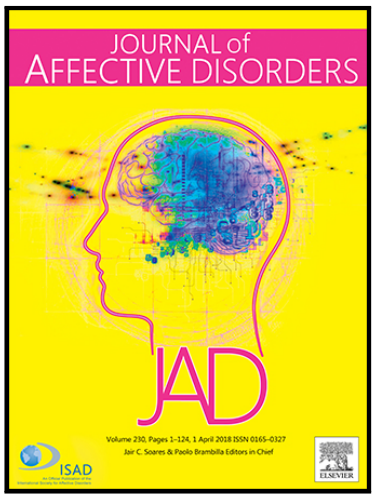
Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.



Unravelling potential severe psychiatric repercussions on healthcare professionals during the COVID-19 crisis

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Unravelling potential severe psychiatric repercussions on healthcare professionals during the COVID-19 crisis

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Abstract: The coronavirus disease 2019 (COVID-19) outbreak is putting healthcare professionals, especially those in the frontline, under extreme pressures, with a high risk of experiencing physical exhaustion, psychological disturbance, stigmatization, insomnia, depression and anxiety. We report the case of a general practitioner, without relevant medical or psychiatric history that experienced a "brief reactive psychosis (298.8)" under stressful circumstances derived from COVID-19. She presented with delusional ideas of catastrophe regarding the current pandemic situation, delusions of self-reference, surveillance and persecution, with high affective and behavioural involvement. Physical examination and all further additional investigations did not reveal any secondary causes. She was administered olanzapine 10 mg with a significant psychopathological improvements being discharged with indications to maintain the treatment. To our knowledge this is the first case of severe mental illness in a healthcare professional without previous psychiatric history due to COVID-19 outbreak. Around 85% of patients presenting a brief psychotic disorder will develop a potentially disabling serious psychotic illness in the long-term. This case represents the potentially serious mental health consequences on healthcare professionals throughout the COVID-19 crisis and emphasizes the need to implement urgent measures to maintain staff mental health during the current pandemic.

Keywords: healthcare professional; mental health; COVID-19; brief reactive psychosis; brief psychotic disorder; depression.

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1. To the editor:

Since he coronavirus disease 2019 (COVID-19) outbreak, with more than 2,000,000 infections have been confirmed worldwide (*WHO. Coronavirus disease 2019 (COVID-19). Situation Report – 88.*, 2020), several major public health measures have been urgently adopted by most countries affected, affecting personal freedoms (imposed quarantine, mandatory isolation of suspected and diagnosed cases and contact tracing and monitoring) and imposing a restructuration of the health systems, including prompt relocation of healthcare professionals into restructured COVID-19 hospitalization units or different cities following assistance requirements (Tanne et al., 2020).

Healthcare professionals, especially those in the frontline, are at increased risk of being infected, work under extreme pressures, are exposed to high stress, prolonged shift times, excessive workload, sometimes without a proper training and adequate personal protective equipment, and may be even discriminated. They are also facing unprecedented situations, such as allocating scant resources to equally needy patients, providing care with constrained or inadequate resources and lack of specific drugs, with an imbalance between their own needs and those of patients (Greenberg et al., 2020).

Moreover, an increasing number of healthcare professionals are being infected with COVID-19 (The Lancet, 2020), thus generating a direct concern for the infection risk and development of consequent complications, and an indirect fear of spreading the virus to their families, friends, or colleagues, which might lead to increased isolation measures with worse psychological outcomes (Belingheri et al., 2020; Xiang et al., 2020). All this pressure may contribute to not only reduce work efficiency but to increase the risk of medical errors and to cause moral injury and/or mental health problems.

As previously reported, the impact of complex humanitarian emergencies on mental health is multi-faceted, with potential long lasting consequences that stretch far beyond the actual resolution of the emergency (Pfefferbaum and North, 2020). Indeed, healthcare professionals are highly vulnerable to experiencing physical exhaustion, fear, emotion disturbance, stigmatization, insomnia, depression and anxiety, distress, substance use, post-traumatic stress symptoms and even suicide (Kang et al., 2020; Lai et al., 2020; Liu et al., 2020; Lu et al., 2020).

2. Case presentation

We report the case of a 42-year-old woman working as a general practitioner, without relevant medical or psychiatric personal or family history and no usual treatment, admitted to our emergency

room after presenting psychomotor agitation. During the past 2 weeks she had been working on her primary care center coordinating the attention of patients with suspicion of COVID-19 infection. This situation was perceived as highly stressful and the patient started presenting with anxiety and insomnia and therefore lorazepam 2 mg/day had been started. Two days before psychiatric admission, the patient started referring to her family delusional ideas of catastrophe regarding the current pandemic situation ("we are all going to die and there are not going to be ICU for me or my family"), presenting suspiciousness and delusions of self-reference, surveillance and persecution, with high affective and behavioural involvement.

At admission, physical examination, including a detailed neurological examination did not reveal any abnormalities. Blood investigations were within the normal limits and urine toxic screening was negative. She was fully conscious and oriented, with decreased attention span and interaction was non-syntonic. Her speech was scarce, with stereotyped answers showing symptom contention and thought blocking. She presented with delusions. There were no perceptual abnormalities, obsessive compulsive symptoms or volitional abnormalities. Affect was parathymic, labile and irritable. Judgement was altered and no insight present. She was administered olanzapine 10mg and remained under observation.

At reevaluation after 24 hours, the patient presented significant psychopathological improvements. Speech was fluid and she persisted with overvalued ideas of catastrophe, self-reference and complot, which were partially criticized with minor affective or behavioural involvement. Affect was euthymic, without irritability or suicidal thoughts. Judgement and insight were partially recovered. She was discharged with the indication of a psychiatric outpatient follow-up at 3 days and treatment with olanzapine 5 mg/day under family supervision.

Considering the sudden psychotic onset with marked severity and functional impairment and rapid recovery, under stressful circumstances and without secondary causes, the diagnosis of DMS-5 "Brief psychotic disorder with marked stressor" (298.8) or "brief reactive psychosis" (APA, 2013) was made.

3. Discussion

To our knowledge this is the first case of severe mental illness in a healthcare professional without previous psychiatric history due to COVID-19 outbreak. It should be noted that around 85% of patients presenting a brief psychotic disorder will develop a potentially disabling serious psychotic illness in the long-term (Kingston et al., 2013). This case represents the potentially serious mental

health consequences on healthcare professionals throughout the COVID-19 crisis and emphasizes the need to implement urgent measures to maintain staff mental health during the current pandemic. However, mental health-centered support in such extraordinary settings is often poorly coordinated, with controversies on the best approach to use (Chen et al., 2020). Addressing the priority of mental health in the general population as well as in healthcare professionals is essential in addition to the infection medical care. Trained staff should identify healthcare professionals at-risk to develop psychiatric symptomatology and refer them to specialists for intervention (Pfefferbaum and North, 2020) and working teams should be reinforced providing regular contact to discuss decisions and, once the crisis begins to recede, active monitoring, support, and, if necessary, evidence-based treatments should be provided (Greenberg et al., 2020).

4. Conclusions

Mental health support must be integrated in the public health response during COVID-19 pandemic, in particular among populations at higher risk. Therefore, it is noteworthy that people with existing mental health disorders are particularly vulnerable to the stressful situations derived from the pandemic outbreak and the confinement situation, which may result in relapses or worsening of psychiatric preexisting conditions leading to hospitalization (Vieta et al., in press; Yao et al., 2020) and need to receive individualized treatment (Anmella et al., 2020). These populations should not be overlooked, and mental health home hospitalization care has been proposed as an alternative to address this problem (Garriga et al., 2020). Additionally, not only healthcare workers, but also other types of workers who are at increased risk of COVID-19 infection through their work, usually from being in close proximity to members of the public, should not be disregarded as they may share some of the stressors leading to severe mental illness and potential psychiatric repercussions as in the exposed case (Sim, 2020). There is an urgent need to monitor mental health and the ongoing onset and persistence of psychiatric symptoms in different populations, to understand the unmet needs and allocate resources for suitable and specific interventions.

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Credit authorship contribution statement

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Giovanna Fico: Conceptualization, Investigation, Methodology, Validation, Visualization, Writing - original draft, Writing - review & editing.

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Marta Gómez: Conceptualization, Supervision, Validation, Visualization, Writing - review & editing.

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Andrea Murru: Conceptualization, Supervision, Validation, Visualization, Writing - review & editing.

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Eduard Vieta: Conceptualization, Investigation, Methodology, Supervision, Validation, Visualization, Writing - original draft, Writing - review & editing.