

## Casi clinici

# Case reports of first psychiatric presentations during CoViD-19 pandemic

## *Casi clinici di prime presentazioni psichiatriche durante la pandemia CoViD-19*

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**SUMMARY.** CoViD-19 pandemic has created a global concern in the whole population. The psychiatric and social impact of the viral infection is recorded differently by the community. However, more vulnerable individuals with negative psychiatric history are presenting to mental health hospitals for admission, assessment and treatment due to abnormal reactions to CoViD-19 pandemic. The current study reports six clinical cases of first psychiatric presentation that were characterised by sudden onset of symptoms, manic and psychotic symptoms, adverse response to stress, psychomotor agitation and behaviours out of character. The presentation was short-lived and responded to typical antipsychotics and antidepressants. The posed diagnoses were acute and transient psychotic disorder and acute stress reaction.

**KEY WORDS:** CoViD-19, coronavirus, psychopathology, psychiatry, acute stress reaction, brief psychotic episode, first psychiatric presentation.

**RIASSUNTO.** La pandemia legata alla CoViD-19 ha provocato preoccupazione generale nell'intera popolazione. L'impatto sociale e psichiatrico dell'infezione virale varia da persona a persona. Tuttavia, a causa di reazioni mentali patologiche alla pandemia da CoViD-19, individui più vulnerabili, con un'anamnesi psichiatrica negativa per precedenti patologie mentali, iniziano a essere presi in carico dai servizi psichiatrici. La nostra ricerca riporta sei casi clinici al loro esordio psichiatrico, caratterizzati dall'insorgenza acuta di una sintomatologia con sintomi maniacali e psicotici, con alterata reazione allo stress, agitazione psicomotoria e comportamento patologico. Per tutti, il decorso clinico è stato breve e caratterizzato da buona risposta ai comuni antipsicotici e antidepressivi. Le diagnosi poste sono state di disturbo psicotico acuto e transitorio e di reazione acuta allo stress.

**PAROLE CHIAVE:** CoViD-19, coronavirus, psicopatologia, psichiatria, reazione acuta da stress, disturbo psicotico breve, anamnesi psichiatrica negativa.

### INTRODUCTION

We report on six cases of first psychiatric presentations triggered by concerns about CoViD-19 infections and requiring admission into acute psychiatric wards<sup>1</sup>. All the cases presented here were not known to psychiatric services before and were diagnosed with ICD-10 F43 reaction to severe stress, and adjustment disorders, and F23 acute and transient psychotic disorders with manic or depressive symptoms (Table 1). Acute stress reactions is characterised by the presentation of transient psychological, physical, cognitive, or social disruption because of experiencing rare and extraordinary circumstance (either short-or durable) of an amazingly undermining or horrendous nature (e.g., conventional or human-made debacles, battle, genuine mishaps, sexual savagery, attack)<sup>2,3</sup>. Symptoms may incorporate autonomic signs of anxiety (e.g., tachycardia, perspiring, flushing), being in a surprise, disarray, misery, nervousness, irritation, despair, psychomotor agitation, dormancy, social withdrawal, or daze; the reaction to the stressor is viewed as usual, given the seriousness of the stressor, and for the most part

starts to decrease inside a couple of days after the event or following removal from the compromising circumstance<sup>2,3</sup>.

### METHODS

We used structured and semi-structured psychiatric interviews, nurses' electronic notes, and standardised psychiatric tests. All the data were anonymised. The interviewers were experienced psychiatrists while nurses and other support workers were all trained mental-health professionals. The settings are acute psychiatric wards for the general population in two major hospitals in the United Kingdom. The psychiatrist tests used for confirmation were BPRS (Brief Psychiatric Rating Scale)<sup>4</sup>, DBI (Beck Depression Inventory)<sup>5</sup>, GAD-7 (Generalized Anxiety Disorder Scale)<sup>6</sup>, CGI (Clinical Global Impression Scale)<sup>7</sup>, PANSS (Positive and Negative Symptoms of Schizophrenia)<sup>8</sup>, HAM-A (Hamilton Scale for Anxiety)<sup>9</sup>, HAM-D (Hamilton Scale for Depression)<sup>10</sup>, PHQ-9 (Physical Health Questionnaire-9)<sup>11</sup>, YMRS (Young Mania Rating Scale)<sup>12</sup>. Clinical assessments included CoViD-19 test, routine blood tests and ECG. We also searched for CoViD-19 serum antibodies that were negative for the cases reported in the current study.

Table 1. Summary of clinical cases of first psychiatric presentations due to concerns about CoViD-19.

Gender	Age	CGI-Severity	Diagnosis ICD-10	Thought content	Behaviour	Test results
M	59	6=severely ill	Stress induced psychosis	Planning mercy killing of wife and daughter to prevent them from suffering from Coronavirus; paranoia; thought about government conspiracy with Coronavirus; feeling house controlled by electronic devices.	Increased agitation, restlessness, insomnia, disinhibition	BDI=12 GAD7=15 PANSS=57 PHQ9=11
F	57	6=severely ill	Stress induced psychosis	Thought someone dispersed a powder into her house to infect her. Believing in a Coronavirus conspiracy. Ideas about government conspiracies; gas and chemicals being sprayed into her home, household; items being contaminated; feeling unsafe.	Severe anxiety, tension, fear, insomnia, difficult concentration, depression; change of sense of smell (olfactory hallucinations)	BPRS=51 HAM-A=32 PANSS=166
F	64	6=severely ill	Stress induced manic psychosis	Feeling worried about children in school who could not attend due to Coronavirus; psychotic mania; following God's footsteps; grandiosity, paranoia.	Aggressive, agitation, mania, disinhibition, giving a large amount of money and food to self-isolating neighbours and children; bizarre behaviour, hyperactivity.	BPRS=65 YMRS=44
M	38	4=moderately ill	Stress induced psychotic depression	Worried about CoViD-19; thought about a conspiracy of neighbours trying to kill him and his family; paranoia.	Progressive self-isolation; uncertainties about the future; loss of financial assets due to quarantine; young children at home.	BPRS=50 HAM-A=29 HAM-D=17
F	44	6=severely ill	Stress induced psychosis	Psychotic delusion about people spraying bleach on her birds, these people being miniaturized and tied to the cage; flies and insects covering floor and her legs.	Agitation, restlessness, unable to keep herself safe; visual hallucinations.	BPRS=50 PANSS=58
F	59	6=severely ill	Stress induced manic psychosis	Paranoia; grandiose and spiritual delusions; wanting to follow the footsteps of God.	Bought a home to a homeless person and invited him at her house; dropping letters and cards to isolated neighbours to lift their spirit; restlessness, agitation, mania, insomnia, dizziness.	BPRS=50 YMRS=26

## RESULTS

In the cases reported, thought content was mainly delusional and paranoid, believing that CoViD-19 Pandemic was part of a conspiracy, thinking that someone was trying to kill or infect them by diffusing the CoViD-19 or other pollutants (Table 1). One case tried a mercy killing of the whole family as a way to lift them from Coronavirus consequences. In two cases, there were olfactory and visual hallucinations. All cases were characterised by sudden behavioural changes out of character, grow-

ing concern about CoViD-19, severe anxiety, psychomotor agitation, insomnia, hyperactivity, aggression, mania, disinhibition, and physical violence. Cases that were accompanied by mania and grandiose delusions had in common loss of financial wisdom and were prolifically giving money, shelter, food or a house to homeless people, self-isolating neighbours and unknown people. All the patients responded well to antipsychotic medication, antidepressants, anxiolytics, and mood stabilisers individually or as a combination. The mean period of hospitalisation with full recovery from symptoms was about one week.

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### DISCUSSION

Research reports that stress can increase dopamine levels in the brain, causing psychosis hence postulating the role of psychological stress to trigger psychosis in vulnerable persons<sup>13</sup>. Studies indicate the correlation between social deprivation and mania, depression, paranoia and hallucinations via the induction of stress which, then, triggers the psychiatric symptoms<sup>14</sup>. In the case of visual or olfactory hallucinations, research suggests the presence of (pseudo)hallucinations occurring with extreme anxiety and conversion disorders<sup>15</sup>. It is reported that subjects high on anxiety scores show more uncertainty about the processing of their sensorial experiences hence being more prone to experience visual and auditory hallucinations under extreme anxiety<sup>16</sup>. Besides, major traumatic life events can increase the risk of first episodes of bipolar disorder and a spectrum of psychotic disorders<sup>17,18</sup>. Hence, CoViD-19 is inducing a whole sort of emotional and behavioural responses to fear<sup>19</sup>.

### CONCLUSIONS

The current study on case reports suggests that CoViD-19 pandemic is about to generate new presentations of cases linked explicitly to emotional reactions to the present viral infection. The first cases that we studied show that the emotional impact of stress and lifestyle related to the pandemic can have a severe effect on people who never had any contact with psychiatric services before. Besides, it was found that the impact of worries linked to CoViD-19 is of such a degree to generate severe psychoses and mania that require close attention to people who start to behave in ways that are considered at high risk for self and others.

*Conflict of interests:* the authors have no conflict of interests to declare.

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