COVID-19 Pandemic for People with Pre-Existing Psychiatric Disorders

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It seems that the impact of the first stage of the COVID-19 pandemic on psychiatric disorders was two-fold: (1) an overall effect, in which people suffering from psychiatric disorders in general experienced more psychological distress and anxiety when compared to people who had no psychiatric diagnosis, and (2) a condition-specific effect, namely in people suffering from eating disorders and obsessive compulsive disorders. Moreover, the current work highlights that there were also some external factors that were related to worsening symptoms. For instance, unemployment or experiencing work and financial difficulties can be a trigger for greater distress during the pandemic for people with mood disorders, and being alone and in social isolation during the COVID-19 pandemic may actually increase substance use and relapse rates. Further studies are needed to prospectively investigate the long-term effects of the current COVID-19 pandemic on people with (pre)-existing psychiatric conditions and on the onset or deterioration of psychiatric-related symptoms in a larger number of participants, as well as exploring the long-term effects of the current pandemic on mental health.

mental health | psychiatric disorders | COVID-19 pandemic | systematic review

1. Introduction

The COVID-19 pandemic, declared on 11 March 2020 by the World Health Organization, started in China and rapidly spread across the world, producing a tremendous impact on people's lives, especially vulnerable populations. Thus, in an effort to contain the disease transmission, governments all over the world imposed social isolation and lockdown measures, which became increasingly stricter as the number of new infections escalated with healthcare systems under increasing strain. While such coping strategies helped limit the transmission rate of COVID-19, they also dramatically impacted the world's social and economic reality (see [1] for Africa, [2] for Asia, [3] for Europe, and [4] for the US). This gave rise to a worldwide crisis, which may have fostered far-reaching mental health repercussions on people [5][6] due to the high level of uncertainty surrounding not only their physical health, but also their social, family, professional, and financial lives [7]. Evidence from previous research on the effects of the current pandemic on mental health suggests a negative impact on mental health in the general [8][9][10][11], as well as in vulnerable populations, which is manifested in symptoms of fear, psychological distress, anxiety, and depression [12][13][14][15][16]. Despite the fact that people with pre-existing mental disorders are more at risk of developing several conditions, including a higher risk of infections, hospitalization, or death from COVID-19 [17], little is known about the impact of the current pandemic on people suffering from pre-existing psychiatric disorders.

High levels of fear, boredom, frustration, social isolation, and loneliness are stressors that play a crucial role in the exacerbation of pre-existing symptoms and/or development of new symptomatology in people suffering from psychiatric disorders [5]. For instance, several studies reported changes in eating disorders, anxiety disorders, and alcohol and substances use during COVID-19 [18][19][20][21]. Particularly during lockdowns, vulnerable populations, such as the ones suffering from pre-existing psychiatric disorders, were in a troublesome situation, as mental healthcare systems around the world had to adjust their services and limit the face-to-face evaluations and interventions, moving to telemental health support. Telemental health support defines a set of psychological and mental health services that are provided via telecommunication technologies, such as evaluations and therapies delivered through videoconferencing, telephone calls, mental health apps, and internet-delivered programs. These programs can be provided in a synchronous (i.e., real-time conferences, telephone calls) and asynchronous (i.e., not in real time—emails, online surveys, apps, etc.) manner. Despite recent evidence suggesting that telemental health support is feasible and possibly as effective as in-person services [22][23] in monitoring mental health with periodic evaluations and providing treatments, not every person had access to these services, and not all mental healthcare providers were able to adapt to these types of services. In fact, lockdown measures around the world have negatively affected the availability of mental health services to people with psychiatric disorders, with other types of health-related services being granted top priority [24]. So, with a vulnerable population at risk of increased mental and general-health-related issues, with decreased support, it is important to assess the impact of the COVID-19 pandemic on the psychiatric well-being of people suffering from pre-existing mental disorders. Therefore, the aim of this research was two-fold: (1) first, to explore whether the COVID-19 pandemic is related to changes in psychiatric symptoms of people with pre-existing psychiatric disorders; and (2) second, to evaluate the impact of the COVID-19 pandemic on people with pre-existing psychiatric disorders, for instance, the effectiveness of treatment response provided to these patients during the pandemic, changes in their daily life, overall quality of life, and awareness of the current pandemic attendance to precaution measures.

2. Current Insights

A total of 49 papers were included in this research, providing preliminary evidence about the psychological impact and symptomatology and disorder-related effects of the early stage of the COVID-19 pandemic in individuals with pre-existing psychiatric disorders, such as: mood, anxiety, obsessive compulsive, eating disorders, substance use and addiction, attention-deficit hyperactivity, schizophrenia, Tourette syndrome, insomnia, and somatic.

Overall, most studies were carried out in Italy (26.5%), one of the countries in Europe with the highest number of confirmed cases (about 4.767.440) and deaths due to COVID-19 (about 132.074) (WHO, 2021) in the initial stages of the pandemic. Most studies were, therefore, carried out between April and May 2020 (38.8%), right in the initial months of the pandemic; only one study includes data collected between April and December 2020, and none of the studies included in this research performed the data collection in the year 2021. That said, it is important to understand that this research focuses on the initial findings during the pandemic, focusing on the studies that will be very hard to replicate and that are not able to track the cumulative effect of long-term exposure to the stressful situations related to the pandemic, which may be more preeminent in the later stages than the early stages of the

pandemic. However, assessing the initial impact on people with pre-existing disorders is an important topic, as it can provide value information for early-stage interventions as well as data to compare to later stages of the pandemic.

Taken together, there is a substantial heterogeneity in terms of results concerning the impact of the early stages of the COVID-19 pandemic on people with pre-existing psychiatric disorders, with some studies reporting worsening symptoms, while others reporting no evidence of worsening symptoms. However, the general conclusion of this work highlights mild to moderate worsening of symptomatology and the emergence of new COVID-19-pandemic-related symptomatology in specific conditions (e.g., people with OCD).

In fact, the current evidence highlights that coping with a very stressful life event such as the global COVID-19 pandemic is certainly very demanding, not only for the general population, but especially vulnerable populations; such is the case of people with psychiatric disorders. Thus, several studies have already shown that anxiety-provoking experiences have the capability to exacerbate mental health problems, especially during a period in which both inpatient and outpatient psychiatric units suffered substantial modifications, and some of them have completely moved to digital or phone call support due to pandemic restrictions [25].

Thus, regarding the studies that evaluated the effect of the COVID-19 pandemic on individuals with mood disorders, in general, they suggest a mild to moderate impact on symptom exacerbation [26][27][28][29][30][31]. Restriction orders and interruptions in the routine seem to be one of the main stressors for the increase in terms of symptoms [26][30]; moreover, most of the concerns reported were related to the fear of infection and to financial concerns [30]. Such financial concerns were also related to the development of symptoms of post-traumatic stress [28]. In line with the findings highlighted in this research, other studies not included in this research because they did not meet the inclusion criteria have also indicated an increase in depressive symptomatology and development of symptoms of post-traumatic stress in people with mood disorders [32][33][34]. These studies noted that these changes are mainly associated with interruptions in routine [33], concerns about the health and well-being of loved ones and society, fear of dying from COVID-19, personal finances, and risk of unemployment or reduced employment [34]. In fact, social isolation, loneliness, feelings of uncertainty, hopelessness, and sadness are core symptoms associated with mood disorders that were triggered in the general population [35] and exacerbated in people with mood disorders during the coronavirus pandemic, who were more vulnerable to this events' consequences. Additionally, several studies have already suggested a link between depression and stressful events and showed the role of rumination and cognitive bias in this relationship [36]. Since not all people with mood disorders experienced a significant negative impact of the pandemic, it would be relevant for future studies to control for such variables to evaluate which populations would be more at risk.

Concerning the effect of the COVID-19 pandemic on individuals with anxiety disorders, studies suggest that the impact varies according to the specific anxiety disorder, indicating that individuals with generalized anxiety disorder and panic disorder have higher levels of stress associated with COVID-19 [37]. However, Plunkett et al. suggested that despite patients' self-report of worsening symptoms, compared to pre-COVID-19 results, only a small percentage of patients experienced worsening of symptoms [38]. This worsening seems to be mainly associated

with reduced social functioning and perceived quality of life [38][39]. Additionally, Taylor and colleagues suggest that individuals with a primary anxiety disorder may be particularly at risk for the development of COVID-19 stress syndrome compared to individuals with mood disorders or without disorders [40][41]. In agreement with the researchers' results, Asmundson et al. point out that the greatest concerns seem to be related to the decrease in social functioning and perception of quality of life, associated with greater fear of danger and contamination, socioeconomic consequences, xenophobia, and PTSD symptoms [32].

Concerning the assessment of the impact of the COVID-19 pandemic on people with OCD, studies indicate mild [42][43] to moderate [12][16][44][45][46][47] OCD symptom worsening. The moderate worsening of OCD symptoms was essentially expressed by the increased frequency of obsessions with contamination and compulsions to clean and wash [12][16][45]. Additionally, alongside worsening OCD symptoms, some studies also reported increased comorbidity with other symptoms, such as changes in eating patterns, changes in sleep quality, suicidal ideation, increased depressive and anxious symptoms, and increased avoidance behaviors [44][47]. Alonso et al. also showed that individuals with OCD self-reported higher increases in symptoms, as compared to the results obtained with the application of the Y-BOCS by an experienced psychiatrist [44]. In a research carried out by Zaccari et al. [48], the authors found a slight to severe worsening in OCD symptoms, especially in obsessions with contagion and washing compulsions, as mentioned above. In addition to these findings, Cunning et al. also verified the development/worsening of other symptoms, such as depression, anxiety, sleep problems, and stress associated with COVID-19, among others [49]. Despite the fact that social distancing and social isolation are common features shared across several people with OCD in coping with stress related to social exposure, one could hypothesize that those factors could be somewhat protective, especially for outside triggers. However, the consequences of the pandemic are far from being only related to social distancing. The pandemic triggered new pandemic-related fears, such as worries about one’s job, money, and health problems (such as fear of coronavirus infection as demonstrated by [44]).

The included studies that assessed alterations in ED symptomatology and general psychopathology (anxiety and depression) in people with eating disorders during the early stages of the pandemic [50][51][52][53][54][55] provided evidence for worsening symptoms for those with anorexia nervosa [51][54], and/or bulimia nervosa [50][52][55], and a history of binge eating disorder [50]. This impact on symptomatology in people with AN, especially during lockdown, was associated with poor self-directedness and poorer coping strategies in dealing with stress related to lockdown measures [53]. Compared with people without a history of ED, people with AN and BN exhibited an increase in compensatory exercise during lockdown, and those with BN experienced exacerbation of binge eating episodes, which significantly interfered with the recovery process initiated prior to the pandemic. The main factors related to this worsening were fear for the safety of loved ones [52] and worsening of symptoms of depression and anxiety during confinement [50][54][55]. In a meta-analysis carried out by Sideli et al., the authors analyzed the changes triggered by the pandemic in participants with eating disorders and mental health symptoms before and during the pandemic [56]. In line with the researchers' findings, Sideli et al., showed that more than 50% of individuals with eating disorders had experienced increased ED symptoms during the pandemic, and some studies in this meta-analysis report that this increase occurred particularly in individuals with AN [56]. Additionally, worsening was also observed in anxiety and depressive symptoms in this population [56]. Taken together, these results indicate that

people with ED may have been at higher risk of relapse during the pandemic, and especially during lockdown, and that vulnerability is not only associated with the diagnosis of ED but also concomitant variables, such as childhood history and insecure attachment, as well as poorer coping strategies.

Regarding the impact of COVID-19 on substance use disorders, studies have obtained mixed results. Some studies suggested that the majority of participants did not report an increase in substance use [6][57][58]. These findings are in line with the results evidenced by the European Center for Monitoring Drugs and Drug Dependence and data presented by Europol from the Global Drug Survey, which identified a decrease in drug use and an increase in the use of psychoactive drugs [59]. However, other studies point to an increase in substance consumption and addictive behaviors [60][61]. Mallet et al. also found discrepancies in the results obtained, suggesting that these depend on the countries in which the studies took place, and as such, some of the conclusions remain speculative [62].

In regard to changes in mood, anxiety, and sleep quality, most studies report a moderate to severe worsening of this symptomatology, possibly associated with the development of symptoms of PTSD, stress, and isolation, among others [57][58][60][63]. These results are in line with those of Munro et al., who report a detrimental impact, including an increase in both levels of anxiety and depression [64].

Finally, concerning the impact of the COVID-19 pandemic on general psychiatric disorders, some studies have indicated null or slight changes in symptoms, especially in patients with more severe mental disorders [65][66][67][68][69][70]. Some authors report that the reduced change in symptoms may be associated with a lack of knowledge and awareness of the pandemic or resilience facing the blocking restrictions and the subsequent policy of physical distancing, as well as the pandemic itself [66][67][69][71]. On the other hand, other investigations obtained different results, indicating a significant increase in depressive symptoms, anxiety, stress, and deterioration of sleep quality, among others [72][73][74][75][76]. These results appear to be associated with compromised treatment [72], decreased perception of quality of life and/or development of PTSD symptoms [77][78][79], and high perception of risk/stress related to COVID-19 [73][74][76].

Tsamakis et al. carried out a research that also indicates a discrepancy in results; however, contrary to the researchers' findings, found this discrepancy for individuals with general psychiatric disorders, suggesting that patients with pre-existing healthcare problems coped remarkably well with the pandemic [80]. The authors point out as possible explanations for these results the transmission mitigation strategies in place, namely the fact that staying at home can be used to develop a structured and fixed daily routine and build resilience [80]. However, a research by Murphy et al. suggests that the pandemic exacerbated symptoms in individuals with pre-existing mental illness, pointing out that the restrictions of the pandemic compromised normal daily routines, social rhythm and, as such, lead to increased levels of stress, depressive and anxious symptoms, insomnia, and suicidal ideation [81].

The worsening of symptoms in people with pre-existing mental illness seems to be related to several factors. As mentioned in some studies, this worsening of symptoms may also be associated with the fact that some patients

are temporarily without psychological support or non-presential (online/telephone) support [52][82]. This claim is supported by several studies that showed a significant reduction in the numbers of patients seeking emergency psychiatric consultations [83][84][85]. Therefore, it is possible that the fear of contamination in emergency departments, deterioration in the accessibility of primary care services, an increase in outpatient activities involving telephone calls, videoconferencing, text messaging, etc., may explain the general deleterious impact of the COVID-19 pandemic on people suffering from pre-existing psychiatric conditions. Particularly concerning substance-related disorders, the literature suggests a decrease in addiction-related appointments in hospitals [86][87]. As Murphy et al. discussed, this might be partially a function of the general disruption to the healthcare system during the peak of the COVID-19 pandemic, or even an increase in outpatient virtual visits [81].

The researchers also found some limitations across the reviewed studies, as some of the disorders were included only in one article, which makes it impossible to make broader comparisons among studies. Second, the majority of the studies assessed participants in the early stages of the COVID-19 pandemic, hence depicting a relatively short-term overview of the possible effect of the pandemic and lockdown policies on psychiatric symptoms. However, the data from these early studies could be useful for future emergency situations, or simply for use as a comparison point for other studies aiming at different goals. Future studies should review the impact of the pandemic at latter stages than the current one, as long-term exposure to very stressful events, associated with mass fatigue of the social distancing measures, fear of health complications (including fear of death), access to and availability of healthcare providers, and financial problems, among others, may contribute to an exacerbation of psychological/psychiatric symptomatology, which may have an increased impact on more vulnerable people , such as the ones with pre-existing psychiatric conditions.

In addition, here the researchers only included studies that have directly assessed people suffering from psychiatric disorders. In other words, studies in which behavioral and emotional changes were rated by caregivers were not included. Moreover, only one study included in the researchers' research reported having assessed children and adolescents, which highlights the importance of assessing whether the deleterious effects of the COVID-19 pandemic are more pronounced in children and adolescents suffering from psychiatric disorders or neurodevelopmental disorders, such as autism spectrum disorders. It is also important for future studies to try to better understand the impact of several factors on the exacerbation (or not) of psychiatric symptoms. For instance, Türkoğlu et al., suggested that home confinement increased eveningness chronotype, sleep problems, and autism symptoms compared to the normal non-home confinement state [88]. Moreover, the current research focuses only on the available data regarding the impact of the early stages of the COVID-19 pandemic in people with pre-existing psychiatric disorders, and does not allow the researchers to draw conclusions regarding the long-term effects of the current pandemic, namely the cumulative effect of the several measures that were taken, the economical and social changes that occurred due to the multiple waves, or the impact on people without pre-existing conditions.

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