

# Mental health challenges during the pandemic: an experience report

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## Abstract

The readjustment in the care of mental health patients during the Covid-19 pandemic was facilitated by changes in the current medical legislation. Telemedicine brought forth opportunities to treat, monitor and identify mental disorders in different ways. This article reports the experience of the mental health service in a teaching hospital and psychiatry residency program during this period. Outpatient care included telemedicine appointments and face-to-face visits, according to severity criteria, and the project Embracing Mental Health in Times of Pandemic was created to assist hospital health staff. The prospect for the future is the use of teleservice as a tool for mental health care, which requires better training for professionals and evaluating the quality of this modality.

**Keywords:** Pandemics. Coronavirus infections. Mental health. Remote consultation.

## Resumo

### Desafios em saúde mental durante a pandemia: relato de experiência

A readequação do atendimento em saúde mental durante a pandemia de covid-19 foi facilitada por mudanças na legislação médica vigente. O teleatendimento trouxe oportunidades para tratar, acompanhar e identificar os transtornos mentais de modo diferente. Este artigo tem por objetivo relatar a experiência do serviço de saúde mental de um hospital universitário e da residência médica em psiquiatria durante este período. A assistência ambulatorial incluiu teleatendimento e consultas presenciais conforme a gravidade, e foi criado o projeto Acolhimento em Saúde Mental em Tempos de Pandemia para assistir os profissionais do hospital. Espera-se que no futuro o teleatendimento seja usado como ferramenta para o cuidado em saúde mental, sendo ainda necessário treinar os profissionais e avaliar a qualidade desse recurso.

**Palavras-chave:** Pandemias. Infecções por coronavírus. Saúde mental. Consulta remota.

## Resumen

### Desafíos en salud mental durante la pandemia: informe de experiencia

La adaptación de la atención de la salud mental durante la pandemia de covid-19 se vio facilitada por cambios en la legislación médica actual. La telemedicina ha brindado oportunidades para tratar, controlar e identificar trastornos mentales de otro modo. Este artículo tiene como objetivo relatar la experiencia del servicio de salud mental de un hospital universitario y de la residencia médica en psiquiatria durante este período. La atención ambulatoria incluyó telemedicina y consultas presenciales según la gravedad, y se creó el proyecto "Acogiendo la Salud Mental en Tiempos de Pandemia" para ayudar a los profesionales del hospital. Se espera que en el futuro se utilice la telemedicina como herramienta para la atención de la salud mental. Para ello, será necesario formar profesionales y evaluar la calidad de este recurso.

**Palabras clave:** Pandemias. Infecciones por coronavirus. Salud mental. Consulta remota.

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## Mental health and the Covid-19 pandemic

Social distancing measures are crucial to reduce the speed of propagation of the new coronavirus (Covid-19). Further actions needed to achieve this include the reorganization of financial resources and redistribution of hospital beds, supplies and human resources, and health services opting to suspend elective outpatient consultations<sup>1</sup>. The unfeasibility of extinguishing this type of care led the Federal Council of Medicine in Brazil to exceptionally recognize the responsibility and ethics of the temporary use of telemedicine, with remote guidance, monitoring and inter-consultation during the pandemic<sup>2</sup>.

Important changes in Brazilian legislation have also made feasible electronic prescriptions<sup>3</sup>, home delivery of controlled drugs and the dispensing of more medicine bottles from a single prescription<sup>4</sup>. Previous experiences support the effectiveness of virtual appointments for mental issues in cases of depression<sup>5</sup>, anxiety<sup>6</sup> and post-traumatic stress disorder (PTSD)<sup>7</sup>. The use of this resource has increased worldwide, and many countries have adopted it, prioritizing people at greater risk if exposed to Covid-19<sup>8</sup>. First reports show that those who were actively seeking online support for mental health were isolated individuals<sup>9</sup>.

Countries with scarce financial resources have prioritized measures to control the transmission and to manage severe forms of the disease. However, the pandemic can deeply impact the economic, social and health promotion situation in the long term<sup>10</sup>. Psychiatric patients and vulnerable populations require qualified mental health care due to the risk of the underlying disease growing worse and the emergence of psychiatric comorbidities, such as PTSD, severe anxiety and depression, sleep disorders and suicide<sup>11</sup>.

Social factors, such as family abandonment and poor housing, can make it difficult for patients with severe mental disorders (SMD) to adhere to social isolation measures, thus making them more vulnerable to contamination. Moreover, diseases like schizophrenia and bipolar affective disorder can be accompanied by cognitive impairments and lower education, which make the adherence to basic preventive measures, such as hygiene, more difficult<sup>12</sup>. The difficulty in monitoring

and interpreting information obtained from the media can also aggravate pre-existing psychiatric conditions and hinder adherence to treatment, especially among the acutely ill.

Tobacco use can also be a risk factor for the emergence of severe forms of Covid-19 in this population. It is estimated that about 64% of schizophrenics and 44% of those affected by bipolar affective disorder smoke<sup>13</sup>. Smoking increases the risk due to greater exposure to fomites, and smokers are believed to have greater expression of the type 2 angiotensin-converting enzyme in the bronchial epithelium, which may be related to an increased risk of developing Covid-19<sup>14</sup>.

In addition to factors inherent to the patient, mental health services are also more prone to contamination because most of them are designed to prioritize social interaction. Furthermore, in general, the requirement to use personal protective equipment in these environments is rare, and their availability may be scarce and the team unable to use it properly<sup>12</sup>. Risk factors for the development of severe forms of Covid-19 infection, such as cardiovascular disease, diabetes, chronic obstructive pulmonary disease, are also more associated with SMD, whose population already has a mortality rate 3.7 times higher than the general population<sup>15</sup>.

The difficulty of access to specialized services in emergency mental health during the isolation period, the stigma experienced by those who suffer from mental disorders and the lack of training of clinical emergency services to serve this population favor the emergence of an epidemic of disorders concomitant or subsequent to that of Covid-19<sup>16</sup>. In this scenario, the Brazilian Psychiatric Association (ABP)<sup>17</sup> recommended that existing psychiatric emergency services remain open and that new locations be created to manage patients facing a crisis. The same document also stressed the need to train health teams in psychiatric emergencies, especially those who are a part of the Brazilian Mobile Emergency Care Service (Samu), having remote support from the psychiatrist as the best way to refer the patient for care<sup>17</sup>.

To avoid the spread of the disease among patients hospitalized in psychiatric beds, ABP<sup>17</sup> also recommended home care when possible, short hospital stay, continuous use of mask for

symptomatic patients and reduced frequency of family visits. Psychosocial Care Centers were advised to suspend group activities and reduce the number of individual consultations to the minimum necessary for the user. Regarding child psychiatric care, the recommendations were the removal of toys, priority assessment of listening to parents before attending the child, careful cleaning of surfaces and using evaluative games to avoid close contact<sup>18</sup>.

In addition to adapting to the recommendations of the Ministry of Health, Federal Council of Medicine and ABP, the psychiatry service of the University Hospital Lauro Wanderley (SP-HULW) prioritized the adherence to telemedicine, reserving outpatient assistance in cases of patients facing SMD crisis. This same hospital also developed an action plan to guide professionals on the prevention and early treatment of mental disorders related to the pandemic.

Thus, to accurately describe the experience of this service and contribute to the area, this article reports the experience of the functioning of the mental health service of a university hospital and medical residency in psychiatry during the Covid-19 pandemic. As long as the descriptions contribute to improve the practice or are relevant to healthcare, they do not need to be successful<sup>19</sup>.

### Readjustment of care during the pandemic

Several difficulties have been faced to maintain services in mental health, such as the removal of employees within a given risk group and the displacement of personnel to priority areas. To guarantee assistance, SP-HULW created emergency work fronts related to patient care in psychiatric hospitalization, inter-consultation, sheltering and special outpatient service and active search, foreseeing actions during and after the period of social isolation.

During the first phase, visits by specialists to the beds under responsibility of the medical residency of the state psychiatric hospital have been guaranteed, as well as inter-consultations to patients of other specialties admitted to the university hospital and provision of prescriptions and certificates for patients accompanied in the outpatient service. The continuous evaluation of the need for face-to-face or remote patient

care through active search of medical records and telephone contact remains, and assistance to hospital professionals within the scope of the Embracing Mental Health in Times of Pandemic project. To inform the population and improve the handling of the situation, relevant topics in mental disorders have been disseminated on social networks, promoting theoretical activities and discussions of relevant cases to instruct the team through mobile phone applications.

After the isolation period, the service will resume face-to-face care according to severity criteria, scheduling appointments with the multiprofessional team. Relevant epidemiological surveys will be performed after the pandemic period, so regular activities can continue.

### *Inpatient care: interconsultations and psychotropic drugs*

Care to patients with SMD who require hospitalizations has been a major challenge during the pandemic given the high risk of collective contamination by Covid-19 in these environments. These patients have difficulties in following guidelines for controlling dissemination in shared environments and, in some cases, performing basic hygiene measures, such as washing hands. Moreover, the recognition of clinical symptoms can be delayed by the patient's inability to recognize and report them to the health team<sup>12</sup>. Factors inherent to psychiatric treatment, such as the use of clozapine – an atypical antipsychotic used in cases of refractory schizophrenia –, can also result in immunosuppression and increase susceptibility to serious infections<sup>20</sup>.

The medical team is now obliged to use personal protective equipment to reduce the risk of dissemination and contamination by the new coronavirus, and the number of professionals was reduced, with the adoption of tele-consultations when necessary. Observations have shown that, despite limiting the circulation of people, the restriction of access to family members makes it difficult to obtain relevant information about the patient and prepare a care plan or schedule early discharge.

At the state psychiatric hospital in which the residents of SP-HULW also work, an isolated and reserved area was created to accommodate symptomatic respiratory patients during

hospitalization, and individuals affected by severe forms of the disease were referred to general hospitals. When in need of psychiatric assessment, hospitalized patients from other clinical specialties – with or without confirmed Covid-19 infection – were assisted via face-to-face scheduled inter-consultation.

Ill patients and relatives of those with coronavirus disease were also included in the assistance plan as a population at risk of developing mental disorders, since they suffer from uncertainty related to the prognosis and the lack of specific treatments for the disease. This group is also exposed to traumatic situations during hospitalization and are at greater risk of developing PTSD, depressive and anxious symptoms than the general population<sup>21</sup>.

The safety for the use of psychiatric drugs in people infected with Covid-19 is yet to be established. Furthermore, although the tropism of the virus has been shown to go through the central nervous system, its long-term consequences are unknown<sup>22</sup>. The drug interaction profile has been the main guide for using these drugs in the assistance to patients with the disease.

When necessary, the following antidepressants are preferable: agomelatine, bupropion, duloxetine, fluoxetine, fluvoxamine, paroxetine and sertraline. Tricyclic antidepressants, citalopram, mirtazapine and venlafaxine should be avoided due to the risk of increasing the QT/PR interval observed on electrocardiograms<sup>23</sup>. Regarding antipsychotics, aripiprazole and lurasidone have a lower risk of electrocardiographic changes, whereas quetiapine and pimozide are not recommended due to the higher risk of drug interactions. The use of lithium and valproate as mood stabilizers seems safe, but carbamazepine should be avoided due to the great potential for interaction with other drugs. The preferable benzodiazepine is lorazepam, when indicated<sup>23</sup>.

### *Special outpatient care*

To facilitate user access to SP-HULW during the pandemic, telephone numbers for contacting the various medical specialties were made available and published on official social media. Consultations – face-to-face or remote, as assessed

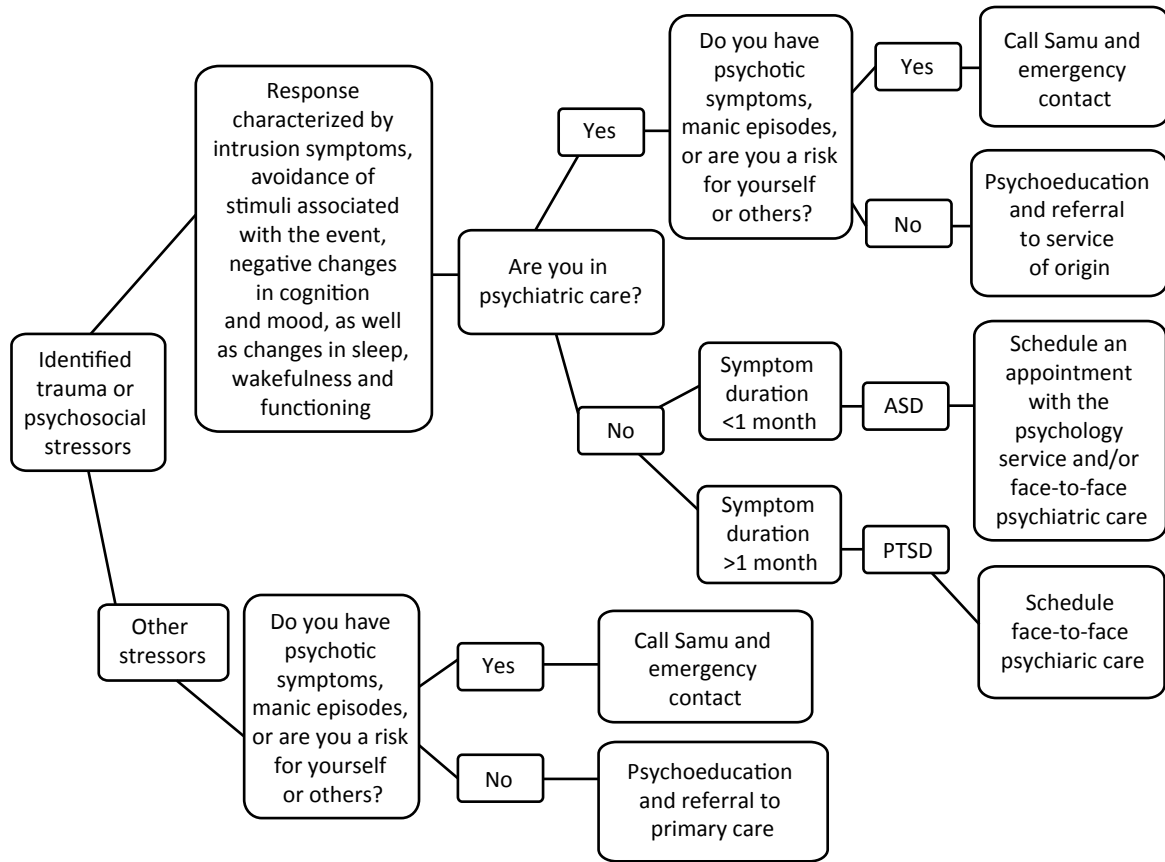
in face-to-face screening or active search – were guaranteed to patients who were regularly treated at the hospital. Outpatients who sought the hospital in person had their demands accepted and were screened by the nurse according to the risk classification for psychiatric medical conditions, based on adaptations of the Manchester protocol<sup>24</sup>.

If the patient interrupted the medication, reported side effects related to psychotropic drugs, when their demand was not covered by the protocol or in cases where the nurse observed possible psychiatric emergencies, the physicians present at the clinic had autonomy to give immediate face-to-face assistance. In the impossibility of resolving the demand or in the absence of a physician at the time of request, the person responsible for the screening referred the patient to the municipal mental health emergency service through Samu.

Patients assisted in the outpatient service were contacted by telephone in active searches to evaluate symptoms, provide healthcare and screening, in a process known as telemonitoring and teleguidance. When severe decompensations were identified but did not characterize psychiatric emergencies, the patient was referred to face-to-face consultation as soon as possible, and in mild and moderate cases, to a telemedicine appointment. Patients who did not present psychiatric decompensation were referred to primary care or had the option of renewing their medical prescription with the on-duty physician.

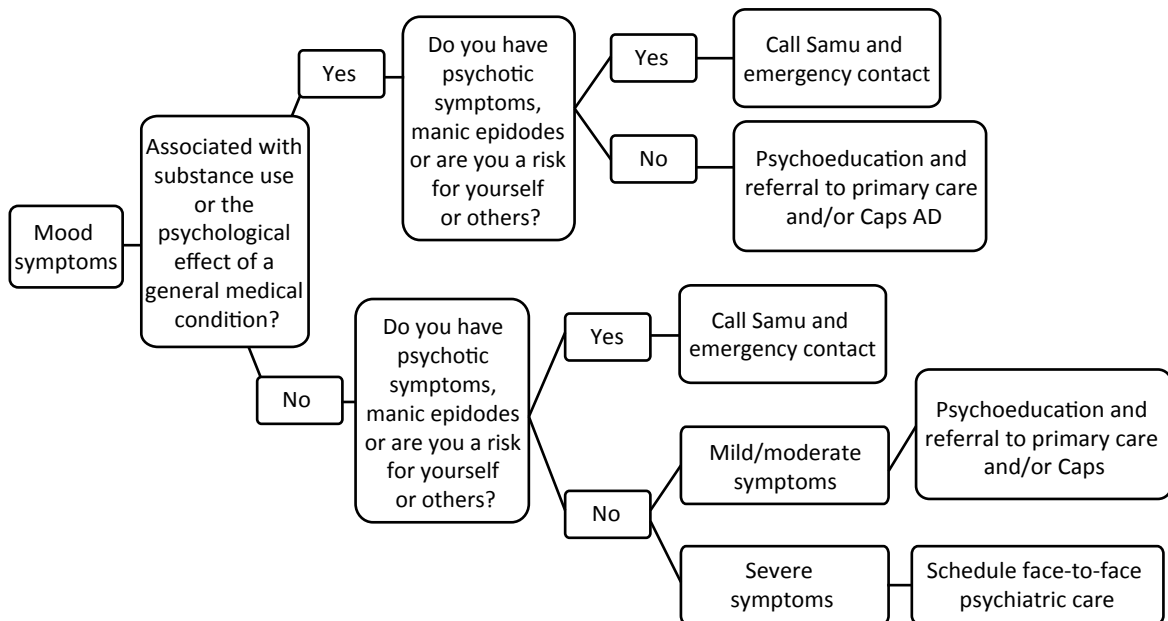
Given the lack of specific recommendations for psychiatric telemedicine appointments, some special precautions were taken, such as the requirement for emergency contact that should be called immediately before the start of remote care. The guidelines established that telemedicine consultations needed to be carry out by professionals in the physical space of the service, in an office and registered in medical records. In cases where health professionals observed possible changes in the level of consciousness, risk of suicide or homicide, psychotic or manic symptoms during the service, the emergency contact and Samu were used for immediate referral to the emergency service (clinical or psychiatric). To standardize conducts and facilitate the decision-making process, algorithms were created (Figures 1 and 2).

**Figure 1.** Decision-making algorithm for trauma and stress situations



Samu: Mobile Emergency Care Service; ASD: acute stress disorder; PTSD: post-traumatic stress disorder

**Figure 2.** Decision-making algorithm for mood symptoms



Caps: Psychosocial Care Center; Caps AD: Psychosocial Care Center for Alcohol and Drugs; Samu: Mobile Emergency Care Service

The team had no difficulties in adhering to telemedicine, but some users had problems giving information, especially older patients and those with SMD due to cognitive limitations or visual and hearing impairments. Despite not having restrictions for remote assistance, some individuals may feel uncomfortable when providing information by telephone or videoconference; therefore, it is not yet known whether this is a limiting factor for symptomatologic evaluation. In the meantime, family reporting has been an indispensable resource for the effective monitoring and assertiveness in decision making.

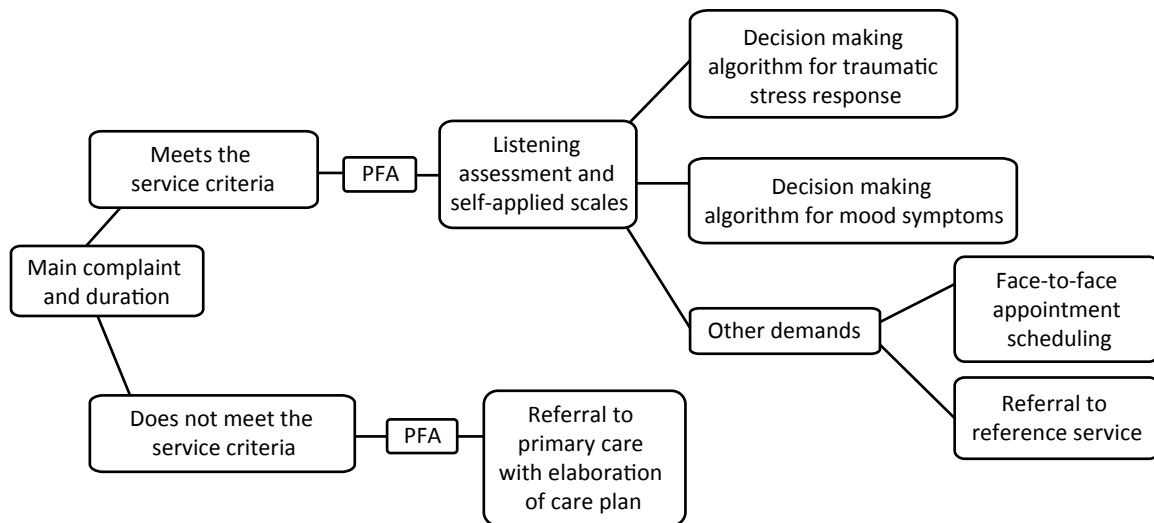
### Embracing mental health in times of pandemic

Past experiences have shown that during pandemic periods health professionals are more susceptible to developing acute stress disorder, PTSD and substance use. The current pandemic has showed an increase in the incidence of mental disorders symptoms in this population, with

depression being the most incident, followed by symptoms of anxiety, insomnia and distress. The most affected among these professionals are women, physicians and nurses, especially those who work directly to combat Covid-19<sup>25</sup>. Regarding the measures to prevent mental illness, cognitive behavioral therapy has positive effect on sleep, fatigue, depression and commitment to work. Other measures have also been shown to be effective, such as techniques using mindfulness, brief intervention focused on stress and resilience training<sup>26</sup>.

The action plan to embrace health professionals, created on an emergency basis, offered qualified listening to the professionals of the university hospital considered in this study. Interested parties requested assistance through a link made available on official social media, filled out a form with sociodemographic data and a standardized scale for stress assessment and were treated remotely within 48 hours, thus receiving PFA. The multiprofessional team screened and guided the patient based on the assessment of traumatic events and associated stressors, according to a standardized algorithm (Figure 3).

Figure 3. Telemedicine screening algorithm



PFA: Psychological First Aid

The main purpose of PFA is to reduce the initial stress caused by potentially traumatic events and to provide the subject with short and long-term coping strategies<sup>27</sup>. Psychological first aid can be provided by any professional, but those with a background in mental health are more qualified. Such interventions must respond to the immediate needs of those who want to share their experiences and should not be

considered as psychotherapeutic treatment, nor should they be aimed at emotional processing<sup>27</sup>.

During screening, all professionals were embraced and received PFA. When traumatic events and psychosocial stressors were identified (associated or not with mood symptoms), an investigation was conducted on the presence and duration of intrusion symptoms, evasive

behaviors related to the event, cognitive changes, mood symptoms and changes of function and of the sleep-wake cycle. When mood symptoms were identified in the absence of a traumatic event, the professional was directed to healthcare according to severity. The use of psychoactive substances, suicide risk or associated clinical conditions were the main aspects investigated.

### Perspectives for the future

Although widely used during the pandemic, telemedicine as a mental health resource must be validated, also defining the profile of a patient that can receive it according to the degree of the disease and their access and ability to handle the technologies available. Instruments and scales

must be created and validated to improve virtual evaluation, but training professionals to optimize this resource is even more important.

Given the economic consequences of the pandemic, it is estimated that unemployment rates will grow worldwide<sup>28,29</sup>, consequently increasing the number of suicides and the appearance or worsening of mental disorders<sup>29,30</sup>. It is thus essential that mental health services and authorities are mobilized to formulate effective preventive measures. After the pandemic, and having overcome the challenges brought by it, the service will certainly have been improved, counting on professionals more aware of their responsibilities to understand, identify and treat health issues. From a social point of view, we will become better in forming support networks and understanding each other in their reactions, limitations and *status quo*.

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All authors discussed the topic, prepared and revised the manuscript.


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