Abstract

COVID-19 pandemic has seen thousands of people all over the world placed under mass quarantine. Although quarantine is a successful public health measure, it has been described as an unpleasant experience. This case report presents the process of institutional quarantine of a 5-year-old boy along with his mother and explores the impact of it on their mental health. It provides an insight about the importance of increasing communication, doing collaborative exercises in addressing the concerns of children and alleviating their loneliness. It highlights the role of caregivers in aiding the recovery and providing essential psychosocial comfort to the affected children, making them an indispensable resource for the care team.

Keywords: Caregiver, children, COVID-19, psychosocial, quarantine

INTRODUCTION

Quarantine is defined as the separation and restriction of movement of people who have potentially been exposed to a contagious disease, to reduce the risk of them infecting others.[1] COVID-19 pandemic has seen thousands of people all over the world placed under mass quarantine. Although quarantine is a successful public health measure, it has been described as an unpleasant experience. Longer durations of quarantine are associated with distress because of confinement, loss of routine leading to boredom, and frustration.[1] Children and adolescents are at an increased risk of engaging in maladaptive coping behavior.[2,3] This case report presents the process of institutional quarantine of a 5-year-old boy along with his mother and explores the impact of it on their mental health.

CASE REPORT

A 5-year-old child resident of Delhi, India, was shifted to a quarantine facility with his mother in early April as he was diagnosed with highly contagious illness of COVID-19. He had a history of contact with COVID-positive patients and had mild symptoms which included runny nose and dry cough. His mother and other family members tested negative. Since he was a young child and could not be quarantined alone, so his mother was quarantined with him as his caregiver. He was a perfectly healthy child, and this was the first time since birth he was admitted in a hospital facility.

The child, initially, felt intrigued, but this did not last long. He realized that his mother was not letting him share her bed and maintaining distance with him and he was not allowed to go out. There was no television or toys to play with, and his father and sister were not allowed to meet him. He became uncomfortable in confinement. He was made to understand that it was essential for him to get well, but it was becoming difficult for him to cope. He used to get scared by seeing the health-care staff doffed in personal protective equipment (PPE). He was very noncooperative during the nasopharyngeal and oropharyngeal sampling procedure and used to get aggressive and violent. The health-care staff also found it difficult to communicate with the child because of Grade 3 PPE despite their extraordinary efforts to care for the child.

The mother of this child felt scared and worried when she was told about the diagnosis of her younger child being COVID-19.
positive. She realized that she needed to go with her son in quarantine to support him during this period of extreme distress. She decided to put herself at risk of infection, leaving her daughter and husband at home, and provide whatever assistance that she could to make her child well again. Once in institutional quarantine, she was asked to maintain distance from her own son although they could be in the same room. It is difficult to imagine the plight of the mother dealing with such a difficult situation. She tried to engage him with play and smartphone and used videoconferencing to stay connected to her daughter and husband. She tried to talk to her son in a playful manner and answered his innocent questions to allay his fears while ensuring minimal physical contact and taking care of his symptoms. Furthermore, her child was picky about food, so she tried to make sure that he ate properly with help from hospital staff. She was also constantly worried about her daughter and husband. This, along with inconsolable sobs of her son during nasopharyngeal sampling, added to her mental trauma. She did not let anything deter her and responsibly monitored herself for any symptoms as she was at extremely high risk of getting infected. By the end of quarantine, with the meticulous care provided by the mother, her son cleared the virus and became negative for severe acute respiratory syndrome-coronavirus-2 infection and she also tested negative after her nasopharyngeal swab testing, which was a commendable result for them as well as health-care staff [Figure 1].

**Discussion**

The COVID-19 pandemic has affected people of all age groups, and the pediatric population is no exception. The clinical manifestations in pediatric patients are less severe than those of adults. 94.1% of pediatric cases reported in previous studies were asymptomatic, mild, or moderate. Children facing unexpected events typically exhibit various stress reactions; clinging, inattention, and irritability were the most severe psychological manifestations. In this case study, we see the child becomes more irritable as the time in quarantine increases. This behavioral change can be attributed to separation from loved ones, loss of freedom, and boredom. Separation from home and familiar environment can cause dramatic changes in children’s behavior. As the kid grew more restless, he started exhibiting a more aggressive behavior. In such a scenario, it is important that caregivers take all measures to support their children. A commonly used tool by parents includes the use of media entertainment, which proved to be quite effective in this case study as well. Previous research has shown that the use of media entertainment was more effective than reading and physical exercise when addressing the concerns of children. Besides this, it is important to pay attention to any sleep difficulties that the child might be experiencing. Changes in sleep pattern can be owed to loss of familiarity and loss of routine, as was observed in this case study. These can be managed with sleep hygiene practices and developing a more productive routine.

It is a difficult decision for the health-care team to allow the presence of caregivers when dealing with such an infectious illness. The clinical report published by the American Academy of Pediatrics during the Ebola outbreak highlights the importance of taking into account a child’s age, developmental level, acuity, and ability to cooperate with caregivers. It is important to understand that children need psychosocial support from their caregivers in extreme stress. The mother in this case willingly took the responsibility to care for her child after she was explained the potential risks of acquiring infection and possible complications of this novel illness. It is important for the clinicians to acknowledge the burden of such caregivers who are putting themselves at risk for a prolonged period. They experience the added stress of separation from their family and disruption of daily routine. The caregivers, however, continue to care for their children relentlessly and prove to be an important resource, especially when it is difficult for the health-care team to communicate with the children effectively. Thus, it is important to ensure to reduce their stress by empowering them with regular information on the health status of their children and words of encouragement.

This case provides an insight about the importance of increasing communication, doing collaborative exercises in addressing the concerns of children and alleviating their loneliness. Furthermore, it highlights the role of caregivers in aiding the recovery and providing essential psychosocial comfort to the affected children, making them an indispensable resource for the care team.

**Declaration of patient consent**

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.
Financial support and sponsorship
Nil.

Conflicts of interest
There are no conflicts of interest.

REFERENCES
1. Brooks SK, Webster RK, Smith LE, Woodland L, Wessely S, Greenberg N, et al. The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. Lancet 2020;395:912-20.
2. Liu JJ, Bao Y, Huang X, Shi J, Lu L. Mental health considerations for children quarantined because of COVID-19. Lancet Child Adolesc Health 2020;4:347-9.
3. Rohan JM, Verma T. Psychological considerations in pediatric chronic illness: Case examples. Int J Environ Res Public Health 2020;17:1644.
4. Eley B. Faculty Opinions recommendation of Epidemiological characteristics of 2143 pediatric patients with 2019 coronavirus disease in China. Faculty Opinions – Post-Publication Peer Review of the Biomedical Literature; 2020.
5. Jiao WY, Wang LN, Liu J, Fang SF, Jiao FY, Pettoello-Mantovani M, et al. Behavioral and emotional disorders in children during the COVID-19 epidemic. J Pediatr 2020;221:264-66.e1.
6. Davies HD, Byington CL; Committee on Infectious Diseases. Parental presence during treatment of ebola or other highly consequential infection. Pediatrics 2016;138:e20161891.
7. Doupnik SK, Hill D, Palakshappa D, Worsley D, Bae H, Shaik A, et al. Parent coping support interventions during acute pediatric hospitalizations: A meta-analysis. Pediatrics 2017;140:e20164171.