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THE EFFECTS OF THE COVID-19 PANDEMIC ON AGGRESSIVE MANIFESTATIONS AMONG PATIENTS WITH MENTAL DISORDERS

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Abstract: The Covid-19 pandemic has tremendously marked the psychosocial dynamic worldwide through the direct effects of the infection and the exposure to a series of information – some mere assumptions – regarding the impact and consequences of the pandemic. Therefore, especially in Europe, Australia, and America, there was an increase in the acute episodes of pre-existing psychiatric pathologies accompanied by aggressive manifestations and an increase in alcohol abuse, consecutively associating hetero-aggressiveness with medico-legal implications. The above have developed based on generalized anxiety, uncertainty, and negative anticipations. This paper aims to synthesize the literature and the studies carried out since the pandemic's beginning regarding its impact on chronic psychiatric pathology or the onset of mental disorders triggered by the various pressures exercised by the spread of the SARS-COV-2 virus. Thus, our goal is to configure multiple premises for developing primary, secondary, and tertiary preventative means applicable even to the reality that Romanian society faces in this context.

Keywords: Covid-19 pandemic, aggressiveness, mental disorders, alcohol abuse, anxiety.

INTRODUCTION

Violence represents, according to the definition of the World Health Organisation (WHO), the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either result in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation [1]. The term includes other types of manifestations too, such as threat, intimidation, negligence, physical, sexual, or psychological abuse, self-harm acts and suicidal behaviour. In 2014, the WHO released its first reports on interpersonal violence. The study includes 133 countries, accounting for 88% of the world's population and indicates that, in 2012, half a million people were homicide victims, 60% of them males aged between 15 and 44 [1, 2].

The Covid-19 pandemic determined significant changes concerning the violent manifestations among the population. Hence, a study carried out in Australia during the pandemic lockdown reported a 40% reduction in crime in the general population, but a 5% increase in domestic violence and a 75% increase in social support needed due to violence [3].

Persons with mental disorders are 3.7 times more prone to physical abuse by their parents and 2.5 times more likely to become unemployed, aggression victims, and domestic violence witnesses than people without mental disorders. Furthermore, the living standard of such persons is often inadequate, and they do not benefit from proper social insertion, accounting for additional risk factors for violent manifestations. Such risk factors are valid for all population categories, even those without mental disorders [4].

Persons with mental disorders under medication are not more dangerous than the general population, without mental disorders. A small number of persons diagnosed with severe mental disorders commit acts of violence, primarily when they associate the abuse of alcohol or various psychoactive substances and lack proper healthcare [5].

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Aggressiveness, mental disorder and COVID 19 pandemic

The heterogeneity of violence is an issue highlighting the blurred relationship with mental disorders in general. Violence is a complex phenomenon due to the characteristics of the victims, the severity of manifestations, the frequency and the context [5].

Violence is defined as physical aggression manifested among people. Some authors use the terms violence and aggressiveness interchangeably, depending on context and style. Like many other psychopathologists, Freud sees aggressiveness as a global instinctual force and identifies aggression as the will to destroy. On the other hand, Miller and Dollard believe it is a consequence of frustration because, though the reactions may be temporarily delayed or compressed by their immediate goal, they do not disappear [5, 6].

Several studies examined the consequences of the existence of a personality disorder diagnosis and psychotic symptoms on the development of aggressive behaviour. For instance, they assessed the contribution of psychotic disorders or lack of impulse control on the aggressions committed by patients diagnosed with schizophrenia or schizoaffective disorder [4]. The purpose was to underscore the underlying reasons for the violent acts committed by the aggressors. Evaluations have reported that 20% of the manifestations were directly related to the existence of psychotic symptoms. Additionally, the factor analysis pointed out the involvement of two factors correlated with the psychotic disorder diagnosis. One is the presence of psychotic symptoms per se, and the other is related to disorganized behaviour consistent with psychotic patients [4, 7].

The medium and long-term social effects of the Covid-19 pandemic may be disproportionate to the persons already diagnosed with a psychotic disorder. In addition, persons without a psychiatric history have an increased risk of developing a psychotic disorder [4,5]. Hence, various environmental factors such as social isolation, job loss, divorce, and family violence may affect the persons already diagnosed with a mental disorder, considering that they are more vulnerable to all these factors. On the other hand, there emergence of psychotic symptoms is associated with coronavirus exposure. Many patients experienced visual and auditory hallucinations or persecutory delusions in the acute stages of the Covid-19 infection without any other pre-existing psychiatric pathology or even the onset of a new one. In addition, it has been reported that the frequent reporting by the media of news related to the Covid-19 pandemic in a sensationalist and impactful manner on the population amplifies psychosocial stress [4, 8].

Concerning the patients already diagnosed with schizophrenia, they were less likely to get vaccinated and thus far more worried about the vaccine's adverse effects than the general population. At the same time, they were less cooperative when social isolation was enforced [4, 8].

Regarding the patients diagnosed with bipolar affective disorder (BD), the violent manifestations have been recorded notably during an acute manic or mixed episode or in the presence of psychotic symptoms. Regarding hospitalized patients, a study carried out by Barlow on a sample of 1269 patients pointed out that those diagnosed with BD displayed much more aggressive behavior than those diagnosed with other types of severe mental disorders [9]. On the other hand, other studies conducted on hospitalized patients have failed to find significant differences concerning their aggressive manifestations, regardless of their diagnosis upon admission. The aggressive manifestations of the patients who are not hospitalized, are more common among the persons diagnosed with BD type I, depressive disorder, or cluster B personality disorder than patients with another psychiatric diagnosis [9,10].

A comprehensive epidemiological trial carried out by Fazel in Sweden has pointed out that the patients diagnosed with BD and at least two hospitalisations displayed a much more violent behaviour than those with other mental disorders. Also, most patients also associated mental manifestations related to the intake of psychoactive substances, thus not determined by the mental disorder per se [10].

During the Covid-19 pandemic, the persons diagnosed with various severe mental disorders, such as schizophrenia or BD, recorded an increase in the number of aggressive manifestations and were more prone to violent behaviour in the family setting [11]. These manifestations are secondary to drug abuse, the temporary shutdown of various medical outpatient services, social distancing and isolation, as highlighted by various studies conducted in 2020 [12]. The measures specific to the pandemic period represented stressors for patients with severe mental disorders and their family members, who had difficulty coping with the various conflict states and found it impossible to deal with the violence [13, 14].

Given that the media featured dramatic data regarding the number of victims and predictions regarding the evolution of the cases and the general

prognostic of the SARS-COV 2 infection since the inception of the pandemic, a series of studies have identified a psychopathological pattern overlapping a so-called pandemic acute stress disorder. However, the nosological classifications enable diagnosing of a multitude of psychiatric disorders that worsened significantly, coinciding with the director indirect effects of the pandemic [15-17].

The current scientific reports regarding the period dominated by the COVID-19 pandemic point out the increased occurrence of mental disorders, with a dominance of anxious symptoms worldwide. The primary explanation is the continuous exposure of the population to information related to the effects of the pandemic, especially their morbidity and mortality. Furthermore, other studies carried out during the same time-frame indicate a marked increase in alcohol use and abuse and an apparent propensity towards aggressive behaviours [17,18].

A series of regional studies have pointed out a significant increase in alcohol intake at the beginning of the COVID-19pandemic. Hence, in Australia, alcohol consumption increased by 25%, in Poland by 30%, followed by Germany and Belgium with similar figures, while in America, by 44%, including binge drinking, with redoubtable behavioral aftermaths [19,20].

Current theories, included those of Panskepp, posit that the system of fears one of the seven emotional systems specific to mammals (and humans implicitly). Such research has concluded that anxiety may represent a genuine precursor of ethanolic abuse and the development of aggressive behaviours [21,22].

Another study focusing on social anxiety and phobia points out the high relevance of anxiety in the defense mechanisms of aggressiveness more than in the onset of alcohol abuse [23].

Furthermore, alcohol use and abuse develop aggressive behaviours that may acquire various forms and entail incontestable medico-legal implications quickly. The biological mechanism is mainly limited to the toxic action of alcohol on the frontal areas of the brain and the damage brought to the emotional processing of stimuli. At the same level, the perturbed action of the dopamine and serotonin specific to persons displaying aggressive behaviours makes them more susceptible to worsening such conduct when they drink alcohol [24-26].

Hence, increased anxiety levels correlated with ethanolic abuse and exacerbated aggressive behaviours; the pandemic did not formally alter this causality correlation, but it intensified the occurrence of its effects. In this context, the anxiety-reducing measures would mitigate aggressive and deviant alcohol-induced behaviours, thus minimizing the impact of the current pandemic on the medium- and long-term [27,28].

During the COVID-19 pandemic, numerous factors with a synergic action were recorded, among which was the initial lock-down, favoring an increase in alcohol intake. At the same time, this phenomenon was also triggered by restricted access to recreational activities not involving alcohol or psychoactive substances. Alcohol abuse gradually became a coping mechanism disguised as having fun. A study carried out in the US in 2020, reports an increase of 55% in alcohol sales in that period [29-31].

The marked anxiety generated by the effects of the SARS-COV2 virus infection determined the dissemination of various myths among the population regarding the germicide effect of alcohol on this pathogenic agent. In this context, increased alcohol intake favored quite the opposite of the above mentioned situation by weakening the immune system and determining behavioural disinhibition and the failure to observe social distancing [32,34].

This led to the outline of a general theory regarding the exacerbated alcohol intake correlated with economic struggles, social isolation, and anxiety concerning the infection and/or the socio-professional and financial status [35,36].

Aggressiveness induced or exacerbated by acute alcohol intoxication is the consequence of the interrelation between a series of factors like gender, genetic "luggage", psychiatric comorbidities, blood alcohol level upon committing the violent act, and, naturally, factors related to the environment where individuals live and carry out their activities [37].

Several studies focused on personality disorders have reported an exacerbation of pathological traits mostly among persons with cluster B diagnoses (already dominated by emotional instability), i.e., intensifying their self-aggressive and hetero-aggressive propensity. It has been proven that individuals with a predilect presence of antisocial elements found it the hardest to devise coping methods to overcome the pressure imposed by the pandemic. Particularly among persons diagnosed with borderline personality disorders, there was an increase in the frequency of depressive episodes and neurotic symptoms, even to a genuine overlapping, by diagnostic criteria, of an anxiety-spectrum disorder, with reports of self-aggressive tendencies and an increased propensity towards addictive disorders, to which these patients are already highly susceptible [32, 37].

In conclusion, the Covid-19 pandemic took the entire world by surprise, in the societies benefiting from highly-developed information and media systems, with an impressive impact on the mental state of the population. Thus, beyond the worsening of psychiatric disorders due to anxiety-inducing news and restricted access to outpatient psychiatric services, there was an increase in the occurrence of mental disorders, such as additive disorders, mostly alcohol abuse and co-occurrences like addiction or anxiety disorders. Many were in a direct causality relation with the onset or exacerbation of self-aggressive and hetero-aggressive behaviours with potential medico-legal implications.

Conflict of interest

The authors declare that they have no conflict of interest.

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