

disproportionally affect patients with severe mental health conditions from low- and middle-income countries, who might need modifications to their care.¹ Here we present data on the feasibility of implementing intensive telehealth case management to fight the COVID-19 pandemic in a Community Psychosocial Center in Brazil.

Mitigating the risks of human physical contact is a difficult task in mental health community centers because minimizing physical contact implies reducing face-to-face patient interactions, a key component of mental health treatment. Although too many visits might unnecessarily increase the risk of COVID-19 exposure, too few visits might also increase the risk of destabilization, particularly for severe cases, resulting in crowded emergency services. To achieve that optimal balance, we tested the feasibility of implementing a telehealth intensive care management system.

The service currently delivers health services to 154 patients who attend the service on a regular basis, 61% male, with an average age of 38.8 (standard deviation = 13.6). Most patients have used the service for less than a year (66%), 22% between 2-5 years and 12% more than 5-years. The most frequent diagnoses include: psychosis (54%), intellectual disability (20%), bipolar (16%), and other mental health conditions (11%). Before launching the telehealth program, 48% attended the community center daily or at least 3 times a week, while the remaining 52% used the service biweekly/weekly/monthly. A total of 21% used depot formulations.

At the beginning of the telehealth program (March 23rd, 2020), patient care was divided among seven case managers. Phone contact was possible for 61% of patients, with 29% being advised face-to-face through regular service attendance. We were unable to contact around 7% of service users despite significant effort. Currently, all patients are telemonitored weekly or biweekly to investigate signs of psychiatric instability. We are also monitoring respiratory symptoms and fever, reinforcing the importance of hand washing and restricting physical contact.

Case managers classify patients as “stable” or “unstable” based on current changes in behavior. All stable cases are being asked to stay home. Unstable cases are being asked to visit the service for face-to-face consultations in addition to frequent systematic telemonitoring. Patients in the COVID-19 risk group (over 60 and with any chronic condition; 24%) who use depot medications are being visited at home for treatment. Increased food insecurity was detected, and all patients with basic food needs (50%) received donations, which were organized by the service. All group activities have been canceled. All actions and information about dynamic changes in patient status are coordinated with an online spreadsheet (<https://figshare.com/s/826f200d872e35ea67f1>). This spreadsheet is kept on a local server and information is kept private and secured by password.

Intensive case management via telehealth is a feasible strategy that can be used in mental health community centers in low- and middle-income countries and could mitigate the exacerbated risks of psychiatric instability from stress related to COVID-19 in this vulnerable population.

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Melatonin and cocaine: role of mitochondria, immunity, and gut microbiome

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I read with interest the recent article by Barbosa-Méndez & Salazar-Juárez on the role of melatonin in regulating the circadian effects of cocaine-induced locomotor activity in rodents.¹ These authors also showed melatonin to decrease cocaine-induced locomotor activity at different times of the day and propose that it could be a readily available, safe and cheap treatment option in the management of cocaine addiction. Future research in a couple of areas should better clarify melatonin's effects and treatment utility.

Many of the effects of cocaine are mediated by alterations in mitochondrial function. Recent work suggest that mitochondria are circadian-regulated, with the effects of

pineal melatonin in optimizing mitochondrial function being mediated by the circadian gene, *Bmal1*.² The interactions of melatonin and *Bmal1* in the regulation of cocaine-driven changes in mitochondrial function will be important to determine.

Cocaine also significantly alters immune system responses, generally increasing the activity of most immune cell subsets.³ Immune cell activation is powerfully regulated by the shift in mitochondrial metabolism from oxidative phosphorylation to glycolysis, with the shift back to an anti-inflammatory phenotype being driven by the autocrine effects of melatonin, as first shown by Regina Markus and colleagues in Brazil.⁴ The effects of melatonin – including via *Bmal1* – in the mitochondria of immune cells on the regulation of cocaine's effects is an important avenue for future investigation.

Cocaine has significant effects on the gut microbiome, with the locomotor-inducing effects of cocaine being significantly modulated by the gut microbiome. This research suggests that increasing the levels of gut microbiome-derived short-chain fatty acids, especially butyrate, could have clinical utility. Butyrate effects include the induction of melatonin and the optimization of mitochondrial function, which may underpin its dampening effects on immune cell activity.⁵ Whether optimizing the gut microbiome with probiotics or with the nutraceutical sodium butyrate would afford additional clinical efficacy to melatonin in the management of cocaine addiction has yet to be clarified.

Such lines of research should considerably help to clarify the biological underpinnings to melatonin's interaction with cocaine, as well as help optimize treatment.

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Forensic psychiatry assessment during parental alienation claims: two cases with different outcomes

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When a forensic psychiatrist is appointed to assess parental alienation in child custody cases, the implications of this duty must be recognized. Firstly, parental alienation is not a diagnosis,¹ but a legal term (described, in the Brazilian context, in Law 12,318/10).² The expert should focus on evaluating the child's functionality within family relationships and to investigate if any mental disorder is present. This brief communication discusses the underlying forensic logic involved in two claims of parental alienation in divorce litigation.

In the first case, the child was 5 years old when her parents divorced after 8 years of marriage. The parents shared custody uneventfully for the first year, until conflicts regarding visitation arose. After an attempt by the father to regulate the situation, the mother made a series of allegations of child sexual abuse and domestic violence, backed by reports from the child's new psychologist. Following nearly a decade of multiple forensic psychological, psychiatric, and social assessments, all evidence of abuse was found to be fabricated by the mother, who was diagnosed with histrionic personality disorder, and the child was placed in the custody of the father. Moreover, parental alienation was not verified, since the child never perpetrated the mother's speech about the father. The mother lost custody due to psychological and physical child abuse and now maintains contact with her daughter solely through supervised visits.

The second case involved twins, who were 13 years old when their parents divorced after 16 years of marriage. The mother had an extramarital affair and moved in with her new partner, while the adolescent twins decided to live with their father. After some visits were canceled, the mother claimed that the boys were behaving distantly as a result of their father's manipulation. After evaluations by a forensic psychiatrist and social worker (including interviews with the school staff), there was evidence of difficulties in the relationship between the boys and the mother. Furthermore, they did not perpetrate any speech against the mother as a result of the father's influence. No psychiatric disorder was diagnosed in any family member,