19, occur, people with mental syndromes are frequently are more vulnerable to infection, for a number of reasons. Firstly, mental conditions may potentially increase the infection risk, including that of pneumonia (Seminog and Goldacre 2013). A report released on 9 February 2020, which considers a group of fifty COVID-19 cases who had been admitted to a psychiatric clinic in the Chinese city of Wuhan, raised concern about the role of mental conditions in the transmission of coronaviruses (Yao et al. 2019). Possible explanations are cognitive impairment, low-risk awareness and fewer efforts to protect the affected person, as well as cramped situations in psychiatric wards.

Secondly, people with mental disorders or similar complications, having been infected with acute respiratory syndromes during the COVID-19, may face more significant barriers to access timely health care because currently, those with poor mental health are often less able to take self-treatment measures efficiently. In Addition, the comorbidities of a mental disorder, in association with COVID-19, will make treating the latter more challenging and possibly less effective (Sartorius 2013). Thirdly, the pandemic has caused a parallel epidemic of depression, anxiety and fear. COVID-19 may possibly affect people with mental ailments because they may be more vulnerable as a result of their emotional reactions, which may encourage relapses or deterioration of the prevailing mental state, due to the higher vulnerability to anxiety and trauma, as compared to healthy people.

Finally, the ongoing pandemic has restrained many people from attending outpatient visits, for assessment, treatment or receive prescriptions. Fear of the virus has an acute impact, which merits increasing awareness among the general public. To this end, engaging psychologists to motivate and guide the public in this regard could prove beneficial. In addition to these issues, curtailment of or bans on national travel and

quarantine regulations, have also added to the general anxiety. The situation is indicating that there is a direct relationship between COVID-19 and the mental health condition of many, including those who have pre-existing mental health issues, as well as afflicting many who has no pre-existing mental health issues. It is also pertinent to mention here that pandemics appear not to have the same impact on all population groups and treating suspected sufferers by early intervention may help to control the spread of infections. During this COVID-19 pandemic, however, only a few voices from that vast but vulnerable populace have been heard from those who are suffering from mental health issues, despite the importance of the matter.

3 Consequences of COVID-19 on Mental Health, and the Way Forward

3.1 Overwhelming Mental Health Problems

In the emergency now referred to as COVID-19, Wuhan's health workers were isolated from their families, while dealing with the highly transmissible disease, which placed them at high risks of contamination but with insufficient protection against infection, fatigue, isolation, frustration, work overload, discrimination (too), and patients also suffered from harmful emotional conditions (Kang et al. 2020). The present circumstances are causing various mental health issues, including anxiety, stress, anger, social denial, insomnia and several other depressive symptoms (Jones et al. 2017). Such mental health challenges not only adversely impact on the understanding, consideration, and the decision-making ability of health professionals, which can hamper the fight against the ongoing pandemic but can also have a lasting impact on the general well-being of the population (Kang et al. 2020). A recent study by Heather Mowbray (2020) presented evidence that the prevalence of post-traumatic stress disorder (PTSD) in the general population ranged from 4 to 41% and the frequency of severe depression increased by 7% after the initial stages of incapacity. Some of the contributing factors for increasing the risk of developing the mental health conditions included frequent use or misuse of social media, interpersonal conflicts, less resilience, lower socioeconomic status and limited social support (Mowbray 2020).

3.2 Extreme Fear, Insecurity, and Uncertainty

Firstly, the emotional responses of the general public are expected to involve strong fear and insecurity, and adverse social behaviour is often driven by distorted perceptions and the fear of risk/threat, thus increasing the likelihood of uncertainty of the unknown. Secondly, special attention should be paid towards vulnerable groups, including (1) sick and infected patients, other colleagues with whom they work and families; (2) healthcare professionals, especially doctors and nurses, who work directly with quarantined or sick people; (3) individuals together with their associations with the community; (4) people with pre-existing medical conditions (both mental and physical). Finally, the extent of

mental stress to which health care workers and others may be exposed and the risk of vulnerable groups in the crisis decision-making process should be taken into account (Torales et al. 2020). Although mental health studies in ongoing pandemic patients are rare, some authors point out that it is possible to predict the likely physical and mental health consequences for the more vulnerable sections of the population (Kang et al. 2020).

3.3 Strengthening Immunity—the Best Self-cure to Fight Against COVID-19

Patients reported their decreased haematocrit, phosphorus and calcium levels after staying in isolation for two weeks, which indicates that social, as well as medical isolation during the pandemic, can cause high levels of anxiety and stress not only in haemodialysis patients but also in healthy people, by being in social isolation or quarantine (Kim et al. 2019). Isolation can be a defensive measure in some situations, for example, in terrorist attacks, where past experience has shown increased mental stress during such events (Fagan et al. 2003). Robust mental health and its maintenance should also be regularly assisted and encouraged in those with an existing vulnerable mental health status, say six months after being released from isolation. Support should include accurate information and adequate patient care, including food, clothing, accommodation if necessary and any other necessity so required (Lin et al. 2007).

In addition, health professionals, themselves, may show evidence of mental strain or incapacity, when or after dealing with traumatic events in the community. For instance, during the SARS-CoV epidemic in Singapore in 2003, 27% of healthcare professionals reported having numerous psychiatric symptoms (Lee et al. 2018). Similarly, in 2015, medical personnel with MERS-related responsibilities presented symptoms of the post-traumatic syndrome, after the Korean outbreak (Celie et al. 2016). All these cases suggest an increased rate of symptoms after home quarantine or isolation. Mental health teams should, thus, have available appropriate psychiatric measures to deal with an outbreak, as previous outbreaks suggest the high-mortality infectious disease is likely.

In conclusion, the increasing evidence of mental health symptoms in public may potentially lower their immune systems, due to fear of the unknown, this indicating that efforts to stimulate the immune system, by providing suitable support for those displaying mental strain, are valuable attributes, in combatting such diseases, in addition to medication or therapies.

3.4 The Prevalence of COVID-19 and the Role of Tele-health in Reducing the Mental Health Burden

The psychological effects of COVID-19 must be recognised together with the physical symptoms, for all who are affected by this pandemic (Minter 2020; Shigemura et al. 2020). Tele-health, or more precisely, the services concerning tele-mental health seem suited in supporting COVID-19 patients, as well as their family

members, and healthcare professionals or providers during the ongoing pandemic (Smith et al. 2020).

COVID-19-related psychological symptoms have already been pragmatic at the various population levels, including anxiety-related panic buying as well as paranoia regarding participation in community events (Collett 2020). Multiple stakeholders including teachers, tourists, (daily wages) workers, and students who were denied access to their educational facilities, jobs, or homes, are developing psychological or mental health symptoms due to reduced autonomy, stress, as well as concerns about habitual residency, learnings, food, security, work and income security (Worthington Worthington 2020). Such evidence is acknowledged by many authorities, including the governments of China, Australia and Singapore, which have highlighted the mental health-related or psychological side effects of the COVID-19 pandemic. Particular concern has been expressed concerning the likely long-term impact of isolation or home quarantine and that the panic and fear in the community could do more harm than the virus itself (GoA 2020; Lai 2020; NHC of PRC 2020).

Evidence and examples to support the efficiency of tele-mental health care strategies are reasonably diverse, particularly in the context of stress and depression (García-Lizana and Muñoz-Mayorga 2010), anxiety (Rees and MacLaine 2015) and PTSD (Turgoose et al. 2018). To this end, videoconferencing (Rees and MacLaine 2015), online forums (Kauer et al. 2014), smartphone apps (Kerst et al. 2020), text-messaging (Kauer et al. 2014) and e-mails (Torniainen-Holm et al. 2016) have proved to be beneficial communication approaches for the delivery of such psychological or mental health facilities.

For example, China is enthusiastically offering several tele-mental health and psychosocial amenities during the COVID-19 outbreak, which are delivered by the top academic intuitions as well as government agencies and include training, supervision, advice, and psycho-education through online means of communication or platforms, such as WeChat, QQ, and Tencent's hotline (MoE of PRC 2020a, b). Similarly, the USA, Brazil, Colombia, Paraguay, Egypt, Iran, Lebanon, Tunisia, Italy, Kosovo, Portugal, Spain, India, Indonesia, and Singapore are also, somehow, considering the deployment of tele-mental health services, in order to better cope with this health issue (Pereira-Sanchez et al. 2020).

3.5 E-Mental Health Care Implications

The apparent solution to successful pandemic mental health care is to deliver 'warm' distance mental health services through psychotherapy, using the videoconferencing and other Internet interventions. A systematic review of these strategies has shown that psychotherapy through videoconferencing shows promising results in dealing with anxiety, stress and moods syndromes (Berryhill et al. 2019) and the therapist-led Internet interventions are evidently appropriate and useful (Andersson 2016; Karyotaki et al. 2018). Various obstacles have, however, so far hampered the general implementation of such routine care, despite twenty years of such evidence-based psychosocial amenities (Tuerk et al. 2018; Vis et al. 2018). To this end, one

of the most critical obstacles has been that mental health had not been regularly integrated into routine care because of a lower rate of acceptability by health care workers (Topooco et al. 2017). Similarly, myths about tele-medicine, for instance, ‘therapeutic association can only be made face-to-face’, have weakened this field, although studies show positive outcomes (Berger 2017). The result is that the learning curves for the introduction of innovative technologies concerning mental health by psychologists as well as patients have progressed much slower than were originally expected. It follows from the aforementioned that the implementation of innovation in the European Union, for example, takes an average of 16 years in the health sector (Rogers et al. 2017). There are, however, several exceptions across the globe, but progress growth is still significantly slow (Tim R. Winda et al. 2020).

The responses across the world to this emergency are no more than a temporary or momentary increase in online works (Blumenstyk 2020). Once the psychiatric institutions have developed the skills to care for and cure their patients through videoconferencing and other digital technologies, there are few reasons to forego them, given the numerous benefits (Tuerk et al. 2018; Blumenstyk 2020). Agility, resilience, mobility and flexibility are crucial skills for institutions of the twenty-first century, especially when unexpected, disruptive viruses (COVID-19) and similar devastating events caused by climate change occur more frequently (Blumenstyk 2020). The present study recommends that healthcare professionals should immediately begin introducing mental health applications, both as a method of continuing care for currently needy patients and as a way to cope with the impending increase in coronavirus mental health complications.

3.6 Effects of Misleading Media Coverage Concerning the Outbreak of COVID-19 Pneumonia, in Relation to Mental Health Syndromes

The proliferation of social media and networks in the digital age has changed the way much information is provided. Nowadays, media sources are essential to inform the public about news in good time. These channels should report the information professionally and promptly as regards disasters or public crises since, in the modern age, social media play an essential part in the public awareness of many concerning these global emergencies (Schultz et al. 2011). An emblematic example is the COVID-19 epidemic in the Chinese city of Wuhan (Huang et al. 2020). The disease has spread around the world and has become a pandemic (WHO 2020b). On 31 January 2020, the WHO announced that the novel coronavirus had become an international health emergency of global importance, which is the sixth of its kind throughout history (ABC News 2020).

China has named the novel coronavirus as the, ‘Novel Pneumonia Coronavirus’ (PCN), which has raised concerns around the world, as evidenced by the growing public interest as reported by the international media (State Council PRC 2020). Initially, some media channels and even state spokespersons reported PCN as being a ‘Chinese virus’, before China officially established the name of the disease (Xinhua News 2020). In addition to these, bolder headlines such as, ‘China is the really sick man of Asia’ and ‘Chinese children stay at home’, have misled the public and

apparently encouraged discrimination against Chinese people, especially those living outside of China, thus affecting the well-beings of Chinese individuals through misleading media coverage.

In a similar vein, the continuing distorted headlines by some media outlets possibly threatened some individuals and communities, mainly through misconceptions, which could also result in mental illnesses that could persist in the current social climate (Rodriguez-Seijas et al. 2015). Similarly, in times of public crisis, distorted reporting can have different consequences, and it would be better if people would try to verify the source of the news, before responding to any purported news.

For example, in a study of a blockade by of a university after a shooting incident apparently related to COVID-19 in the USA, subjects who received inconsistent information regarding the blockade reported a considerably higher level of serious stress (Purgato et al. 2018). The study also reported acute stress suffered by social media users. This report highlights the importance of periodically publishing major official updates and monitoring social media during a crisis event, in an effort to reduce the risk disseminating misleading information and its likely consequences (Purgato et al. 2018; Mowbray 2020).

3.7 Collateral Damage to Civil Rights During the Pandemic

In the USA, journalists are required by law to include government information in their COVID-19 stories (GIJN 2020). In contrast, the President of the Philippines reportedly told the security forces that if someone violates the regulations concerning isolation or home quarantine, they should be ‘shot down’ (The Dawn 2020). In Hungary, the Prime Minister can rule indefinitely in any untoward situation. Similarly, in Europe, Africa, Asia, and the Middle East, governments have presented emergency states to deal with the rapid spread of the COVID-19, by striking some of the strictest restrictions on civil rights and liberties (The Dawn 2020).

Since the novel coronavirus has spread around the world affecting around more than forty million people (42,990,580) and approximately 1,155,437 deaths, up to 25 October 2020 (WMO 2020), governments across the globe have passed several laws and administrative regulations, to combat the ongoing situation efficiently. The priority of these measures is the protection of public health and control of the disease from spreading further. The US-based International Centre for Non-profit Laws has created a database that tracks legislation and its implications for civil liberties and human rights. According to this report, 68 countries have made emergency statements so far, while nine have introduced expressions of opinion, 11 have increased surveillance, and there are a total of 72 assembly restrictions (The Dawn 2020).

4 Legal Aspects of COVID-19 Management

The course of a pandemic is as much a function of social structures as protein structures. Crucially, the law is among the more important of these social structures, requiring rapid adaptation to address a pandemic. Thus, there is a need to scrutinise

the role of the law in impeding or supporting timely local, national and global responses to the transmissibility of severe acute respiratory syndrome COVID-19 and the lethality of its associated malady (Johnson and Bailey 2020).

This study examines how matters can evolve concerning professional liability law. It also briefly examines the likely increase in volunteers involved in addressing the impact of a pandemic and the essential aspect of patient confidentiality in the case of handling COVID-19 patients by volunteers (BBC 2020); it concludes that patient confidentiality may be compromised. The law on care obligation, whether those who are specialists to their patients or managers or employers to their employees, is based on appropriateness. In these situations, what is more reasonable should not directly affect the confirmed or suspected patients by violating information privacy laws, in addition to the existing challenges of the availability of resources, such as equipment and relevant staff.

4.1 Patients' Confidentiality and Legal Obligation

In the current situation of the COVID-19 pandemic, it is crucial to include support for professionals, who may have doubts, in some instances, and they should share reasonable suspicion or their knowledge concerning a particular patient, who could pose the risk of contagion to others. They may be uncertain if a particular procedure may be impractical, ineffective or even rejected, however, the common rule is that, it is lawful to disclose such details or information to the extent that it appears obligatory, to alleviate or eliminate the expected danger (Finch 2019). Maintaining confidentiality is a professional as well as moral value and responsibility, and its violation is punishable under the law, except in such cases where the disclosure of such information is provided in good faith, as provided in Article 26 of Vienna Convention 1980, and has positive intentions for society.

4.2 Extended Powers of Law Enforcement Agencies for Arrests

While opinions are inevitably diverse, the proposal to empower the enforcement agencies, including the police or similar agencies to arrest people who are violating government rules concerning 'social distancing' and 'quarantine', may be deemed useful in one way. On the other hand, such action may result in some undue stress or pressure, where people find themselves unable to attend to their necessities, during a crisis. The 'restrictive action' by the authorities may appear valid to them, since the individuals involved are likely to be infected with the coronavirus, whereas, in others' opinion, such action may seem entirely inappropriate and impractical as they view the laws for limiting the spread of the disease differently and possibly unacceptable. An analogy can be made with the powers of the police under the relevant sections of the law, including Mental Health Laws, since the activities in question can be deemed as having direct or indirect relations with the mental health of the suspected people. The practical implication of such laws has an unfortunate history, and a number of deaths of people with mental illness have occurred during

police custody (Finch 2020). While the law enforcement agencies, including the police, are trained how to act during in such demonstrations and be aware of the potential of some individuals suffering from mental ill-health, arrest and detention can be inappropriate, when dealing with those suspected of having mental health issues, although it should be acknowledged that, since often, instant decisions must be made by the authorities, discerning who may or may not where should them be suffering from mental ill-health may not always be easy to determine.

Imposing fines for such violations may seem reasonable but could potentially add excessive anxiety and stress to financial burdens, during the days of the uncertainty of unemployment and business closure, with no end in sight as regards the pandemic. For people with existing mental disorders, there is also the question of, in the event of some disruption, where should they be taken, if not to a police station. General psychiatric practitioners and hospitals are unlikely to welcome such individuals, not least because hospitals are already often overwhelmed during the pandemic and paramedical staff are already overworked, due to the continuously increasing number of COVID-19 patients. It would seem that, rather than following regular procedures, in the event of a disruption, the police should adopt a more advisory and awareness centred approach, during the lockdown periods. Although there can be a lack of suitable infrastructure to maintain an accurate record of people moving in a given locality, this can only be addressed by the authorities being trained to give adequate guidance and awareness, as opposed to more normal procedures. Awareness and empathy can make a positive impact, based on a mutual understanding of the need for voluntary compliance. An authoritative action seems reasonable, if carried out to arrest a person suspected of a COVID-19 breach, when also related to the committing of crimes or violating the rules (Finch 2020). There are, however, some difficulties created by the existing powers, that could potentially hinder the desire to achieve their well-being goals.

4.3 Political Obligations and Timely Decision-Making

The USA, Italy, Japan, Korea, France and Germany, all of whom are struggling with the pandemic, with varying levels of success, all offer different mixtures of these forms of decision-making. The question arises as to how to strike the right balance. It seems clear at this point that, politically accountable leaders in the USA and Italy have not been optimal decision-makers, since the pandemic has been acute, at times, in these countries. The actions of such decision-makers appear to have had limited success, in attempts to curtail liberty to save lives.

It is not unreasonable to hold politicians accountable for miscalculating, but a more profound problem lies in the design of the systems that make such decisions political in the first place. It is not plausible to expect politicians or politically controlled agencies to necessarily exercise decisive leadership with unappealing measures such as halting travel, banning public events, and mandating social distancing. Politicians and politically accountable agency heads will, quite rationally, anticipate that any unpopular pronouncements are likely to be received with distaste. It is possible to conceive of a scenario, where measures introduced work well in preventing

the spread of the virus, but healthy but annoyed citizens may well conclude that they were inconvenienced needlessly for a crisis that never apparently materialised. The politically astute ploy is to anticipate a crisis, instead of reacting as it unfolds, blaming others abroad for any lives lost; similar things are happening now in the USA and elsewhere. Moreover, this scenario would be less likely, if the response to a pandemic is taken timeously and expertly.

4.4 Role of WHO COVID-19 Law Lab

The WHO has taken a significant and much-needed initiative, by establishing a new COVID-19 Law Lab, in an effort to provide legal information to the various stakeholders concerning the potential legal impact of COVID-19 across the world (WHO 2020c). This Law Lab initiative collects and shares legal documents from around 190 states around the globe to help these countries in establishing and implementing a solid legal framework, in the fight against the ongoing pandemic. The aim is to make sure that laws protect the health and well-being of communities and individuals and that they comply with international human rights standards. It will also include studies of various legal frameworks for COVID-19 (WHO 2020d). These analyses can be instrumental in considering the impact of public health laws on human rights and in helping states identify best practices to manage their immediate responses to COVID-19 and post-pandemic socioeconomic recovery efforts. It is also developing the work of the United Healthcare Legal Solutions Network, which was set up to help countries achieve universal health insurance, through the implementation of rights-based legal frameworks.

4.5 Role of Judicial and Administrative Institutions

The alternative approach, however, is not authoritarianism. What is needed is a better use of our judicial and administrative institutions, along with some careful tuning of the political accountability or insulation mixture. Currently, for example, the US Public Health Service (USPHS), of which the Centres for Diseases Control and Prevention (CDC) is an integral part, is an executive branch agency accountable to the President (CDC of the US 2020). It does not have to be this way, however, as the USPHS could be refashioned on the model of independent agencies to deal with such pandemic situations since the leaders in these organisations, once appointed, could not be removed at the President's sole behest (O'Reilly 1992). To prevent tyrannical overreach by an independent USPHS during a pandemic, the law could require public health measures to be approved in advance by a federal court, which could review petitions on an emergency basis. It is due to the fact that the US constitution already requires liberty-limiting public health measures and that they must satisfy due process considerations of being necessary to protect the public from significant risk (Gostin et al. 2016). The legislation should encourage public servants to simplify and assist the Food and Drug Administration to think creatively in designing case-by-case approval procedures for vaccines, other biologics and small-molecule drugs for combatting COVID-19 (Lim 2018).

4.6 How Changing the Laws Could Save Lives?

It is a risk–risk trade-off, one that makes reasonable and ethically defensible; a strategy of expedited clinical research among well-informed and consenting clinical subjects. Scientists and health professionals tend to take the law as a fixed constraint on their work, even as they attempt to bend chemistry and biology to their will, in the battle against the disease. The pandemic context, however, demands a more expansive perspective. People must be alert as to how the law may exacerbate or ameliorate the pandemic, and we must consider how changing the law could save lives, reflecting on the law's role in the rapidly increasing problem of COVID-19, for building formal pandemic provisions and contingencies into the law. Doing so would facilitate the various kinds of high-speed coordinated collective action and innovation among the public and private actors, that are needed to more successfully grapple with pandemics.

5 Recommendations and Conclusions

Remote care as regards psychiatric services has the advantage that isolated people can receive ongoing support, while also protecting health professionals from the risk of infection (Moldofsky and Patcai 2011). Appropriate technology is already available in many countries to provide remote psychosocial services, and it is easier for individuals to access such facilities, without violating the protocols of social isolation, as posed by governments. For instance, doctors can contact existing patients and perform various wellness or medical checks, to make sure if they fully understand the implications of the COVID-19 pandemic, have adequate resources, sufficient medication and appropriate aids to isolate themselves or otherwise.

Handling and governing protocols for COVID-19 pandemic patients should cope with the physiological, as well as mental health care needs, of both the patients and healthcare professionals. Psychological support and assistance can potentially decrease the burden of comorbid mental syndromes or illnesses and ensure the overall well-being of affected people. In addition to the above, some other useful techniques should be adopted by the concerned stakeholders, including providing alternatives to inpatient care; developing new communication strategies; promoting enhanced use of tele-medicine consultation; monitoring intensive care and support for those already recognised as being at-risk; organising support for health professionals; and monitoring the enduring impact on health workers and similar result-oriented techniques and strategies.

The above discussion informs that, the crisis is both a challenge and as an opportunity, for innovation and adaptation. There are also some lessons from history, and essential measures should be timely taken accordingly. The current focus on the global spread of COVID-19 infection might divert public consideration of the mental health consequences of affected pandemic patients, as well as the general public. It should be acknowledged that the emerging psychological problems associated with this global incident can develop into permanent health and stigma problems.

Global health policies should be used to address the mental health variables and consider the various psychosocial stress factors (as discussed in Sect. 3), especially those related to home quarantine or isolation, anxiety and vulnerability in the general population. All these situations merit a uniform global response, focusing on the psychological impact on the mental health of affected people and the general populace. In addition, data released by the mass media and social networks should be appropriately monitored, strictly controlled (if misrepresented) and community-based psychological support measures encouraged worldwide. Amending or passing new laws and regulations to manage these situations could be beneficial, if appropriately implemented.

In conclusion, the results from the above discussion show that, for instance, a surprisingly significant number of healthcare workers across the globe who suffer from viruses also suffer from mental syndromes. They would instead benefit from the increased availability of personalised psychiatric care by psychiatrists and psychotherapists, where diverse mental health groups possibly focus on providing specialised psychiatric facilities. The review of literature, discussion and analysis made in this study indicate that countries should make pertinent laws and regulations and use them as legal tools to control and coordinate the ongoing situations; legal transplantation and learning from other state practices should be considered as the best practice. These steps are needed for greater awareness and better preparedness for future infectious diseases, and despite the current global economic impact of the pandemic, it would seem wise to take action now, rather than to wait for another crisis. Such action would be seen as a prudent investment in the provision of crucial mental health tools in a country's medical structure for the future care and protection of medical professionals, who are always at the forefront of dangerous disease occurrences.

References

- Aarons, Gregory A., Charles Glisson, Phillip D. Green, Kimberly Hoagwood, Kelly J. Kelleher, and John A. Landsverk. 2012. The organizational social context of mental health services and clinician attitudes toward evidence-based practice: a United States national study. *Implementation Science* 7: 1–15. <https://doi.org/10.1186/1748-5908-7-56>.
- ABC News. 2020. Coronavirus is a public health emergency, World Health Organisation declares. ABC News, February 1.
- Allport, Gordon W. 1954. *The nature of prejudice*. Cambridge: Addison-Wesley Publishing Company.
- Andersson, Gerhard. 2016. Internet-delivered psychological treatments. *Annual Review of Clinical Psychology* 12: 157–179. <https://doi.org/10.1146/annurev-clinpsy-021815-093006>.
- BBC. 2020. Coronavirus: NHS volunteers to start receiving tasks. *BBC News*, April 7.
- Berger, Thomas. 2017. The therapeutic alliance in internet interventions: a narrative review and suggestions for future research. *Psychotherapy Research* 27: 511–524. <https://doi.org/10.1080/10503307.2015.1119908>.
- Berryhill, Micha Blake, Nathan Culmer, Nelle Williams, Anne Halli-Tierney, Alex Betancourt, Hannah Roberts, and Michael King. 2019. Videoconferencing psychotherapy and depression: a systematic review. *Telemedicine and e-Health* 25: 435–446. <https://doi.org/10.1089/tmj.2018.0058>.
- Blumenstyk, Goldie. 2020. Why coronavirus looks like a 'Black Swan' moment for higher Ed. *The Chronicle Published*.

- Carter, Robert T., Michael Y. Lau, Veronica Johnson, and Katherine Kirkinis. 2017. Racial discrimination and health outcomes among racial/ethnic minorities: a meta-analytic review. *Journal of Multicultural Counseling and Development* 45: 232–259. <https://doi.org/10.1002/jmcd.12076>.
- CDC of the U.S. 2020. Coronavirus Disease 2019: CDC is responding to the Novel Coronavirus Outbreak. *The United States Centres for Diseases Control and Prevention (CDC)*.
- Celie, Karel-Bart, Kenneth Prager, Danielle Chaet, Carolyn Johnston, and Rachel Yarmolinsky. 2016. How should clinicians integrate mental health into epidemic responses? *AMA Journal of Ethics* 18: 473–563.
- Collett, Michael. 2020. Coronavirus update: more COVID-19 cases confirmed across Australia as shoppers stock up on toilet paper, groceries. *ABC News*, March 5.
- Cui, Long-Biao, Xiao-Hui Wang, and Hua-Ning Wang. 2020. Challenges facing coronavirus disease 2019: psychiatric services for patients with mental disorders. *Psychiatry and Clinical Neurosciences*. <https://doi.org/10.1111/pcn.13003>.
- Fagan, Joanne, Sandro Galea, Jennifer Ahern, Sebastian Bonner, and David Vlahov. 2003. Relationship of self-reported asthma severity and urgent health care utilization to psychological sequelae of the September 11, 2001 Terrorist attacks on the world trade center among New York City area residents. *Psychosomatic Medicine* 65: 993–996. <https://doi.org/10.1097/01.PSY.0000097334.48556.5F>.
- Finch, John. 2019. Compensation for lifting accidents in community nursing. *British Journal of Community Nursing* 24: 296–299. <https://doi.org/10.12968/bjcn.2019.24.6.296>.
- Finch, John. 2020. Legal aspects of COVID-19 pandemic management for community nurses. *British journal of community nursing* 25: 196–199. <https://doi.org/10.12968/bjcn.2020.25.4.196>.
- García-Lizana, Francisca, and Ingrid Muñoz-Mayorga. 2010. Telemedicine for depression: a systematic review. *Perspectives in Psychiatric Care* 46: 119–126. <https://doi.org/10.1111/j.1744-6163.2010.00247.x>.
- GIJN. 2020. Investigative journalism on the COVID-19 crisis. *Global Investigative Journalism Network (GIJN)*, March 25.
- GoA. 2020. Coronavirus (COVID-19) health alert. *Health Department of Government of Australia (GoA)*.
- Gostin, Lawrence O., Lindsay F. Wiley, and Thomas R. Frieden. 2016. *Public health law: power, duty*, 3rd ed. Berkeley: University of California Press.
- Holshue, Michelle L., Chas DeBolt, Scott Lindquist, Kathy H. Lofy, John Wiesman, Hollianne Bruce, Christopher Spitters, et al. 2020. First case of 2019 novel coronavirus in the United States. *The New England Journal of Medicine* 382: 929–936. <https://doi.org/10.1056/NEJMoa2001191>.
- Huang, Chaolin, Yeming Wang, Xingwang Li, Lili Ren, Jianping Zhao, Hu Yi, Li Zhang, et al. 2020. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *The Lancet* 395: 497–506. [https://doi.org/10.1016/S0140-6736\(20\)30183-5](https://doi.org/10.1016/S0140-6736(20)30183-5).
- Johnson, Eric E, and Theodore C Bailey. 2020. Urgent legal lessons from a very fast problem: COVID-19. *Stanford Law Review* 73.
- Jones, Nickolas M., Rebecca R. Thompson, Christine Dunkel Schetter, and Roxane Cohen Silver. 2017. Distress and rumor exposure on social media during a campus lockdown. *Proceedings of the National Academy of Sciences of the United States of America* 114: 11663–11668. <https://doi.org/10.1073/pnas.1708518114>.
- Kang, Lijun, Yi Li, Hu Shaohua, Min Chen, Can Yang, Bing Xiang Yang, Ying Wang, et al. 2020a. The mental health of medical workers in Wuhan, China dealing with the 2019 novel coronavirus. *The Lancet Psychiatry* 7: e14. [https://doi.org/10.1016/S2215-0366\(20\)30047-X](https://doi.org/10.1016/S2215-0366(20)30047-X).
- Kang, Lijun, Simeng Ma, Min Chen, Jun Yang, Ying Wang, Ruiting Li, Lihua Yao, et al. 2020b. Brain, behavior, and immunity impact on mental health and perceptions of psychological care among medical and nursing staff in Wuhan during the 2019 novel coronavirus disease outbreak: a cross-sectional study. *Brain, Behavior, and Immunity* 87: 1–7. <https://doi.org/10.1016/j.bbi.2020.03.028>.
- Karyotaki, Eirini, David Daniel Ebert, Liesje Donkin, Heleen Riper, Jos Twisk, Simone Burger, Alexander Roental, et al. 2018. Do guided internet-based interventions result in clinically relevant changes for patients with depression? an individual participant data meta-analysis. *Clinical Psychology Review* 63: 80–92. <https://doi.org/10.1016/j.cpr.2018.06.007>.
- Kauer, Sylvia Deidre, Cheryl Mangan, and Lena Sancí. 2014. Do online mental health services improve help-seeking for young people? a systematic review. *Journal of Medical Internet Research* 16: 1–18. <https://doi.org/10.2196/jmir.3103>.

- Kennedy, Carlos, Tavares Lima, Poliana Moreira, De Medeiros Carvalho, Igor De Araújo, Araruna Silva, José Victor, et al. 2020. The emotional impact of Coronavirus 2019-nCoV (new Coronavirus disease). *Psychiatry Research* 287: 112915. <https://doi.org/10.1016/j.psychres.2020.112915>.
- Kerst, Ariane, Jürgen Zielasek, and Wolfgang Gaebel. 2020. *Smartphone applications for depression: a systematic literature review and a survey of health care professionals' attitudes towards their use in clinical practice*, vol. 270, 139–152., European archives of psychiatry and clinical neuroscience Berlin: Springer.
- Kim, Yang Gyun, Haena Moon, Se Yun Kim, Yu Ho Lee, Da Wun Jeong, Ju Kipyoo Kim, Young Moon, et al. 2019. Inevitable isolation and the change of stress markers in hemodialysis patients during the 2015 MERS-CoV outbreak in Korea. *Scientific Reports* 9: 1–10. <https://doi.org/10.1038/s41598-019-41964-x>.
- Lai, Linette. 2020. Fear and panic can do more harm than the coronavirus, says PM Lee Hsien Loong. *The Straits Time*, February 8.
- Lee, Sang Min, Won Sub Kang, Ah Rang Cho, Tae Kim, and Jin Kyung Park. 2018. Psychological impact of the 2015 MERS outbreak on hospital workers and quarantined hemodialysis patients. *Comprehensive Psychiatry* 87: 123–127. <https://doi.org/10.1016/j.comppsy.2018.10.003>.
- Li, Juan, Meng Meng Zhang, Lin Zhao, Wen Qiang Li, Jun Lin Mu, and Zhao Hui Zhang. 2018. Evaluation of attitudes and knowledge toward mental disorders in a sample of the Chinese population using a web-based approach. *BioMed Central (BMC) Psychiatry* 18: 1–8. <https://doi.org/10.1186/s12888-018-1949-7>.
- Lim, Daryl. 2018. Biologics as the new antitrust frontier: reflections, riposte, and recommendations. *University of Illinois Law Review* 209: 209–227.
- Lin, C.Y., Y.C. Peng, Y.H. Wu, J. Chang, C.H. Chan, and D.Y. Yang. 2007. The psychological effect of severe acute respiratory syndrome on emergency department staff. *Emergency Medicine Journal* 24: 12–17. <https://doi.org/10.1136/emj.2006.035089>.
- Mcfarlane, Alexander, Rakesh Jetly, Carl A. Castro, Neil Greenberg, and Eric Vermetten. 2020. Impact of COVID-19 on mental health care for veterans: improvise, adapt and overcome. *Journal of Military, Veteran and Family Health* 6: 17–20.
- Minter, Adam. 2020. Quarantine for Coronavirus has serious side effects. *Bloomberg*, February 28.
- MoE of PRC. 2020a. In response to the epidemic, the psychology department of Beijing Normal University opened a psychological support hotline and online counseling service! *Ministry of Education (MoE), Peoples Republic of China (PRC)*.
- MoE of PRC. 2020b. Mental health service platform provides around-the-clock psychological support during COVID-19 outbreak. *Ministry of Education (MoE), Peoples Republic of China (PRC)*.
- Moldofsky, Harvey, and John Patcai. 2011. Chronic widespread musculoskeletal pain, fatigue, depression and disordered sleep in chronic post-SARS syndrome; a case-controlled study. *BMC Neurology* 11: 37. <https://doi.org/10.1186/1471-2377-11-37>.
- Mowbray, Heather. 2020. In Beijing, coronavirus 2019-nCoV has created a siege mentality. *British Medical Journal*. <https://doi.org/10.1136/bmj.m516>.
- NHC of PRC. 2020. Interpretation: “Notice on Strengthening Psychological Aid and Social Work Services in the Work of Responding to New Coronary Pneumonia.” *National Health Commission (NHC), Peoples Republic of China (PRC)*.
- O'Reilly, James T. 1992. Review: it's time for several third editions: a review of Schwartz, administrative law (3d ed. 1991). *Administrative Law Review* 44: 461–464.
- Pager, Devah, and Hana Shepherd. 2008. The sociology of discrimination: racial discrimination in employment, housing, credit, and consumer markets. *Annual Review of Sociology* 34: 181–209. <https://doi.org/10.1146/annurev.soc.33.040406.131740>.
- Peffley, Mark, Jon Hurwitz, and Jeffery Mondak. 2017. Racial attributions in the justice system and support for punitive crime policies. *American Politics Research* 45: 1032–1058. <https://doi.org/10.1177/1532673X17692326>.
- Pereira-Sanchez, Victor, Frances Adiukwu, Samer El Hayek, Drita Gashi Bytyçi, Jairo M. Gonzalez-Diaz, Ganesh Kudva Kundadak, Amine Larnaout, et al. 2020. COVID-19 effect on mental health: patients and workforce. *The lancet. Psychiatry* 7: e29–e30. [https://doi.org/10.1016/S2215-0366\(20\)30153-X](https://doi.org/10.1016/S2215-0366(20)30153-X).
- Purgato, Marianna, Chiara Gastaldon, Davide Papola, Mark van Ommeren, Corrado Barbui, and Wietse A. Tol. 2018. Psychological therapies for the treatment of mental disorders in low- and middle-income countries affected by humanitarian crises (Review). *Cochrane Library*. <https://doi.org/10.1002/14651858.CD011849.pub2>. www.cochranelibrary.com.

- Ransing, Ramdas, Frances Adiukwu, Victor Pereira-Sanchez, Rodrigo Ramalho, Laura Orsolini, André Luiz Schuh Teixeira, Jairo M. Gonzalez-Diaz, et al. 2020. Mental health interventions during the COVID-19 pandemic: a conceptual framework by early career psychiatrists. *Asian Journal of Psychiatry* 51: 102085. <https://doi.org/10.1016/j.ajp.2020.102085>.
- Rees, Clare S., and Ellen MacLaine. 2015. A systematic review of videoconference-delivered psychological treatment for anxiety disorders. *Australian Psychologist* 50: 259–264. <https://doi.org/10.1111/ap.12122>.
- Rodriguez-Seijas, Craig, Malki Stohl, Deborah S. Hasin, and Nicholas R. Eaton. 2015. Transdiagnostic factors and mediation of the relationship between perceived racial discrimination and mental disorders. *JAMA Psychiatry* 72: 706–713. <https://doi.org/10.1001/jamapsychiatry.2015.0148>.
- Rogers, Hunter, Kapil Chalil Madathil, Sruthy Agnisarman, Shraddhaa Narasimha, Aparna Ashok, Aswathi Nair, Brandon M. Welch, and James T. McElligott. 2017. A systematic review of the implementation challenges of telemedicine systems in ambulances. *Telemedicine journal and e-health: the official journal of the American Telemedicine Association* 23: 707–717. <https://doi.org/10.1089/tmj.2016.0248>.
- Roy, Deblina, Sarvodaya Tripathy, Sujita Kumar, Nivedita Sharma, Sudhir Kumar, and Vikas Kaushal. 2020. Study of knowledge, attitude, anxiety & perceived mental healthcare need in Indian population during COVID-19 pandemic. *Asian Journal of Psychiatry* 51: 102083. <https://doi.org/10.1016/j.ajp.2020.102083>.
- Rubin, G.James, and Simon Wessely. 2020. The psychological effects of quarantining a city. *The British Medical Journal* 368: 1–2. <https://doi.org/10.1136/bmj.m313>.
- Sartorius, Norman. 2013. Comorbidity of mental and physical diseases: a main challenge for medicine of the 21st century. *Shanghai Archives of Psychiatry* 25: 68–69. <https://doi.org/10.3969/j.issn.1002>.
- Schultz, Friederike, Sonja Utz, and Anja Göritz. 2011. Is the medium the message? perceptions of and reactions to crisis communication via twitter, blogs and traditional media. *Public Relations Review* 37: 20–27. <https://doi.org/10.1016/j.pubrev.2010.12.001>.
- Sellers, Robert M., and J. Nicole Shelton. 2003. The role of racial identity in perceived racial discrimination. *Journal of Personality and Social Psychology* 84: 1079–1092. <https://doi.org/10.1037/0022-3514.84.5.1079>.
- Seminog, Olena O., and Michael J. Goldacre. 2013. Risk of pneumonia and pneumococcal disease in people with severe mental illness: English record linkage studies. *Thorax* 68: 171–176. <https://doi.org/10.1136/thoraxjnl-2012-202480>.
- Shigemura, Jun, Robert J. Ursano, Joshua C. Morganstein, Mie Kurosawa, and David M. Benedek. 2020. Public responses to the novel 2019 coronavirus (2019-nCoV) in Japan: mental health consequences and target populations. *Psychiatry and Clinical Neurosciences* 74: 281–282. <https://doi.org/10.1111/pcn.12988>.
- Smith, Anthony C., Emma Thomas, Centaine L. Snoswell, Helen Haydon, Ateev Mehrotra, Jane Clemensen, and Liam J. Caffery. 2020. Telehealth for global emergencies: Implications for coronavirus disease 2019 (COVID-19). *Journal of Telemedicine and Telecare*. <https://doi.org/10.1177/1357633x20916567>.
- State Council PRC. 2020. Notice on strengthening the treatment and management of patients with severe mental disorders during the outbreak of new coronary pneumonia. *State Council of People's Republic of China*.
- The Dawn. 2020. In global war on coronavirus, some fear civil rights are collateral damage. *The Dawn*, April 11.
- Topocoo, Naira, Heleen Riper, Ricardo Araya, Matthias Berking, Matthias Brunn, Karine Chevreul, Roman Cieslak, et al. 2017. Attitudes towards digital treatment for depression: A European stakeholder survey. *Internet Interventions* 8. The Authors: 1–9. <https://doi.org/10.1016/j.inven.2017.01.001>.
- Torales, Julio, Marcelo O'Higgins, João Mauricio Castaldelli-Maia, and Antonio Ventriglio. 2020. The outbreak of COVID-19 coronavirus and its impact on global mental health. *International Journal of Social Psychiatry*. <https://doi.org/10.1177/0020764020915212>.
- Tornainen-Holm, Minna, Maiju Pankakoski, Tuomas Lehto, Osmo Saarelma, Pekka Mustonen, Kaisla Joutsenniemi, and Jaana Suvisaari. 2016. The effectiveness of email-based exercises in promoting psychological wellbeing and healthy lifestyle: A two-year follow-up study. *BMC Psychology* 4: 1–12. <https://doi.org/10.1186/s40359-016-0125-4>.

- Triana, María De, Mevan Jayasinghe Carmen, and Jenna R. Pieper. 2015. Perceived workplace racial discrimination and its correlates: a meta-analysis. *Journal of Marriage and Family* 36: 5–22. <https://doi.org/10.1002/job>.
- Tuerk, Peter W., Stephanie M. Keller, and Ron Acierno. 2018. Treatment for anxiety and depression via clinical videoconferencing: evidence base and barriers to expanded access in practice. *Focus* 16: 363–369. <https://doi.org/10.1176/appi.focus.20180027>.
- Turgoose, David, Rachel Ashwick, and Dominic Murphy. 2018. Systematic review of lessons learned from delivering tele-therapy to veterans with post-traumatic stress disorder. *Journal of Telemedicine and Telecare* 24: 575–585. <https://doi.org/10.1177/1357633X17730443>.
- Unnever, James D., Francis T. Cullen, and J.C. Barnes. 2017. Racial discrimination and pathways to delinquency: testing a theory of african american offending. *Race and Justice* 7: 350–373. <https://doi.org/10.1177/2153368716658768>.
- Vis, Christiaan, Mayke Mol, Annet Kleiboer, Leah Bührmann, Tracy Finch, Jan Smit, and Heleen Riper. 2018. Improving implementation of emental health for mood disorders in routine practice: systematic review of barriers and facilitating factors. *Journal of Medical Internet Research*. <https://doi.org/10.2196/mental.9769>.
- Wen, Jun, Joshua Aston, Xinyi Liu, and Tianyu Ying. 2020. Effects of misleading media coverage on public health crisis: A case of the 2019 novel coronavirus outbreak in China. *Anatolia: An International Journal of Tourism and Hospitality Research*. 31: 1–6. <https://doi.org/10.1080/13032917.2020.1730621>.
- WHO. 2020a. Rolling updates on coronavirus disease (COVID-19). *World Health Organization*.
- WHO. 2020b. Coronavirus (COVID-19) case at global level. *World Health Organization*.
- WHO. 2020c. New COVID-19 law lab to provide vital legal information and support for the global COVID-19 response. The World Health Organisation.
- WHO. 2020d. COVID-19 Law lab: collecting legal documents from the COVID-19 response. The World Health Organisation.
- Winda, Tim R., F. Marleen Rijkeboerb, Gerhard Anderssonc, and Heleen Riper. 2020. The COVID-19 pandemic: The ‘black swan’ for mental health care and a turning point for e-health. *Internet Interventions journal* 20: 100317.
- Wintemute, Robert. 2017. Israel-Palestine through the lens of racial discrimination law: is the south African apartheid analogy accurate, and what if the European convention applied? *King’s Law Journal* 28: 89–129. <https://doi.org/10.1080/09615768.2017.1298943>.
- WMO. 2020. COVID-19 Coronavirus pandemic: updated cases information. *World Meter Organisation (WMO)*.
- Worthington, Brett. 2020. Coronavirus pandemic fears prompt Government to activate emergency response and extend travel ban. *ABC News*, February 27.
- Yu Tao, Xiang, Yuan Yang, Wen Li, Ling Zhang, Qing Zhang, Teris Cheung, and H.Ng. Chee. 2020. Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed. *The Lancet Psychiatry* 7: 228–229. [https://doi.org/10.1016/S2215-0366\(20\)30046-8](https://doi.org/10.1016/S2215-0366(20)30046-8).
- Tao, Xiang, Yu., Yu. Xin, Norman Sartorius, Gabor S. Ungvari, and Helen F.K. Chiu. 2012. Mental health in China: challenges and progress. *The Lancet* 380: 1715–1716. [https://doi.org/10.1016/S0140-6736\(11\)60893-3](https://doi.org/10.1016/S0140-6736(11)60893-3).
- Xinhua News. 2020. Interview: calling coronavirus “Chinese virus” absolutely absurd, says analyst, March 19.
- Yao, Hao, Jian-hua Chen, and Xu Yi-feng. 2019. Patients with mental health disorders in the COVID-19 epidemic. *The Lancet Psychiatry* 7: e21. [https://doi.org/10.1016/S2215-0366\(20\)30090-0](https://doi.org/10.1016/S2215-0366(20)30090-0).

Authors and Affiliations

**Mehran Idris Khan^{1,2} · Hafiz Abdul Rehman Saleem³ ·
Muhammad Fahad Anwar⁴ · Yen-Chiang Chang¹**

Mehran Idris Khan
lfomd@hotmail.com

Hafiz Abdul Rehman Saleem
H.a.rehman@hotmail.com

Muhammad Fahad Anwar
fahad@uosahiwal.edu.pk

¹ School of Law, Dalian Maritime University, Dalian 116026, Liaoning Province, China

² Business Administration Department, Faculty of Management Sciences, ILMA University, Karachi 75190, Sindh Province, Pakistan

³ Guanghua Law School, Zhejiang University, Hangzhou, Zhejiang Province, China

⁴ Department of Law, University of Sahiwal, Sahiwal 57000, Punjab Province, Pakistan