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Research Article

Working with Bipolar Disorder During the COVID-19 Pandemic: Both Crisis and Opportunity

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Abstract

Beyond public health and economic costs, the COVID-19 pandemic adds strain, disrupts daily routines, and complicates mental health and medical service delivery for those with mental health and medical conditions. Bipolar disorder can increase vulnerability to infection; it can also enhance stress, complicate treatment, and heighten interpersonal stigma. Yet there are successes when people proactively improve social connections, prioritize self-care, and learn to use mobile and telehealth effectively.

Impact of the Pandemic and Public Health Responses

The ongoing COVID-19 pandemic has to date infected more than 34 million people and led to more than 1 million deaths globally (map here) (projections of peak and incidence curve here).[1] Both the infection and mortality numbers will undoubtedly continue to go up before the outbreak recedes. Thus, many governments have enforced regional or national stay-at-home orders to "flatten the curve" of incidence and slow its spread (map of the USA). In this global health emergency, special attention should be paid to the potential impact of the measures taken to combat the pandemic on patients with mental health problems,[2][3][4] especially those with bipolar disorders (BDs).[5]

Shelter-in-place and quarantine are key public health tools, yet they have high psychological[6] and economic costs.[7][8][9][10][11] They require sacrificing daily routines

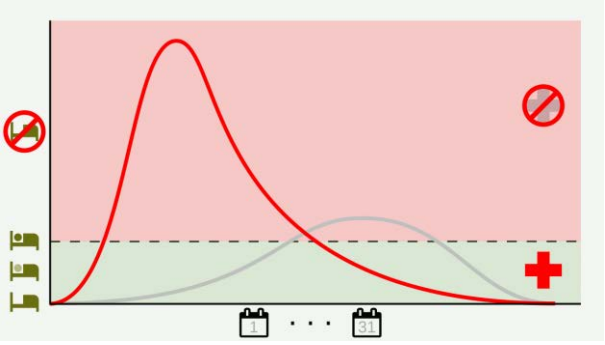

Figure 1 | "Flattening the curve" of active cases, and "raising the line" of healthcare capacity, attempt to ensure that healthcare can be provided to a population. For video follow this link.
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and public/personal social encounters that enhance health and quality of life and provide emotional support and resilience.[12][13][14] Even in the general population, extended duration and constrained physical space in social isolation can lead to a wide range of adverse psychological effects, including depression, malaise, lowered self-esteem, alienation, helplessness, panic, compulsive buying disorder behaviors, and panic-buying.[6][15][16] Anger, clinical anxiety, and posttraumatic stress disorder can persist years after the end of isolation, as indicated by literature on quarantine.[6] Vulnerable populations – such as people with low income, racial and ethnic minorities, and those who struggle with managing their mental health – are also at an increased risk of contracting coronavirus due to factors such as lack of access to safe transportation (versus having to use subways/busing/metros), the inability to work at home due to unpaid time off, and differences in the type of jobs (low-wage essential workers like grocers, sanitation workers, home health aides, delivery drivers, and fast food servers all involve more exposure than desk jobs would).[17][18][19] We cite all of this not to contradict the importance of physical and social distancing measures in the COVID era, but rather to underscore the potential consequences for vulnerable and marginalized populations.

Effects on People with Bipolar Disorders

There are multiple ways that the pandemic is affecting people with bipolar disorders.

Disruption of Medical and Mental Health Services

The impact of measures to combat COVID-19 could be particularly severe and long-lasting in persons with BD. The emergency disrupted both public and private mental health services. The situation has continued to shift speedliy as governments, insurance companies, providers, and patients all advance policies and behavior in response to new information.[4] Most initial patients had trouble accessing outpatient care in the immediate wake of the lock-downs and mandated social isolation and distancing. More specifically, during the current COVID-19 emergency, the state of mental health services in different countries worldwide, including China,[20] Italy, and Spain[21] was as follows: Psychiatric outpatient facilities often initially suspended all programmed and routine clinical activities as well as case management, though still guaranteeing interventions in urgent cases (e.g., exacerbation of symptoms; the

Figure 2 | COVID-19 has created much uncertainty which can negatively impact individuals living with bipolar disorder (BD). To help manage stress and symptoms during the pandemic, here are some ways to cope with BD.
Tasha Regan, CC BY-SACC BY-SA

appearance of adverse effects reported by the patient or family members), clinical demands (e.g., administration of depot antipsychotic medication), and legal authority prescriptions. Home visits were limited to urgent cases and to ones that cannot be postponed when patients cannot reach the service. In all other cases, therapeutic continuity can be achieved via telephone or online sessions to monitor the patient's clinical progress. Semi-residential facilities (psychiatric day-care facilities) are often closed, but even in these cases, continuity of care has been achieved through phone contact. In residential facilities, individual clinical practices continue to be regularly carried out, as well as some group activities. In these settings, patient passes were suspended, and most outings were only allowed with operator supervision – both of which curtail freedom of movement. The entry of outside visitors was forbidden, so that the staff would be the only potential contagious carriers, thus again increasing social isolation. The entry of new patients has allowed in cases that cannot be delayed (e.g., patients coming from the hospital for a post-relapse period). Even psychiatric inpatient units have limited, as much as possible, hospitalizations to urgent cases and those that cannot be postponed.[20] Patients presenting both active psychiatric disorders needing hospitalization and Severe Acute Respiratory Syndrome-Coronavirus-2 (SARS-CoV-2) symptoms are generally placed in psychiatric wards, and when possible, in COVID-dedicated areas or rooms. These patterns threaten to undermine treatment continuity, patient-clinician alliance, treatment adherence, and patient-driven recovery progress – while the pandemic simultaneously escalates stress levels.

There was a rapid adjustment, with some clinics pivoting to providing services primarily or only by telephone, and then adding video sessions. Many governments and insurance payers modified rules to allow more video service provision, including changes to billing codes and regulations. Recommendations for telehealth and protective measures to allow the resumption of in-person services have swiftly followed, balancing issues of safety and prevention of infection with concerns about privacy and offer continued service provision. Six months after the initial distancing and lockdown orders, there is uncertainty and variation about how long to authorize telehealth as the primary form of service provision. Although the pace of innovation has accelerated, there have been changes in service use patterns, with some hospitals and clinics seeing a big decrease in admissions and appointments.[16] The changes have been larger for elective issues than for emergencies, perhaps due to concerns about medical facilities being a place for potential exposure to the virus.[16][22] The situation is likely to continue to be fluid and variable across regions, even months after an effective vaccination program might become available.[4]

Increased Strain

Alarming news reports about economic and human costs add heightened stress, while social distancing measures simultaneously reduce exercise opportunities, sunlight exposure, participation in meaningful activities, and social engagement. Job loss and financial uncertainty add additional strain, potentially triggering anxiety and mood symptoms – again, in a population already vulnerable. At the time of writing, there are now more than 22 million Americans out of work. Over 10 million Americans have applied for unemployment benefits, and more are anticipated to apply.[23] The surge is causing unemployment offices to fall behind.[24] Many large corporations and small businesses are having to lay off workers and are experiencing significant financial hardship. The United States federal government appropriated funds for small businesses, but businesses are still in need of aid while waiting for the funds to be disbursed.[25] Many shuttered businesses may not reopen, causing the unemployment rates to remain low even when regions relax restrictions on movement and work.

Disrupted Routines and Sleep

A healthy life's regular rhythm becomes hard to maintain as sheltering-in-place eliminates much of the existing structure from an individual's day. It also interferes with the positive influence of other zeitgebers (e.g., getting exposure to sunlight, eating meals, engaging in social activities, and going to the gym) to keep sleep and activity regular.[13][14][26] Sleep and schedule regularity are key components of mood maintenance for people with BD[27][28] who typically have less social rhythm regularity under normal circumstances.[29] Thus, when work-at-home policies are implemented and classes are canceled or moved online, there are fewer external forces to help people with BD to adhere to a routine.

Many people with BD have an evening chronotype, preferring to stay up late and sleep through the morning.[30] Work or school obligations can help to keep an individual's circadian rhythm more or less entrained with the environment. Unfortunately for many people, COVID-19 has led to job loss or cessation of regular classes (e.g., replacement of instruction with independent work or online instructional videos that can be viewed at any time). More than a third of the global workforce

was employed in sectors now experiencing a severe reduction in productivity with high risk of furlough, job loss, or bankruptcy.[11][31]

The United Nations' specialized agency, the International Labour Organization's second edition of key analysis and policy recommendations surrounding worsening COVID-19 world crisis with devastating effects on the world of work.

Additionally, many other activities in which people have engaged for social or health benefits (e.g., sports teams, clubs) are on pause. Guidelines during shelter-in-place – stay at home as much as possible, leaving only to engage in essential activities – reinforce behaviors that clinicians often try hard to discourage. Although it is possible to attain structure on one's day during shelter-in-place, it requires motivation and self-control. For many people with BD, acting against what feels best (i.e., resisting the tendency to stay up late) may be quite challenging to enforce. Other people can help impose structure through shared meals and other activities, but this also becomes a challenge. That is, people with BD are less likely to be partnered than other adults[32] and, as a result, may find themselves isolated. Although social interaction patterns may be beneficial for those who do live with others, other stressors related to being confined can introduce interpersonal challenges, with associated mood consequences.

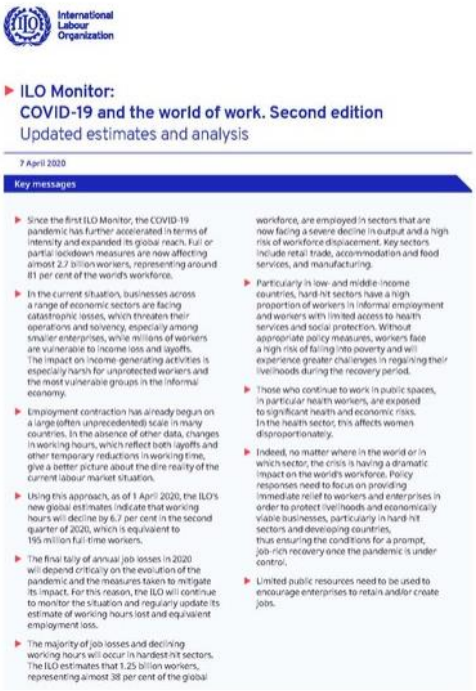
Medical risk factors and comorbidity

Higher risk of infection and poor outcome

People with BD are likely to be especially susceptible to infection because those with BD have high comorbidity with obesity, diabetes mellitus, coronary heart disease, and obstructive pulmonary disease, as well as smoking and substance use.[33][34] These factors and related physical illnesses compromise immune functioning and heighten the risk for severe acute respiratory syndrome (COVID-19 if one is infected with the coronavirus). Smoking and cardio-pulmonary disease are also common comorbidities observed among those who perish from COVID-19.

Managing complex treatments

Current treatment protocols for COVID-19 are quickly evolving, incurring risk for drug interactions, especially in patients being managed with complex regimens. Of course, BD itself frequently involves polypharmacy. Because no specific antiviral treatment has been developed, current treatment options include off-label use of azithromycin, lopinavir–ritonavir, chloroquine/hydroxychloroquine, tocilizumab, remdesivir, atazanavir, favipiravir, and other agents.[35] However, using these medications for BD patients requires careful attention because of interactions between azithromycin/lopinavir–ritonavir and the commonly recommended medications for BD. For example, atazanavir and lopinavir /ritonavir are protease inhibitors that change CYP34A related metabolism, thus substantially increasing quetiapine, lurasidone, ziprasidone, and pimozide levels, as well as levels of benzodiazepines, such as midazolam and triazolam.[35][36] Some of the COVID-19 experimental treatments (azithromycin, hydroxychloroquine, lopinavir/ritonavir, and tocilizumab) may increase the QT interval, requiring ECG monitoring and caution when co-administered with some antipsychotics and antidepressants.[37] Of real concern, the possible adverse psychiatric effects of chloroquine/hydroxychloroquine include psychosis, mood change, mania, and suicidal ideation.[38] Chloroquine may exacerbate BD[39] and might increase phenothiazine levels.[40] Corticosteroids are being used in some COVID-19 patients with severe respiratory distress, and the effects of steroids in terms of triggering manic episodes in bipolar patients are well-known.[41] Finally, carbamazepine may significantly decrease the blood levels of many of the drugs


International Labour Organization

ILO Monitor:
COVID-19 and the world of work. Second edition
Updated estimates and analysis

7 April 2020

Key messages

Figure 3 | The United Nations' specialized agency, the International Labour Organization's second edition of key analysis and policy recommendations surrounding worsening COVID-19 world crisis with devastating effects on the world of work. For the full report, follow this link.
International Labour Organization, public domain

medications for COVID-19, thus reducing such treatments' effectiveness.[35] In short, the management of dual treatments for COVID-19 and BD requires substantial monitoring.

Stigma

Social stigma flares when societies are under stress, with a malign eye falling on people associated with or belonging to high-risk groups, on those considered contagious, as well as on anyone considered "different."[42][43]

Stigma around COVID-19

Social stigma has mainly manifested toward several high-risk groups since the beginning of the COVID-19 outbreak.[44] Aside from those who are ostracized because of their diagnosis,[45] healthcare workers treating COVID-19 patients and people of Asian ethnicity have been subject to increased maltreatment in countries worldwide. In India, news outlets report that stigma towards healthcare workers is on the rise and has resulted in physical violence.[46] In the United States, there are higher rates of infection and death in African Americans.[47] There have also been reports of Asian Americans who fear racially motivated violence due to COVID-19.[48] Government officials and the media's improper language to describe COVID-19 has created friction between racial groups and incited others to weaponize it against Asians across the globe.[49] The increase of fear and anxiety surrounding the Coronavirus outbreak has bred racially-motivated hate crimes against Asians as a form of scapegoating.[50] The rise of coronavirus hate crimes towards people of Asian descent has taken the form of physical assault such as acid attacks,[51] verbal abuse and harassment such as yelling racial slurs and blaming for "spreading the virus."[52] Survivors of hate crimes are more likely to experience psychological distress than survivors of violent crimes.[53] Victims of hate crimes suffer from psychological trauma like internalizing the messages associated with perpetrators' motivation to engage in the attacks, leading to low self-esteem, posttraumatic stress reactions, and a fear and distrust of others and social institutions.[54] Another consequence of using racist language and the influx of hate crimes against the Asian community is the fracturing of unity in society, which makes preserving the sustenance of the global economy harder to achieve.[55]

Figure 4 | Many people of Asian descent have been blamed and ostracized during the COVID-19 pandemic.
Min An, CC0

Stigma around bipolar disorder and other serious mental illnesses

BD is already prone to high levels of stigmatization[56][57] and will undoubtedly take a second hit when people with BD also contract COVID-19. Multiple incidents of ostracism, violence, and discrimination against doctors and people suffering from COVID-19 have already been flurrying in the news worldwide.[58][59] Morover, it is well documented that when people with mental disorders also develop a physical condition, the "medical" disorders are likely to be discounted and undertreated. If a person with BD contracts SARS-CoV-2 and develops COVID-19, there is a clear risk that stigma could change treatment decisions and threaten therapeutic rapport.[60] The double stigma of having two burdens may not just aggravate a sense of isolation but provoke hostility instead of support – and deprive the individual of needed treatments.[61] The World Health Organization has provided guidelines and a powerpoint on ways to address the social stigma surrounding COVID-19 in the community such as effective ways to communicate, hosting an open discussion that includes health education while dispelling rumors and misinformation about the virus, and engaging influential people in the community to encourage harmony.[62]

Opportunities

Still, crises are also times of opportunity. We can learn from examples of resilience and rethink and adapt our ways of working. At a global level, the pandemic and response to it are accelerating social and economic changes and transforming daily life and technology for shopping, communicating, and engaging with the community in ways likely to persist.[11]

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Learning from unexpected resilience

Within a few months after the start of China's COVID-19 lock-down, Chinese mental health clinicians see that if patients move from insecure housing to more secure housing, they report more daily regulation and mood stability or improvement. These positive trends occur in patients returning to live with their families, as well as in hospital settings. Similarly, people with lived experience of BD who are engaged with the Collaborative RESearch Team in Bipolar Disorder (CREST.BD) network report silver linings. Indeed, during the TalkBD Online Meetup: Staying Mentally Well During COVID-19 (March 20, 2020) forum, investigators found that being proactive about protecting routine and doubling down on wellness tools prevented social distancing from triggering deterioration.

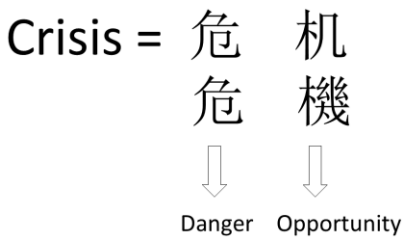

Figure 5 | The Chinese word for "crisis" combines characters that separately would mean "danger" and "opportunity." The top row uses Simplified characters, and the bottom row shows Traditional characters.
Jun Chen, CC BY

Opportunities to transform service delivery

The COVID-19 pandemic forces a rethinking of how best to improve access to and implementation of enhanced psychological and psychiatric intervention services specific to BD treatment. These should include—but not be limited to—home visits with physical distancing measures in place,[63] as well as telepsychiatry and telepsychology (including both therapy and assessment; e.g., Effective Child Therapy's online assessment center). Online prescription and medicine express delivery, telepsychology management interventions, telepsychotherapy, online psycho-education programs, online mindfulness-based interventions, online sleep hygiene resources, and apps, facilitating access to existing phone and online support lines staffed by mental health professionals trained in treating BD are all salient and essential. The emerging number of apps and mental health resources may play a crucial positive role.[64] Reddit, Quora, and Wikiversity provide mechanisms for prompt, interactive information exchange and education, with Reddit and Quora providing models for expert-community exchange (e.g., "Ask Me Anything" (AMA) threads, such as CREST-BD). Wikiversity offers a potential "train the trainer" platform for rapidly changing areas, such as telepsychology. A great need exists to train and support clinicians to go to people's online presence.

There are several low or no-cost crisis support resources for patients experiencing acute distress during and after the pandemic. For example, in the USA, the Suicide Prevention Lifeline (800-273-8255) is available 24/7. The Suicide Prevention Lifeline is also available in Spanish (Nacional de Prevencion del Suicido; 888-628-9454), and for the Deaf and Hard of Hearing (800-799-4889). For those who are more comfortable texting, Crisis Text Line (CTL) is accessible and available around the clock (Text HOME to 741741). Disaster distress helplines like SAMHSA are now offering counseling and support to those experiencing emotional distress related to the Coronavirus pandemic for free 24/7 by phone (1-800-985-5990), by texting "TalkWithUs" to 66746, or by visiting DisasterDistress.samhsa.gov. Since 2013, CTL volunteer crisis workers have engaged in over 140,000,000 crisis conversations with individuals across the United States. Approximately 25% of crisis conversations include support requests by people experiencing suicidal thoughts. Among support options, CTL in particular is accessed at higher rates during population-wide stressors, such as exposure to fictional suicides (e.g., 13 Reasons Why), media coverage of suicide deaths of celebrities (e.g., Anthony Bourdain),[65] and climate-related disasters.[66] For example, after Hurricane Florence in 2018, CTL crisis text volume in North and South Carolina, USA, showed an immediate, sustained increase in crisis texts about stress/anxiety and suicidal thoughts in the six weeks following the weather-related disaster. Taken together, these data provide some promise in contributing feasible, acceptable, and accessible resources for those in distress in short order.[66]

In addition to promoting such easy-access crisis resources for bipolar disorder patients, it may become necessary to make home environments safer during a prolonged shelter-in-place orders. Unfortunately, suicidal crises, though often brief, can escalate quickly. In studies involving patients who have made a serious attempt, nearly 50% escalated from experiencing suicidal thoughts to an attempt in under 10 minutes.[67] Thus, for those patients at risk for suicide (i.e., with either a history of attempts or acute distress), helping families secure unlocked firearms and reduce access to dangerous medications could help prevent suicide death during the pandemic. For clinicians unfamiliar with these

suicide prevention strategies, online training for particular types of means safety approaches (e.g., Counseling on Access to Lethal Means; CALM) are publicly available and free here. Other prominent "lethal means safety" approaches are available either for free here or for a modest cost, including the Collaborative Assessment and Management of Suicidality (CAMS) Model.

Telepsychology and Telepsychiatry

Telepsychology, including both therapy and assessment, can be especially helpful during shelter-in-place. In addition to providing support during a stressful time, telepsychology can help patients maintain their lifestyle strategies and skills and adapt and cope with changing circumstances. Therapy also provides some interaction and structure during weekdays, which can be valuable for patients with BD. The sudden shift to online services is part of a general trend for the pandemic response to accelerating the transition back to normalcy.[11] There are several ways to conduct therapy while maintaining social distance successfully. The easiest option is to use the phone , as both patient and therapist should have the necessary equipment and are familiar with its use. Furthermore, phone-based therapy raises fewer HIPAA-related concerns than other modalities. The primary downside of phone therapy is that the therapist and patient cannot see each other during the session, and so, valuable information can be lost. Furthermore, phone-based therapy raises fewer HIPAA-related concerns than other modalities. The primary downside of phone therapy is that the therapist and patient cannot see each other during a given session, so that important information can be lost.

If possible, it is often preferable to use a secure video conferencing platform such as doxy.me, Zoom(with needed security features), or thera-LINK. In addition to seeing one another and interacting more naturally, video enables the use of worksheets, play, and other activities to increase engagement and facilitate learning. Video is more technologically difficult to use than a phone, but most people can master it with some instruction. Video also requires that both the patient and the therapist have a camera-enabled device. Assessment—particularly frequent self report of mood, sleep, and activities – can provide insight to both the therapist and patient. Routine assessment enables early identification of clinically significant change in need of intervention; it can also help the patient better understand him/herself and how choices they make (e.g., sleep habits, exercising or not) can affect mood and later physiology. Assessment can be conducted by emailing self-reports, reading the assessment out loud for the patient to respond to, using an online form or survey, or procuring an app. When choosing to engage in telepsychology, it is also important to consider patient symptom severity and risk. Knowing the patient's address and emergency contact information is critical, as is updating the safety plan with the patient to account for current circumstances. Some patients may need more intensive services than can reasonably be offered via telepsychology, finding an appropriate referral is vital in these cases.

Conclusion

Despite the dramatic consequences of the COVID-19 pandemic, this emergency presents both the opportunity for (a) broader and more in-depth understanding of BD patients' psychological functioning; and (b) development and implementation of mental health policies and services. A prompt and effective response holds the potential to lower the personal and societal risks associated with poor mental health, with the added benefit of saving private and public money. These efforts offer the opportunity to address mental illness stigma. They potentially ameliorate internalized stigma by fostering a society where persons with a mental disorder are demonstrably valued—with adequate support of their health needs. Indeed, appropriate use of technology can help to maintain human connections despite physical distance.

The COVID-19 crisis is a wave propelling sweeping changes in policy, access, delivery, and attitudes. When it recedes, the landscape for the treatment of BD will have changed. There will be damage and loss, but also opportunities to learn – and changes in service delivery that could evolve into significant innovations in service provision and improved outcomes.

Additional information

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Conflict of Interest

Eric A. Youngstrom, PhD, is the co-founder and CEO of Helping Give Away Psychological Science, a 501(c)3 nonprofit charitable educational national organization. He is on the editorial board of the *Wiki Journal of Medicine* (and is recused from the review process). The other authors have no competing interests to declare.

Ethics statement

There are no primary results from human or animal subjects research presented in this paper.

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