

# Unmasking of Obsessive Compulsive Disorder in a Vulnerable Preadolescent Girl due to COVID-19 Related Stress: A Case Report

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## ABSTRACT

Coronavirus Disease-2019 (COVID-19) pandemic has been especially hard for children and adolescent's mental health due to their inherent vulnerabilities and added stress of lockdown, mobility restrictions, school closure, absence of peer interaction. This case report highlights the unmasking of obsessive compulsive symptoms due to the COVID-19 pandemic stress and the role of inherent vulnerabilities in a 11-year-old female. The management of the index case emphasised upon age appropriate strategies for intervention. Although, Obsessive Compulsive Disorders (OCD) is not a stress disorder per se but the index case highlights the role of stress in manifestation of mental illness in vulnerable individuals favouring the biopsychosocial model for mental illness.

**Keywords:** Coronavirus disease-2019, Lockdown, Mental health, Stress

## CASE REPORT

An 11-year-old female of urban, nuclear, middle socio-economic status family, studying in sixth standard, contacted telepsychiatry services in July 2020 for an illness of four months duration of sub-acute onset. On exploration, it was revealed that her illness started during the initial phase of lockdown (April 2020) when family members observed that she had increased frequency of micturition. Evaluation for increased frequency of micturition did not reveal any abnormalities, however she was given treatment for urinary tract infection but this did not bring about any significant relief in symptoms. Along with this, she also remained excessively preoccupied with cleanliness i.e., excessive and unwarranted hand washing, repeatedly changing her undergarments (about 8 times/day) following the repeated, intrusive thought that she had soiled her clothes with urine, despite knowing that she had not done so. She would be extremely restless if she did not change her garments and did not try to control the distressing thoughts.

Additionally, she was excessively preoccupied with coronavirus infection and insisted on following COVID-19 appropriate behaviours (i.e., hand washing, gargles and not touching anything) which were beyond normal as reported by parents. She was constantly seeking reassurance from mother regarding her cleanliness and hand washing and not having contacted coronavirus infection. Additionally, both parents were working from home due to restrictions extending beyond the lockdown period which forced them to accommodate her behaviours in their own routine. They started indulging in proxy compulsions by washing repeatedly on her behalf when she demanded and gave repeated reassurances whenever she sought. Her daily routine was hampered and concentration in academics reduced due to additive effect of repetitive thoughts, 'online' classes and inability to focus for longer duration in the virtual class due to interference by her thoughts. Temperamentally, she was a shy, introvert child.

Past history revealed that since the age of 8-9 years she kept her belongings very organised, school bag packed neatly (albeit always taking longer than the required time). On many occasions mother had checked her from spending too much time in arranging things but it had not deterred her and this had continued till date. Parenting assessment revealed that father was strict, critical, always expecting the child to be studying and performing good in academics. Mother

was overprotective in an attempt to mitigate father's behaviour. No medical or psychiatric help was sought anytime in the past. No history of neurodevelopmental disorders was obtained.

Mental status examination done through video-conferencing revealed anxious affect, obsessive doubts about contamination and contracting COVID-19 illness, cleaning and washing yielding compulsions and reassurance seeking. She had recurrent, intrusive thoughts of symmetry (keeping things in place) and arranging compulsions for past 2-3 years and had not divulged it to anyone. Although, on many occasions she had to bear the scolding of her mother for taking long time in completing her work and getting late for other errands. Higher mental functions were adequate and she had partial insight. International Classification of Diseases (ICD 10) diagnosis of Obsessive Compulsive Disorders (OCD) (mixed obsessional thoughts and acts) was made [1]. Baseline Children's Yale-Brown Obsessive Compulsive Scale (CY-BOCS) [2] total score was 29 (obsessions-14; compulsions-15). After discussion about treatment options available, she was started on oral fluoxetine 20 mg, increased to 60 mg over a period of eight weeks which was well-tolerated. Exposure and Response Prevention (ERP) using RIDE protocol (a cognitive behaviour therapy approach used for OCD in children) was initiated initially telephonically and later in person when physical outpatient department services resumed. A brief overview of the ERP sessions is provided in [Table/Fig-1]. Additionally, family accommodation in OCD, parenting issues (critical attitude of father) was addressed. She gradually improved over a period of three months and scored 75% marks in her final examination. She is maintaining improvement and is on regular follow-up with a CY-BOCS score during (most recent follow-up done in May 2021) of 13 (obsessions-6; compulsions-7).

RIDE steps		
R: Rename the thought	That's OCD talking, not me.	Child named obsessive thoughts as Mr. Monster
I: Insist that you are in-charge!	I'm in charge! I choose not to believe OCD	I will not let Mr. Monster play tricks with me.
D: Defy OCD	I will ride up the worry hill and stick it out until I can coast down	I will not listen to Mr. Monster and will do the complete opposite.
E: Enjoy your success, reward yourself.	I did it! I beat OCD	I beat OCD (Mr. Monster). I can do it again.

**[Table/Fig-1]:** ERP as per RIDE protocol followed for the index child.

## DISCUSSION

World Health Organisation (WHO) states that mental health conditions account for 16% of global burden of disease in individuals aged 10-19 years and half of all mental health conditions start by 14 years of age, however most cases are undetected and untreated [4,5]. National Mental Health Survey in India reported that 7.3% of adolescents suffer from some mental illness with OCD in 0.8% [6]. OCD was once considered to be rare in childhood and known for its secrecy. There is a tendency of children and adolescents to consider OC thoughts and rituals as non-sensical and thus keep it hidden for as long as possible (from parents as well as practitioners) [7]. As a result, it was almost 4-5 years from the onset of symptoms that it is recognised and psychiatric help is sought. It is reported to be a common cause of distress for children and adolescents and about one half to one third of adult subjects with OCD have onset in childhood or adolescence [7].

The index case also displayed the same nature of illness, hidden for 2-3 years until it became apparent during stress due to COVID-19. It is also reported that hand washing is disguised as frequent voiding in children which also seems to be holding true in the index case whose symptoms started with complaints of increased frequency of micturition and none of the investigations yielded any positive results [7]. Biological vulnerability may be present in the index case in the form of high levels of shyness- a temperamental trait representing behavioural inhibition. Literature although scant, reports that behavioural inhibition and harm avoidance are associated with OCD in children and adolescents [8]. Demanding and perfectionist fathers and overprotective and intrusive mothers are generally reported to be parenting characteristics in children with OCD and the same held true for the index case too [9].

The COVID-19 pandemic has taken a heavy toll on the mental health of all, increasing stress and anxiety levels, irrespective of whether an individual had mental health issues earlier or not. While there is currently more research regarding the psychological impact of COVID-19 among adults, study about the effects of the pandemic on younger populations are scarce [10]. Children are the most vulnerable members of the society yet invisible causalities of this pandemic and thus, it becomes imperative to highlight emergence of mental illness in children during COVID-19 times [10]. The psychosocial risk factors associated with prolonged lockdown, physical and social distancing i.e., extended school closure, isolation from friends and peers, suspension of extra-curricular activities, online medium of teaching, increased digital media exposure and in some cases exposure to increased family stress and violence in children's lives has negative implications for mental health and some children are experiencing them simultaneously and multiplicatively due to pandemic restrictions. COVID-19 pandemic is laying a ripe context for unthinkable mental health difficulties in children and adolescents [11].

A study conducted by researchers at the Aarhus University and the Centre for Child and Adolescent Psychiatry, Denmark [12] concluded that fear, stress and anxiety due to COVID-19 has a huge impact on the OCD incidence and worsening of symptoms. The researchers particularly observed excessive handwashing and disinfection among the children, which clearly correlates to the previous knowledge that OCD patients tend to have higher health anxieties and aversions to bacteria and dirt, as is evident in the index case. In the present case, female had a demanding father (with respect to academics), an overprotective mother and continuous staying together at home by parents as well as the index case due to pandemic restrictions further increased the exposure of the girl to stress in the home environment. Her biological vulnerability of a shy temperament on interacting with stress due to parenting style increased the propensity of this girl to have anxiety which was further worsened due to COVID-19 related fear of contracting the infection and general notion related to highly infectious nature of the coronavirus and associated high mortality. This may have increased

her health related anxieties which manifested as excessive hand washing and other behaviours which were clearly labelled by family members as excessive and beyond limit. She also had those specific vulnerabilities known to be associated with heightened levels of stress like developmental age (preadolescent), children and a female [7]. All in all, the biopsychosocial model of mental illness seems to explain the development of OCD in the index case.

A comprehensive assessment of the case was carried out by trained and qualified child psychiatrist and clinical psychologist which included enlisting all obsessions and compulsions, assessing predisposing factors, precipitants, and maintaining factors and thereby developing an individualised child centered treatment plan. Tools used for assessment were telephonic clinical interviews, self monitoring (maintaining a diary of obsessional thoughts and compulsive behaviour), behavioural observations by parents and rating on CY-BOCS. In the index case, therapy was executed in a child friendly manner using RIDE protocol [3]. It includes providing the patient with opportunities to gradually confront feared thoughts, situations and experience anxiety reduction in these situations without performing any rituals and avoidance, thus learning that these situations were not dangerous. The parents were also asked to report compulsions observed by them and were instructed not to assist the patient in performing rituals or engaging in avoidance behaviours. Both the patient and parents agreed to these instructions and were given ongoing coaching by the therapist in implementing ritual prevention. The case management was in line with the evidence in literature which suggests that cognitive behaviour therapy and pharmacotherapy either singly or in combination leads to a clinically significant response in majority of cases [13].

Authors can infer that multiple stressors in the lives of children and adolescents have been unmasked in the wake of the pandemic. Schools are a significant coping mechanism for young people by providing a structured and predictable routine along with social and peer interaction and a time away from family. Unpredictability and uncertainty about the future due to psychosocial changes adds to the stress.

## CONCLUSION(S)

Physical and social isolation associated with a pandemic takes a toll on the caregivers as well and negative expressed emotions run high. All the factors can unmask psychiatric illness in vulnerable persons, as was seen in the present case. Hence, along with measures to curb the spread of this deadly virus, it is important to pay close attention to factors mentioned above and structure the daily activities of children and create social opportunities for their routine development so as to promote positive mental health and avoid precipitation of mental illness.

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