Psychiatria Danubina, 2020; Vol. 32, Suppl. 4, pp S597-601
Medicina Academica Mostariensia, 2020; Vol. 8, No. 1-2, pp 199-203 *Case report*

CLINICAL PSYCHOPATHOLOGY DURING COVID-19 PANDEMIC: CASE REPORTS OF FIRST PSYCHIATRIC PRESENTATIONS

Carlo Lazzari[1,4], Ahmed Shoka[2,4], Abdul Nusair[1,4], Su Mon Hein[2,4] & Marco Rabottini[3,4]

[1]*South-West Yorkshire NHS Trust, Fieldhead Hospital, Wakefield, United Kingdom*
[2]*Essex Partnership University Foundation NHS Trust, The King's Wood Centre, Colchester, United Kingdom*
[3]*International Centre for Healthcare and Medical Education, Bristol, United Kingdom*
[4]*Steering Committee for the Study of COVID-19 Psychiatry, Wakefield-Colchester, United Kingdom*

received: 22.4.2020; revised: 27.5.2020; accepted: 23.7.2020

* * * * *

INTRODUCTION

The current pandemic is creating uncertainties about what is real and anyone as a personal viewpoint about Coronavirus, hence people become disoriented, illogical, anxious, frightened, paranoid and intolerant of others to the point of displaying irrational behaviours (Jakovljevic et al. 2020). The emotional reactions of people to the COVID-19 pandemic can be recorded as a traumatic experience developing as extreme anxiety or depressive disorder or post-traumatic stress illness (Jakovljevic 2020). The clinical cases found in the psychiatric hospitals of the authors of the current study and here reported bolsters the theory that COVID-19 pandemic can trigger, fuel or break mental stability in fit individuals who never had contacts with psychiatric services before. In all cases, presentation to psychiatric hospitals or infirmaries is characterised by extreme anxiety and psychomotor agitation which is a direct or aberrant route connected to COVID-19 pandemic, social segregation, constraints or interference of day by day lifestyles.

The diagnoses of the cases reported in the current study mainly were those of ICD-11 F 23.0 Acute Stress Reactions (ASR) characterised by the presentation of transient psychological, physical, cognitive, or social disruption because of experiencing rare and extraordinary circumstances (either short-or durable) of an amazingly undermining or horrendous nature (e.g., conventional or human-made debacles, battle, genuine mishaps, sexual savagery, attack). Side effects 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 (Luciano 2015, WHO 2020).

The cases reported in the current study also fulfil the criteria for Acute and Transient Psychotic Disorder (ATPD) (ICD-10 F 23.0) which is characterised by the abrupt onset of psychotic symptoms often induced by severe stress and subsiding within the period from one week to three months (affected by prescribed antipsychotic medication), commonly associated to female gender with healthy premorbid social life (Castagnini & Berrios 2019, Jørgensen et al. 1997).

Studies indicate that stress reaction can augment the level of dopamine in the brain and cause psychosis in susceptible individuals (Soliman 2007). COVID-19 has also increased self-isolation and loss of jobs. Hence, studies confirm that social isolation is recorded as a highly stressful event which can trigger extreme anxiety leading to several mood and psychotic disorders including paranoia, mania, depression, conversion disorder and perceptual abnormalities such as visual and auditory hallucinations due to increased ambiguity to decipher psychological experiences (García-Montes 2006, Wearne 2017, Wickham 2014). In most extreme cases, recurring life events can trigger bipolar disorders (Simhandl 2015).

During COVID-19 pandemic, the emotional load linked to severe and lethal illnesses like COVID-19 pandemic can affect vulnerable people beyond their point of resistance, leading to increased stress reactions, depression, suicide, homicide, and psychosis (Lazzari et al. 2020a). In a most extreme case, a brief psychotic response to stress resulted in a man who attempted mercy killing of his whole family preoccupied with the outcomes of COVID-19 pandemic (Lazzari et al. 2020b). The following paragraphs will bring the description of four clinical cases which presented as a direct consequence of stress reaction to COVID-19 pandemic.

CASE NO 1

This is the case of a 64-year old lady at her first admission to a psychiatric hospital. She accessed our psychiatric services after she was assessed at the department of Emergency of the local hospital. She was referred to mental health teams as she had a sudden change of her character, starting to give her money prolifically out to other residents of the nursing home where her father was staying and to all the children of

attending to her nursery school. She explained that she wanted to help them because of the COVID-19 emergency. She also was buying food and flowers for her neighbours and leaving the goods outside of their houses.

Although she is a religious person, she became aggressive and disinhibited to her husband, which was considered totally out of her character. At the psychiatric assessment, she presented as agitated and hypomanic, taking her clothes off while in the seclusion room of the ward. There were accounts that she was aggressive towards her family members. She commented that Coronavirus is connected with the devil. She reported grandiose religious delusional beliefs. She also presented with pressured speech and flight of ideas. She was confused and thought blocking was observed. At admission, she appeared to suffer from mania with psychotic symptoms or an acute psychotic episode. She spoke about fixed beliefs and predictions over the future of the Coronavirus and El Shaddai (God Almighty) commanding her to get the scripture right.

She had no insight into her mental health and did not believe she was unwell. Besides, she was presenting as aggressive towards her family and displaying disinhibited behaviours in response to following El Shaddai's command. At the assessment, all her biochemical parameters were within normal limits. There was no concern about her physical health.

Test scores at admission were: BPRS (Brief Psychiatric Rating Scale) (Overall & Gohrman 1962) = 65 (scoring high on elated mood, grandiosity, unusual thought content, bizarre behaviour and hyperactivity), Young Mania Rating Scale (YMRS) (Young et al. 1978) = 44 (scoring high in irritability and hostility, pressure of speech, hyper-religious thought content, and aggressive behaviour). The diagnosis posed was ICD-11 Acute Stress Reaction with Manic Mood. She recovered soon after she was started on injectable antipsychotic depot as she was refusing her oral medication. The Clinical Global Impression (CGI) Scale (Busner & Targum 2007; Guy 1976) at admission and with oral antipsychotic medication was Severity of Illness 6 = (severely ill), Global Improvement 4 = (no change).

Considering that she did not improve and remained in seclusion, she was started on depot antipsychotic Zuclopenthixol Decanoate 100 mg weekly after a one-off dose of Zuclopenthixol Acetate of 100 mg and Semisodium Valproate 250 mg twice daily. At this point, she normalised her presentation, and her mood became euthymic. At this point, her CGI was CGI-Severity = 2 (subtle or suspected pathology), CGI-Improvement = 1 (very much improved - nearly all better; good level of functioning; minimal symptoms; represents a very substantial change). She regained insight and capacity. Ultimately her Young Mania Scale subsided at the score of 4 just because she denied having been ill.

CASE NO 2

The current case refers to a 59-year-old woman who, at admission, reported feeling under pressure and unable to trust people. She added that she had these feelings for the previous few weeks and heightened since self-isolating because of COVID-19 emergency. At background assessment, she reported that she had a history of depression and chronic fatigue treated by primary care. She also reported seeing a private psychiatrist in 2004. Since then, no other contacts with secondary care and psychiatric services were recorded. She stated that her mood has been deteriorating for the three weeks before admission, experiencing ideas of reference, making bizarre connections between things, also feeling very close to God.

At the time of admission, she presented with behaviours out of her character, like buying a home to a homeless man to help him cope with Coronavirus restrictions. She reported feeling unsafe because of the current pandemic. She said that she started to attend the Cathedral and trying to connect with God. She also mentioned that she wanted to follow the footsteps of Jesus, and therefore, she started inviting a homeless person to her home to help him. She said that her husband was a bit irritated with her because of her choices.

She was also trying to engage with homeless people on the high street as well but believing that they might be disguising their identity and not be who they said they were. Besides, she was also dropping letters and notes to her neighbours to uplift their spirit due to quarantine and told that one of her neighbours messaged her to thank her for her gesture but lied about his name. Nonetheless, she added that she was not sure if she received the message on the phone or was imagining it; therefore, she broke her phone. She felt that if she were left to be herself, she would calm down. She also mentioned about her irritation at people trying to restrain her like the Good Samaritan on the roadside at the time of her accident when she bumped into the back of another car in extreme panic and fright.

At the initial psychiatric assessment, she reported weight loss, increased energy, reduced sleep, dizziness spells that were not present in the past. At the initial psychiatric evaluation, she presented in an acute manic state with a pressure of speech, a flight of ideas, grandiose ideas, overfamiliarity with bystanders and lack of insight. Psychiatric tests scores were: BPRS = 50 (extremely severe conceptual disorganisation, severe grandiosity, extremely severe unusual thought content). The Young Mania Rating Scale reported a score of 26 (manic symptoms). Biochemical parameters were all within normal limits. The diagnosis posed was ICD-10 F30.0 Acute Manic Episode. At admission, her CGI was CGI-S=5 (markedly ill) and CGI-I=4 (no change in presentation after admission). She was started on a course of antipsychotic Olanzapine at 10 mg twice daily

to address the manic symptoms and abnormal beliefs. At discharge, her CGI was CGI-Severity = 1 (normal) and CGI-I = 1 (very much improved).

CASE NO 3

Here is the case of a 38-year-old gentleman at his first admission to a psychiatric hospital and not known to psychiatric services. He had a negative history for psychiatric disorders, negative family history of siblings and relatives diagnosed with mental illnesses, while medical history was unremarkable. At admission to a psychiatric hospital, he reported feeling very depressed which he justified to the accumulation of stress, moving to a new home, having a new-born child, and decreased financial assets due to COVID-19 forced restrictions on his activity as a builder. In his household, he had a boy of age three years and a six-month-old baby daughter. He reported hearing voices into his head for the first time but becoming constant and affecting his sleep.

When assessed, he was found having a severe degree of subjective and objective levels of anxiety. He denied any suicidal or self-harming thoughts, though he did respond with "not yet." At admission, he told that he was experiencing an increased level of stress due to the recent COVID-19 pandemic and lockdown, resulting in being confined at home and provoking uncertainty about his future and finance. He explained that he has been experiencing thoughts that his neighbours have been planning on killing him and harming his family. He expressed some guilt feelings that it took him a long time to bond with the baby. Tests at admission were: BPRS = 50 (severe anxiety, guilt feelings, tension, depression; and extremely severe suspiciousness); HAM-A (Hamilton 1959) (Hamilton-Rating Scale for Anxiety = 29 (moderate-severe anxiety) (Thompson 2015); HAMD-7 (Hamilton 2002) = 17 (moderate depression) (Zimmerman et al. 2013). CGI (Clinical Global Index of Severity) was: Severity = 4 (moderately ill), Global Improvement = 4 no improvement).

He was started on a course of antipsychotic Quetiapine at 100 mg twice daily and antidepressant Mirtazapine 30 mg once daily. Biochemical parameters and blood test were all within normal limits. After the beginning of treatment, all test scores normalised to non-pathological levels. The diagnosis at discharge was ICD-11 = Acute Stress Reaction with Depressed Mood. CGI at discharge was CGI-S=1 (normal) and CGI=I (1 = very much improved).

CASE NO 4

Here is the clinical case of a 44-year-old woman who recently moved in with her partner due to COVID-19 restrictions. Her past psychiatric history only depicted anxiety two years before admission assessment with episodes of panic attacks which responded to medication. At the current psychiatric evaluation, it emerged that she has been worried about COVID-19 for the last months, concerned about her children visiting her and her ex-partner and grandparents, and reporting that these concerns were impacting enormously on her mind. Her partner said that he was unable to provide full support to her as she appeared more agitated and he was incapable of distracting her from her intrusive thoughts with increased risk when she was left alone in the house, such as using the toilet or bathroom on her own.

From her account and partner's report, she presented with an articulated story suggesting psychotic features. She spoke about people spraying bleach on her Guinea pigs, these people being miniaturised and tied to the cage. She also added that there were similar miniaturised people in the Accident and Emergency Unit at the hospital, and some were on the ceiling. She also mentioned that flies and insects were covering the ground and up her legs. She also reported vivid visual hallucinations and persecutory paranoid beliefs.

Psychiatric tests scores at admission were: BPRS = 50 (severe anxiety, severe conceptual disorganisation, extremely severe tension, extremely severe hallucinatory behaviour, severe thought content); PANSS = 58 (moderate delusions, severe hallucinations, mild agitation and anxiety). CGI, CGI-S =5 (markedly ill) and CGI-I = 4 (no improvement). Biochemical parameters were all within normal limits. The diagnosis posed was Acute and Transient Psychotic Disorder (ICD-10 F 23.0). She was started on the beta-blocker Propranolol 20 mg twice daily to reduce physical and psychological symptoms of anxiety, antipsychotic Olanzapine 5 mg twice daily to address psychotic symptoms, and antidepressant Venlafaxine 225 mg once daily also to address mixed anxiety and depressive symptoms. At discharge, her CGI was CGI-S = 1 (normal) and CGI-I (1 = very much improved).

DISCUSSION

The case reported were all characterised by symptoms that satisfied the diagnostic criteria of acute stress reactions and brief psychotic episodes.. The clinical cases discussed were all short-lived and required brief admissions in a psychiatric hospital to up two weeks. None of the patients has ever had any contact with psychiatric services before. In all the instances, the triggers were the concern about COVID-19 pandemic experienced either as a form of divine punishment, highly stressful event, Doomsday condition, or as bereavement (Ambelas 1979) due to loss of a job or freedom with increased responsibility in the family.

The anxiety reported in the clinical cases is classifiable in the category of 'abnormal emotional reactions' which recognises an identifiable stressful trigger (e.g.

fear of Coronavirus) but associated to a more profound and protracted deficiency of daily living with impact on mood, on other emotions and altered behaviour (Kasey & Kelly 2007). When the cases included psychotic symptoms, these were classified as 'secondary delusions' as arising from stressful events and which ranked as grandiose or nihilistic delusions (Kasey & Kelly 2007).

The behavioural component was characterised by extreme psychomotor agitation, aggressiveness out of character, severe anxiety, odd behaviours that were never observed before admission and were indicative of a high level of psychogenic arousal and psychomotor agitation. In extreme cases, patients arrived to destroy theirs or others property (Lazzari 2020b). Major traumatic life events are reported to increase the risk of first episodes of bipolar disorder and a spectrum of psychotic disorders (Gibson et al. 2019; Kessing et al. 2004). COVID-19 is inducing a whole sort of emotional and behavioural responses to fear (Marčinko et al. 2020).

In all the cases described, the rapid recovery was facilitated by combined therapy of sedative antipsychotics (Olanzapine, Quetiapine, Zuclopenthixol) with antidepressants with anxiolytic effects (Mirtazapine, Venlafaxine) and mood stabilisers (Semisodium Valproate). The decision to treat instead of waiting for a natural outcome was dictated by the severity of the risk to self and others presented by patients, some of them requiring restriction in a seclusion room. Research has shown a correlation between trauma, auditory hallucinations and paranoid thoughts, although the reaction is higher in those who had more severe child abuses being and were victims of unpredictable events (Freeman & Fowler 2009).

The use of antipsychotic medication in acute mania is reported as being advantageous compared to mood stabilisers alone (Tarr et al. 2011). Besides, the literature supports the use of antidepressants Serotonin-Noradrenaline Reuptake Inhibitors like venlafaxine (SNRI) for treating anxiety linked to depression (Baldwin 2006).

CONCLUSIONS

The current study on case reports suggests that COVID-19 pandemic is about to generate new presentations of cases linked explicitly 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 were considered at high risk for self and others.

Acknowledgements: None.

Conflict of interest: None to declare.

Contribution of individual authors:

Carlo Lazzari: concept and design of article, literature searches, writing manuscript, approval of final version.

Ahmed Shoka, Abdul Nusair, Su Mon Hein & Marco Rabottini: comments on the concept of article, literature searches, writing some parts of manuscript, approval of the final version.

References

1. *Baldwin D: Serotonin noradrenaline reuptake inhibitors: A new generation of treatment for anxiety disorders. International Journal of Psychiatry in Clinical Practice 2006; 10(sup2):12–15*
2. *Busner J, Targum SD: The Clinical Global Impressions scale: applying a research tool in clinical practice. Psychiatry (Edgmont) 2007; 4:28–37*
3. *Casey P, Kelly B: Fish's Clinical Psychopathology: Signs and symptoms in psychiatry. 3rd edn. London: Gaskel, 2007*
4. *Castagnini A, Berrios G: Approach to refine ICD-11 acute and transient psychotic disorder (polymorphic psychotic disorder). Schizophrenia Research 2019; 212:239–240*
5. *Freeman D, Fowler D: Routes to psychotic symptoms: Trauma, anxiety and psychosis-like experiences. Psychiatry Research 2009; 169:107–112*
6. *García-Montes J, Cangas A, Pérez-Álvarez M, Fidalgo Á, Gutiérrez O: The role of meta-cognitions and thought control techniques in predisposition to auditory and visual hallucinations. Br J Clin Psychol 2006; 45:309–317*
7. *Gibson L, Reeves L, Cooper S, Olino T, Ellman L: Traumatic life event exposure and psychotic-like experiences: A multiple mediation model of cognitive-based mechanisms. Schizophrenia Research 2019; 205:15–22*
8. *Guy W: ECDEU Assessment Manual for Psychopharmacology Revised (DHEW Publ No ADM 76-338). Rockville, MD, U.S. Department of Health, Education, and Welfare, 1976*
9. *Hamilton Anxiety Rating Scale (HAM-A) Hamilton M: The assessment of anxiety states by rating. Br J Med Psychol 1959; 32:50–55*
10. *Hamilton Rating Scale for Depression (HAMD-7); McIntyre R, Kennedy S, Bagby RM, Bakish D: Assessing full remission. J Psychiatry Neurosci 2002; 27:235–239*
11. *Jakovljevic M, Bjedov S, Jaksic N, Jakovljevic I: COVID-19 Pandemia and public and global mental health from the perspective of global health security. Psychiatr Danub 2020; 32:6–14*
12. *Jakovljevic M: COVID-19 crisis as a collective hero's journey to better public and global mental health. Psychiatr Danub 2020; 32:3–5*
13. *Jørgensen P, Bennedsen B, Christensen J, Hyllested A: Acute and transient psychotic disorder: a 1-year follow-up study. Acta Psychiatr Scand 1997; 96:150–154*

14. *Kessing L, Agerbo E, Mortensen P: Major stressful life events and other risk factors for first admission with mania. Bipolar Disord 2004; 6:122–129*
15. *Lazzari C, Shoka A, Nusair A, Rabottini M: Psychiatry in Time of COVID-19 Pandemic. Psychiatr Danub 2020a; 32:229-235*
16. *Lazzari C, Nusair A, Shoka A, Rabottini M: Psychiatry during COVID-19 Pandemic: A Case Report of Attempted Mercy Killing. Psychiatr Danub 2020b 32:303-304*
17. *Luciano M: The ICD-11 beta draft is available online. World Psychiatry 2015; 14:375–376*
18. *Marčinko D, Jakovljević M, Jakšic N, Bjedov S, Mindoljević Drakulić A: The importance of psychodynamic approach during COVID-19 pandemic. Psychiatr Danub 2020; 32:15-21*
19. *Overall J, Gorham D: The Brief Psychiatric Rating Scale. Psychol Rep 1962; 10:799–812*
20. *Simhandl C, Radua J, König B, Amann B: The prevalence and effect of life events in 222 bipolar I and II patients: A prospective, naturalistic 4-year follow-up study. Journal of Affective Disorders 2015; 170:166–171*
21. *Soliman A, O'Driscoll G, Pruessner J, Holahan A, Boileau I, Gagnon D et al.: Stress-Induced Dopamine Release in Humans at Risk of Psychosis: a [11C] Raclopride PET Study. Neuropsychopharmacology 2007; 33:2033–2041*
22. *Tarr G, Glue P, Herbison P: Comparative efficacy and acceptability of mood stabilizer and second generation antipsychotic monotherapy for acute mania - A systematic review and meta-analysis. Journal of Affective Disorders 2011; 134:14–19*
23. *Thompson E: Hamilton Rating Scale for Anxiety (HAM-A). Occupational Medicine 2015; 65:601–601*
24. *Wearne D, Curtis GJ, Genetti A, Samuel M, Sebastian J: Where pseudo-hallucinations meet dissociation: a cluster analysis. Australasian Psychiatry 2017; 25:364–368*
25. *WHO (World Health Organization): ICD-11 Coding Tool Mortality and Morbidity Statistics (MMS) [Internet]. Icd.who.int. 2020 [cited 29 April 2020]. Available from: https://icd.who.int/ct11/icd11_mms/en/release*
26. *Wickham S, Taylor P, Shevlin M, Bentall R: The Impact of Social Deprivation on Paranoia, Hallucinations, Mania and Depression: The Role of Discrimination Social Support, Stress and Trust. PLoS ONE. 2014; 9:e105140*
27. *Young R, Biggs J, Ziegler V, Meyer D: A Rating Scale for Mania: Reliability, Validity and Sensitivity. British Journal of Psychiatry 1978; 133:429–435*
28. *Zimmerman M, Martinez J, Young D, Chelminski I, Dalrymple K: Severity classification on the Hamilton depression rating scale. Journal of Affective Disorders 2013; 150:384–388*

Correspondence:
Carlo Lazzari, MD
South-West Yorkshire NHS Trust, Fieldhead Hospital
Wakefield, United Kingdom
E-mail: carlolazzari@nhs.net