## Psychopathological Consequences of the COVID-19 Pandemic: A Case Report

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### Background

Culture influences psychotic symptoms, defining what constitutes as a psychotic symptom as well as content and expression (1). The primary form and structure of delusions have persisted across time and different cultures (2). Content within delusions may differ according to cultural events - hallucinations during the Great Depression involved grandiose delusions of wealth (3), and delusions of control involving supernatural forces may now more frequently involve technology (4).

Mental illness rates increase after natural disasters (5). Our case report describes a 37 year old female presenting with schizophrenia during the COVID-19 pandemic where COVID-19 was incorporated into the central delusion.

#### **Patient Information**

Mrs. JD was a 37 year old IT specialist brought into Northern Hospital Emergency Department (ED) in Melbourne, Australia during May 2020.

At ED assessment she reported:



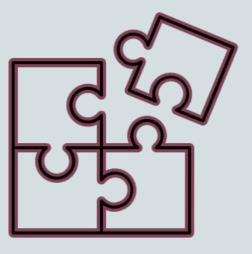
Special powers to cure the population from COVID-19 and a predetermined mission to stop the pandemic

Needing to keep her children happy to stop them spreading the virus, and subsequently needed to buy presents



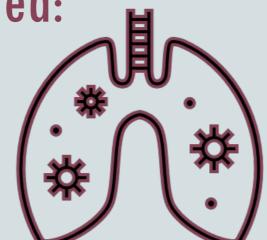
Hearing voices, being monitored by cameras, people talking about her, and her face disappearing

Mrs. JD attempted to self-strangulate by wrapping a cord around her neck, and stated this was due to spirits controlling her actions and guilt from not being able to protect her children from COVID-19

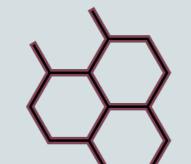


Upon admission to the Northern Psychiatric Unit she reported:

She was admitted to save the world, with divine orders and a special purpose to heal the world from COVID-19

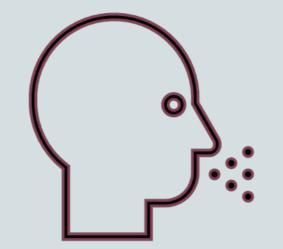






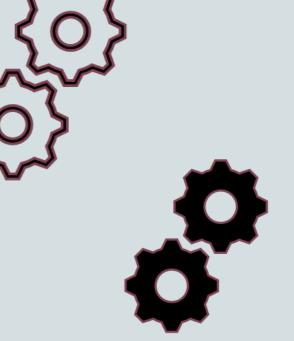
Her gift involved spirits, faith, and serpentine leaves

She cured COVID-19 by breathing in and out as a gift from God



Her youngest daughter had been removing her thoughts and was super-gifted and the vital key to curing COVID-19

Hearing whistling as she walked and whispers about various topics, including needing to wash her hands more

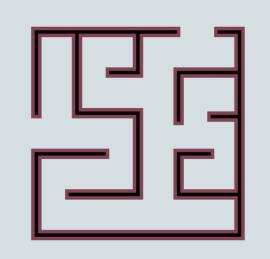


Somatic passivity and negative symptoms

Her psychotic symptoms gradually began during the COVID-19 lockdown due to stress from homeschooling, restrictions, and decreased social support

## Findings

Mental state examination included bizarre behaviours e.g. prayer-like posturing, disorganized and circumstantial speech, restricted and perplexed affect, low mood, thought blocking, grandiose delusions, and impaired insight and judgment





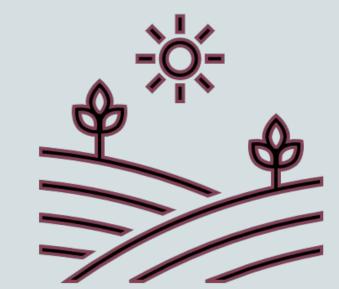
Schizophrenia was the primary diagnosis as per DSM-5 criteria, she had previous psychotic episodes, and first rank symptoms such as passivity phenomena, thought removal, delusional perception, auditory hallucinations, and passivity of volition were present

#### Management

- 6 mg risperidone, 15 mg olanzapine, and 150 mg sertraline
- Occupational therapy, art therapy, peer support work, and

### relapse prevention planning

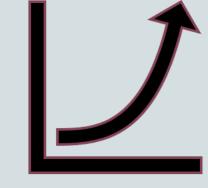
Mrs. JD and her family participated in psychoeducation,
 carer peer support, and social work input for safety planning



Community case management with a view to antipsychotic monotherapy

# Outco

Normal mental state on discharge, with significantly improved positive and negative symptoms





Return to baseline functioning - engaged in part-time employment and homeschooling her children with her husband

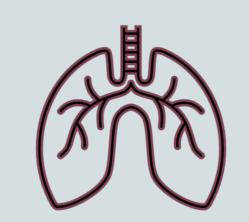
Positive engagement with ongoing telehealth appointments due to COVID-19 restrictions





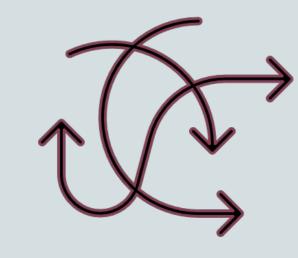
This case report is an example of the current COVID-19 pandemic becoming incorporated into grandiose and religious delusions in schizophrenia





The COVID-19 pandemic may have complex implications for mental health, including psychotic symptoms such as delusions and hallucinations

Mental health professionals should remain aware and screen for the broad consequences the pandemic may have among patients and the general population



Mrs. JD very kindly gave informed consent for this publication

#### References

- 1. Larøi F, Luhrmann TM, Bell V, Christian Jr WA, Deshpande S, Fernyhough C, Jenkins J, Woods A. Culture and hallucinations: overview and future directions. Schizophrenia bulletin. 2014 Jul 1;40(Suppl\_4):S213-20.
- 2. Stompe T, Ortwein-Swoboda G, Ritter K, Schanda H. Old wine in new bottles?. Psychopathology. 2003;36(1):6-12.
- 3. Mitchell J, Vierkant AD. Delusions and hallucinations as a reflection of the subcultural milieu among psychotic patients of the 1930s and 1980s. The Journal of psychology. 1989 May 1;123(3):269-74.
- 4. Lerner V, Libov I, Witztum E. "Internet delusions": the impact of technological developments on the content of psychiatric symptoms. Israel Journal of Psychiatry and Related Sciences. 2006 Jan 1;43(1):47.
- 5. Beaglehole B, Mulder RT, Frampton CM, Boden JM, Newton-Howes G, Bell CJ. Psychological distress and psychiatric disorder after natural disasters: systematic review and meta-analysis. The British Journal of Psychiatry. 2018 Dec;213(6):716-22.