



CASE REPORT

Your country is your routine: The evacuation, quarantine, and management of behavioral problems of a child with autism during COVID-19 pandemic

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ABSTRACT

As the COVID-19 outbreak has begun spreading around the globe, all countries reacted to the threat with a series of measures in varying degrees. The Special Children Support System (SCSS) is a system designed to provide multidisciplinary support for behavioral problems of (children with mental special needs) CMSN that occurred during COVID-19 Pandemic and related home confinement. The system combines the telehealth applications with the services from local psychosocial intervention teams. In this case report, we will present an 11-year old child with autism spectrum disorder who returned from the United Kingdom to Turkey and were held in a dormitory for a 14-day quarantine and managed with a telehealth based system developed by our institution to specifically support children with special needs during COVID 19 pandemic. Considering the nature of the disorder in individuals with autism, due to the negative effects of environment and routine change, the intervention to be made to these individuals must be early and ready. Since the first day of our case, with the intensive application of both behavioral and medical treatment with a multidisciplinary team, a significant change was seen in our patient's symptoms, therefore, it supports the idea that rapid intervention and a ready system are crucial.

Keywords: Autism spectrum disorder, COVID-19, integrative psychiatry

INTRODUCTION

With the COVID-19 pandemic affecting the world, precautions are taken by the countries and are tried to be applied meticulously by individuals. One of the earliest reactions of countries including Turkey was the termination of all scheduled international flights to and from countries (1). This decision led to some people's

stranding in a foreign location amid the coronavirus pandemic. The governments started to evacuate some of their citizens in the following days of the pandemic. In this respect, Turkey evacuated over 29 thousand nationals from abroad. As a part of the process after landing in Turkey, the citizens follow mandatory health checks and are put in 14-day quarantine in line with the country's measures to stem the spread of the virüs (1).

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In this case report, we will present an 11-year old child with autism spectrum disorder who returned from the United Kingdom to Turkey and were held in a dormitory for a 14-day quarantine and managed with a telehealth based system developed by our institution to specifically support children with special needs during COVID 19 pandemic.

CASE

CD is an 11-year old boy who was diagnosed with Autism spectrum disorder while he was 3 years old. Although they were living in Turkey, CD, his sister, and mother were in the United Kingdom while COVID 19 pandemic spread to Europe and were unable to come back to their country before the international flights between two countries were abandoned. On April 22, the family applied for evacuation to the Turkish Ministry of Foreign Affairs, and their application was accepted. The problems of the boy started on the flight such as irritability, screaming, and hitting himself.

After they landed, the family was transferred to a dorm for medical check-up and a 14 day quarantine period. But in the dorm, the boy had a tantrum, and the father contacted the government for behavioral support.

The family was asked to use a system called 'Special Children Support System (SCSS)' which was developed by our institution during COVID 19 pandemic for managing behavioral problems of children with mental special needs.

The SCSS mobile application, a system prepared for delivering remote video calls for children with mental special needs who have extra misbehavior due to the pandemic process, has been developed. When the application is downloaded and open, individuals are first met by the operators. They refer families to trained behavior counselors on applied behavior analysis and child and adolescent psychiatrists for psychiatric help and psychotherapy.

In the first visit, a video call was carried out with the family and detailed anamnesis about the history and current symptoms were collected and the child was tried to be observed through the video call. CD was a full-term baby delivered with no complications. His mother reported that as a baby and toddler, he was healthy and his motor development was within normal limits for the major milestones of sitting, standing, and walking. At age 3 he was described as a low tone with awkward motor skills and inconsistent imitation skills. His communication development was delayed; he began using vocalizations at 3 months of age but had

developed no words by 3 years. He has been on a special education program and rehabilitation center for over 8 years and is on Risperidone 3 mg/day for irritability and Melatonin 1.5 mg/day treatments for sleep problems. The boy was irritable and his stereotypical movements were going worsened, did not want to appear on the video call.

In the second visit, His counselor carried on to working with the family. They especially worked on establishing routines in the first step. Then they worked on behavioral analysis to reinforce positive behaviors and ignore negative behaviors. Also, they worked on activities he could do in the dorm. He was referred to a child and adolescent psychiatrist for his medication arrangement.

In the follow-up visits: Risperidone treatment was arranged as 2 mg in the morning and 1 mg in the evening by the child and adolescent psychiatrist. Melatonin was increased to 3 mg/day in the evening. The counselor continued his current practices with family too.

With acute management, a significant improvement was observed from the first week. Behavioral problems decreased and his sleep was a regular pattern. Irritability reduced. At the end of the fourth day, the family reported they were almost as comfortable as at home with their child. Written informed consent of the patient has been obtained from the parents.

DISCUSSION

Especially in isolation and quarantine process, separation from loved ones, loss of freedom, and uncertainty about the course of the disease can have dramatic effects on people (2). There may be problems like irritability, related behavioral issues, communication difficulties (2,3). In this process, "acute stress responses" appear more in the first days. Adjustment disorder with depressed temperament and behavior problems are among the first and the most common mental disorders (3). Being in an indoor environment can also lead to exacerbation or aggravation of the symptoms of an individual with a mental disorder (3). Considering the nature of the disorder in individuals with autism, due to the negative effects of environment and routine change, the intervention to be made to these individuals must be early and ready (4). Since the first day of our case, with the intensive application of both behavioral and medical treatment with a multidisciplinary team, a significant change was seen in our patient's symptoms, therefore, it

supports the idea that rapid intervention and a ready system are crucial.

The evidence suggests that best practice for managing maladaptive behavior (MB) in children with special needs is a combination of behavioral interventions with psychiatric support (5). But it was unclear how to implement this 'best practice' in pandemic conditions. In this context, we used a three-stage telehealth based integrative model. By adopting such an approach, we aimed at using Applied Behavioral Analyses which is known as the most effective tool in MB management, in the first line and tries to handle most of the problems in this stage (6). We tried to operate child psychiatrist consultation and if required medications as the second line, for the cases whose more complicated problems could not be solved in the first stage. We also established local units as a third line for the cases whose needs can not be covered by telehealth applications. In this context, with a system that has a strong technical infrastructure, the early implementation of a multidisciplinary intervention supports the importance of telehealth requirement in individuals with special needs, especially in acute challenging conditions. A general limitation of telehealth services, especially in models indicating caregiver facilitation, is that the quality and intensity of services may be limited based on caregiver availability. Although this potential limitation is a grave concern, if face-to-face services are not possible due to the COVID-19 outbreak, it seems effective that the delivery of telehealth services is likely to produce some benefits to the patient (7-9).

Informed Consent: Written informed consent of the patient has been obtained from the parents.

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