

Caught Off Guard: Parenting Children with Disabilities During COVID-19 Pandemic*

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Abstract

Families of children with disabilities faced significant challenges during COVID-19 pandemic due to the social isolation and restrictions put in place to reduce or stop transmission of the virus. Using a qualitative approach, this study aimed to identify the challenges children with disabilities and their families have faced during COVID-19 pandemic as a result of changes in their daily routines; examine the strategies and resources families used to deal with these problems; and determine the supports they needed to address them. Data were collected from 40 parents of children with disabilities through semi-structured interviews and analyzed using inductive content analysis. Results of qualitative analysis showed that challenges encountered by families of children with disabilities included changes in daily routines and family priorities, increased problem behaviors exhibited by children, difficulties regarding virtual learning, and adverse impact in intra-family relationships. Consulting with teachers and other professionals, getting help from close family members or friends, using different education platforms, and bonding with family members were among the strategies and resources families used to address challenges they faced. Parents reported needs for psychological, economic, and education support for themselves and their children. COVID-19 pandemic significantly impacted lives of children with disabilities and their families in multiple ways. Findings of this study have potentials to guide the future efforts in providing support services to families of children with disabilities and allocating resources in similar situations.

Keywords: COVID-19 Pandemic, Children With Disabilities, Parents, Challenges, Resources, Supports, Needs

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INTRODUCTION

The COVID-19 pandemic continues to impact societies around the world. Like many other countries, Turkey took precautionary measures such as curfew and social restrictions in order to prevent the spread of the virus. These restrictions resulted in changes in family's daily routines which have adversely impacted intra-family communication and relationships (Ahmen et al., 2020) and family's emotional well-being in many cases. International reports noted that families from disadvantaged backgrounds are among the most affected groups. In addition to changes in daily lives and routines, the pandemic significantly affected the way in which educational and developmental services are provided to children with disabilities (United Nations, 2020). Studies have reported that children with disabilities have shown more challenging behaviors during the pandemic and their social interaction behaviors have been adversely impacted (Narzisi, 2020). Moreover, daily routines of these children such as sleep, eating, and technology use are disrupted (Tso et al., 2020).

Access to therapy and special educational services and materials were restricted during the pandemic (Warner-Richter & Lloyd, 2020). Virtual educational opportunities and therapies provided to children with disabilities are insufficient, and most materials are not suitable for their individual characteristics and needs (Ayda et al., 2020). As a result, parents of children with disabilities had increasing levels of responsibilities to identify activities for supporting development, well-being and learning of their children and frequently experience anxiety about not knowing what to do in this process. Parents had difficulties to balance their increased responsibilities and feel overwhelmed (Garbe et al., 2020) as the boundaries between work and home are unset. The increased care burden, social isolation, and stress can cause the deterioration of relationships among family members including spousal and parent-child interactions (Prime et al., 2020).

The extant literature indicates that parents of children with disabilities use problem-based coping strategies which often includes seeking external support such as social, educational, and informational support, and emotion-based coping strategies that include what has been described as a desperate approach, submissive approach, and optimistic approach (Eren & Dogan, 2020). Despite the difficulties in caring of a child with disabilities, the use of appropriate coping strategies plays an important role in preventing or reducing the negative effects of challenges families face (Durukan et al., 2010). Although some families use coping strategies to address these challenges, many may need additional support to cope with the challenges they face during the pandemic. For example, studies have indicated that professional assistance by special education teachers is the most needed support by families (Toseeb et al., 2020). Therefore, exploring the type and intensity of supports that families need contributes to the determination of the support that will be offered primarily in cases of pandemics and similar circumstances that may occur in the future.

The present study used a qualitative approach to identify the challenges children with disabilities and their families have faced during the COVID-19 pandemic; to examine the strategies and resources families used to deal with these problems; and to determine the supports they needed to address them. The following research questions were addressed in the present study: (1) What challenges do families of children with disabilities experience during the COVID-19 pandemic? (2) What are the strategies and resources used by families of children with disabilities to deal with the

problems they face during the COVID-19 pandemic? (3) What supports do families of children with disabilities need to deal with the problems they face during the COVID-19 pandemic?

METHOD

Participants

Participants of this study included 40 parents of children with developmental disabilities. Parents were selected randomly from a list of parents who participated in a larger research project conducted to examine the impact of the COVID-19 pandemic on the quality of life of children with disabilities and their families in Turkey (Rakap, et al., 2022). Researchers contacted 91 randomly-selected parents (approximately 10% of the participants on the larger study) through phone and explained the purpose and rationale of the study with a goal of recruiting at least 30 participants for the current study. Research showed that samples of 20 to 30 participants are most common in qualitative research with 25-30 participants being a typical recommendation. From the 91 parents contacted, 40 agreed and 51 declined to participate in the current research. We reached data saturation after 32 interviews and completed 5 additional interviews to conclude data collection. Of the 37 parents who were interviewed, all (100%) were mothers with a mean age of 37.05 (SD = 6.15; range = 22 - 50). Participants had a total of 44 children with disabilities; 26 (59%) were female and 18 (41%) were male. The mean age of children was 8.67 (SD = 4.50; range = 3 - 18). Of these children, 14 (32%) had mild, 15 (34%) had moderate, and 15 (34%) had severe developmental disabilities, while 15 (34%) were in preschool, 14 (32%) in primary school, and 12 (27%) in secondary/high school ($n_{\text{not reported}} = 3; 7\%$). Children had a variety of different disabilities including autism spectrum disorder ($n = 19; 43\%$), intellectual disabilities ($n = 10; 23\%$), learning disabilities ($n = 3; 7\%$), hearing impairments ($n = 3; 7\%$), multiple disabilities ($n = 3; 7\%$), speech and language impairments ($n = 2; 5\%$), physical disabilities ($n = 2; 5\%$), and attention deficit and hyperactivity disorder ($n = 2; 5\%$). Demographic information about participating parents and their families is presented in Table 1.

Table 1 Demographic Characteristics of Participants (N = 37)

Variable	N	%
Parental Education		
Primary School	10	27
Middle School	5	14
High School	11	30
College	11	30
Socioeconomic Level		
Low	16	43
Middle	16	43
High	0	0
Not Reported	5	14
Marital Status		
Married/Together	36	97
Not Reported	1	3
Number of Children in Family		
1	15	37.5
2	16	40
3+	9	22.5
Number of Children with Disabilities		
1	36	90
2	4	10

Procedures

Data Collection Tools

Researchers developed a Demographic Information Form and Semi-Structured Interview Form and Guide to collect data in this study. The Demographic Information Form was developed to collect demographic data about the parents, their children and other family members and it was completed by participating parent before the interview using a paper-pencil or an online form. The Semi-Structured Interview Form and Guide included 10 open-ended questions developed to determine the problems that the parents of children with disabilities faced during the pandemic, and the resources and strategies they used or need to deal with these problems. Initial version of the interview form and guide developed by the research team included 14 questions. This version was examined by three experts in the field of special education. Based on the feedback from the experts, three questions were combined with other questions; one question was deleted; and three questions were revised to facilitate the meaning. The revised version was piloted with two mothers of children with disabilities who did not participate in the actual study. Minor revisions were conducted on question wording for clarity after the pilot administrations. The final form was used in the present study to collect qualitative data.

Data Collection Procedures

Semi-structured interviews were conducted using phone or online platforms. The format of each interview (i.e., phone or online) was determined based on the preference of participants. The video feature was kept off when online platforms were used for interviews. Four researchers trained by the first author conducted the interviews using the interview protocol developed by the research team between September 1-October 25, 2020. The interview protocol included an opening statement, brief chat with the participant to build rapport, a description of study purpose, questions and a closing statement. Each interviewer interviewed with 9-10 parents. Parents and researchers who conducted the interviews did not know each other prior to the interviews. Rapport was established with participating parents through having small talks and casual conversations at the beginning of the interview about personal life and interests and noting the importance of parental experience and perspectives. Prior to asking the first interview question, the researcher briefly explained the purpose of the study and asked participating parents whether they had any questions about the study before commencing the interview. All interviews were conducted in the researchers' offices and recorded (audio recording) with written and verbal consent from the participants. Interviews lasted an average of 25.2 minutes (SD = 8.7; range = 12-60 minutes). Each participant was sent a copy of her/his interview transcript and asked to provide additional comment, corrections or clarifications. Ethical approval was obtained from the XXX University Social Science and Humanities Research Ethic Committee (Protocol Number: 2020/304) prior to research activities.

Data Analysis

Data collected through semi-structured interviews were analyzed using inductive thematic analysis to determine how parents made sense of the COVID-19 outbreak and what they experienced during the pandemic (Creswell & Creswell, 2018). Thematic analysis is a method used to identify, analyze and report patterns (themes) in data. In this context, first, audio recordings of interviews were transcribed and all identifying information was removed from the text. Then, these data were analyzed according to the inductive thematic analysis approach. For this purpose, the data were read twice by two researchers in order to gain a general perspective and the first ideas were noted. Next, the data encoding stage was started. At this stage, the aim was to systematically encode the interesting features of the data and to gather the data related to each code. Following the coding process, themes were developed based on the codes. In the next stage, the themes were reviewed and a thematic map for the analysis was created. In the last stage, themes are defined and named. Concrete, striking, and convincing data were directly quoted (selection of samples), the encoded data contents were reviewed and reported for the last time. For reliability purpose second researcher listened to 10% of the audio recordings and compared them with the transcripts. In addition, the principles of credibility,

transferability, verifiability, and consistency were taken into account in order to support the validity and reliability of the qualitative analysis. While diversification and member checking were used for credibility of the research, detailed description and diversity in the selection of the sample were used for transferability. The research process, characteristics of the participants, data collection and analysis processes are detailed for verifiability. The coding was completed by two researchers and intercoder reliability was checked. The mean intercoder reliability was .98 (range = .89 – 1.00). NVivo 12 Pro was used for qualitative data analysis.

RESULTS

Three main themes were identified as a result of qualitative analysis of data collected from participating parents through semi-structured interviews. These included impact of COVID-19 pandemic on (a) Family’s Daily Life, (b) Children’s Education, and (c) Intra-Family Relationships. Table 2 shows sub-themes under each of the three themes.

Table 2 Theme and Sub-Themes Obtained as a Result of Qualitative Data Analysis

Impact on Family’s Daily Life	Impact on Children’s Education	Impact on Intra-Family Relationships
Challenges during daily routines	Concerns about education	Relationships with children
Difficulties with children's behaviors	Different educational platforms used	Spousal relationships
Impact on family priorities	Family education and training	Sibling relationships
Types of supports needed		
Strategies and suggestions		

Next, as shown in Figure 1, the themes and sub-themes were examined and regrouped under the research questions and results were presented by research questions.

Problems Families of Children with Disabilities Faced During Pandemic

As seen in Figure 1, seven sub-themes grouped under the three themes were used to answer the first research question: (a) challenges during daily routines, (b) difficulties with children's behaviors, (c) impact on family priorities, (d) difficulties and concerns about education, (e) relationships with children, (f) spousal relationships, and (g) sibling relationships.

Challenges during Daily Routines

Parents identified several challenges in relation to daily routines of their children and family. Child related challenges included not being able to go to school or a playground, not being able to socialize, disruption in sleep routine, increased screen time, decreased appetite, increased time spent at home, not maintaining self-eating skills, and demanding parents to feed. Family or parent related challenges included inability to meet the basic needs of the household due to financial difficulties, increase in the time required for the care of children, decrease in the time allocated for themselves, running out of games and activities with children, not being able to take children to routine doctor checks, constant hand washing, difficulty in going to places such as markets with children, reduced or no support for childcare, increased workload at home, not being able to use public transportation and losing jobs. Parents of children with autism and those with moderate to severe disabilities were impacted more from the changes in daily routines due to pandemic. One of the parents who participated in the interviews expressed the difficulties associated with daily routines as follows: *“It is a pretty bad process for me, psychologically. I'm just getting through now, but I'm still struggling, frankly. We cannot go out much with children during the pandemic, because they will touch everywhere and get sick... we prefer not to go out, but to stay at home.”* Another parent said the following about the difficulties associated with daily routines: *“... In other words, our social activity is completely, dead... In the days of coronavirus, my child spends most of his time on the phone playing games because we can't get out much and we are out of games and activities at home. We can't take him to the backyard because there will be other kids there... He is very overwhelmed, we are overwhelmed.”*

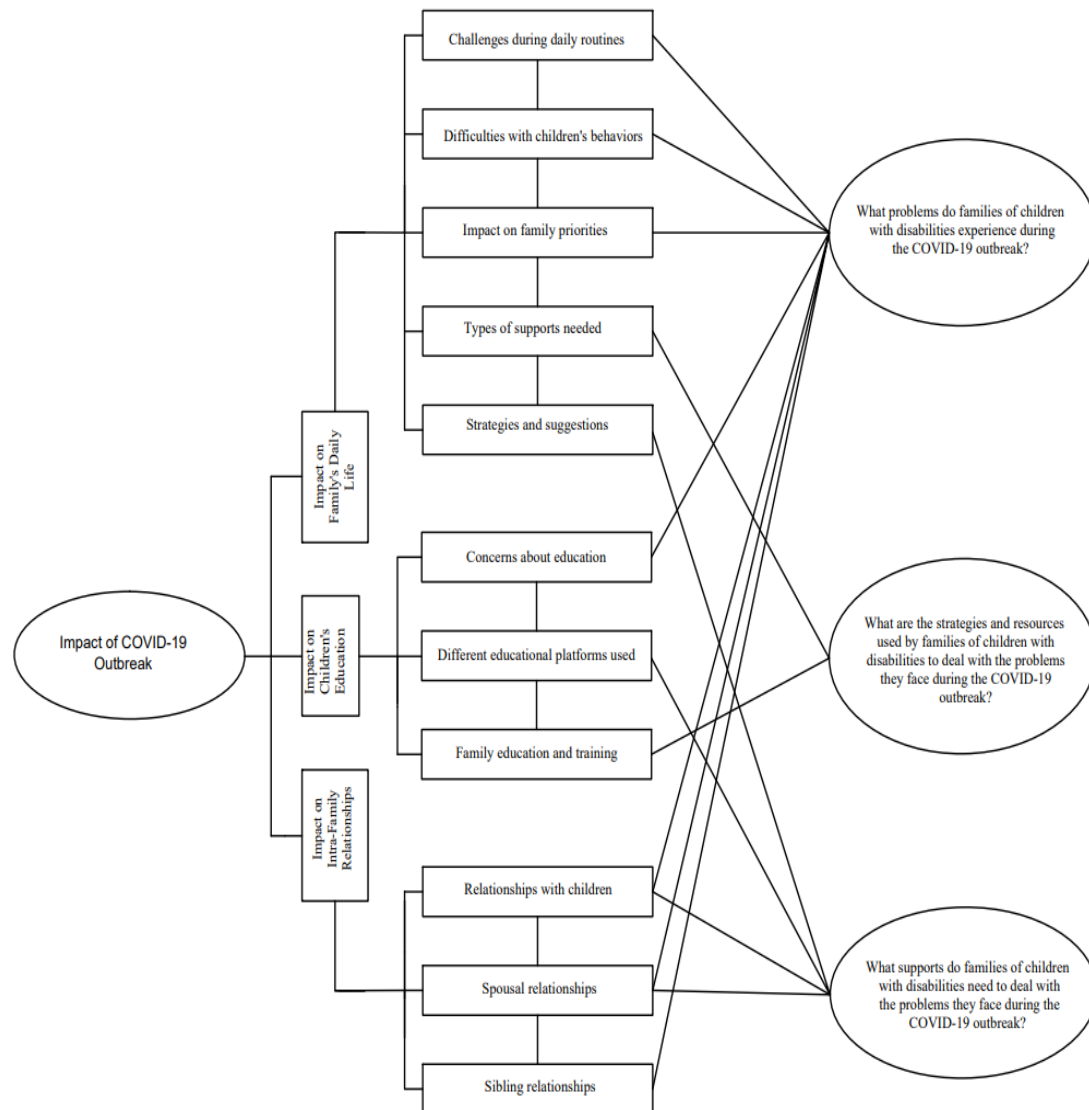


Figure 1 Themes and Sub-Themes by Research Question

Difficulties with Children's Behaviors

When the views under this sub-theme were examined, several difficulties were identified in relation to children's behaviors. These behavioral difficulties included obsessive and aggressive behaviors; using harmful behavior such as opposing and hitting; showing inappropriate behaviors to get attention; having tantrums; increased sleep duration; and decreased communicative, academic, and social skills. These challenging behaviors were reported more frequently by parents of children who had moderate to severe disabilities and parents of older children. One of the participants the difficulties related to children's behavior as follows: *"When the pandemic started, he become very aggressive. He was constantly yelling and calling. He wanted to go out, we couldn't. Then at some point government said that the children with disabilities can go out on the street with their reports. Then his father started taking him outside once in a while. It just got better... Thank God."* Another parent reported the following about the difficulties associated with their child's behaviors: *"But there is this. We noticed when we went out. My child was a very social child, you know, he can't socialize with others now because of the virus. Other children did not want to approach him. He didn't understand why they were far from him. His grandmother and grandfather stayed away... Then, he stopped approaching them, did not hug them, stayed away from his friends and showed a bit harsher attitude towards people. In that respect, of course, it had a huge impact. "*

Impact on Family Priorities

Parents reported that their priorities have changed significantly during the pandemic. Reported family priorities during the pandemic included protecting health of all family members (not getting the virus), providing education at home, cleaning, being economical and saving, increasing independent life skills of children and ensuring their happiness. Some parents also reported concerns about their children's care if something happens to them because of the virus. One of the parents who participated in the interviews expressed the impact of the pandemic on family priorities as follows: *"Cleaning. Our first priority is now cleaning. Prior to the virus, we would not clean what we bought from the market, we would not, now we clean them in front of the door, keep them there for a while, and then take them inside like that... Our cleaning has changed a lot in the first place."* Another parent reported that they were worried about their children and what will happen to them if they die from COVID-19: *"Many things have changed in our lives. There is fear, there is anxiety, so let's say we protected our child, if something happens to me, there is a fear who will take care of him ... "*

Concerns about Education

When the data under this sub-theme were examined, several difficulties and concerns related to education of children during the pandemic were identified. These included children not complying with the individualized education plan in the home environment, getting bored and decreased motivation and attention during one-on-one work time, wanting to play games with computers during virtual classes, declining in academic and social areas, content of virtual classes not being adequate for the individual needs of children, access issues to virtual classes due to lack of internet connection and computer, parental lack of knowledge in computer use to help their children in virtual classes, and difficulty in supporting academic skills and being in the role of a teacher. With the opening of schools during the pandemic, safety concerns in school environment (cleaning) were added to the list of concerns parents had. In addition, parents reported that they do not see themselves as competent in educating their children. These concerns were voiced more frequently by the parents of children with moderate to severe autism and intellectual disabilities and parents whose children were in primary school. One of the parents who participated in the interviews expressed the concerns and challenges regarding their children's education as follows: *"I don't want my child's education to be interrupted. I cannot give those trainings at home... I am not their teacher; they do not listen to me. I am their mother; I can't educate them like the teachers educate my children."* Another parent reported the following challenges about their child's education during COVID-19 pandemic: *"... Rehabilitation centers are like a blessing, but when we look at them from this point of view, but when we look at them during the pandemic, it is very difficult to decide taking my child there for therapies... into that crowded building... Even if I tell my child to wear a mask or follow the hygiene rules, you never know if they will follow your directions."*

Relationships with Children

The examination of findings under this sub-theme revealed prolonged amount of time spent at home with children during the pandemic and new parental roles (e.g., teaching or facilitating learning) adversely impacted parents and child relationships. Parents reported that managing their children's behaviors became more difficult as the time spent at home increased and they began showing increased negative parental behaviors such as scolding or reprimanding due to the increase in opposing behaviors in children. Moreover, participating parents noted that because the new role (supporting development and learning of their children at home) they assume increased their workload at home, their patience towards children decreased. One of the participants stated that she developed an obsession with cleaning during the pandemic and therefore could not touch her children out of fear of infecting them and this situation negatively affected their relationships. One of the participants expressed the effect of the pandemic in the relationships with her child as follows: *"... My relationships with my children... Of course, it was negatively affected, but being at home all the time has an overwhelming effect. Not knowing what will happen. There is a feeling of pessimism, a desire not to do anything."* Another parent reported the following to note the impact of pandemic on their

relationship: *“Well, E is tired of me; I am tired of E... so it has been such a difficult process. Somedays, it is very difficult to be at home with him by myself and I watch the door for my husband to come home... being at home with your child with disabilities all the time is very overwhelming.”*

Spousal Relationships

Participating parents also noted negative impact of pandemic on their spousal relationships. These included increased levels of stress, problems, yelling, and arguments, decreased levels of tolerance and respect between spouses as the time together at home increased. One parent expressed the effect of the pandemic on his relationship with his wife as follows: *“I got more aggressive. Things I would typically tolerate; I can’t tolerate them anymore, instead I shout or yell at her... I am not used to spend this much time at home. I really need to go back to work.”* Another parent stated the following to note the impact of pandemic on her relationship with her husband: *“... On the one hand, you burden the emotional discomfort of a father who is locked in the house, on the other hand your emotional discomfort. These also cause conflicts periodically.”*

Sibling Relationships

When the data under this sub-theme were examined, two main areas of concerns in relation to sibling relationships aroused. There was more conflict and arguments among siblings as they had to share the same space more frequently and increased levels of jealousy and compulsive behaviors towards each other were observed. One of the parents who participated in the interviews expressed the effect of pandemic on sibling relationships as follows: *“Between siblings ... because they see each other all the time and need to share thing at home more frequently, there can be discussions and disagreements with each other, unavoidably. ... If they could go out in the neighborhood, on the street or in the park and get rid of their stress, this problem will disappear.”*

Strategies and Resources Families of Children with Disabilities Used

As seen in Figure 1, five sub-themes grouped under the three themes were used to answer the second research question: (a) strategies and suggestions, (b) the use of different educational platforms used, (c) relationships with children, (f) spousal relationships, and (g) sibling relationships.

Strategies and Suggestions

Participating parents reported the use of several strategies to overcome the problems they face during the pandemic. These included consulting with different individuals including teachers about education-related issues, searching information via online platforms (i.e., search engines), seeking help from the other spouse, close family members or friends, getting psychological support from a professional, spending time alone, thinking worse off and be thankful, praying, showing patience, taking nutritional supplements in relation to COVID-19, and taking their children outside during off times to avoid the crowd. A parent expressed her ways of dealing with the difficulties encountered during the pandemic as follows: *“There are certain people I can ask what to do and how I can solve a problem... For example, my son’s teacher. The current teacher, we are always in contact with her... I am talking to her; I get support from her about what I can do at home with my son. We use internet to find information or use the resources (books etc.) we already have at home.”* Another parent noted the following strategy to deal with the challenges of the pandemic: *“At least I went to the psychiatrist to stay calm myself, I get psychological support, I am on medication right now, that way I can be more patient and take care of my family during this difficult time.”*

The suggestions of the participants to better solve the problems they encounter included the controlled opening of schools, providing remote psychological support services to parents, financial assistance to families, increasing the frequency of parent education and training program delivered online, teaching parents how to use computers, designing virtual learning programs tailored towards individual needs of children with disabilities and shortening their duration, providing home-based

special education services through itinerant teachers, and ensuring that everyone complies with pandemic measures. One of the parents interviewed noted her suggestion to deal with the difficulties faced during the pandemic as follows: *"I think that if a specialist were housed in the health centers for special children, if there were at least someone we could go and consult with, we would have been more successful to support our children during the pandemic."* Another parent made the following suggestion to address the difficulties faced during the pandemic: *"You know, my son never accepts distance education; he does not even want to sit on computer, you know, it's impossible to have him study on the internet. ... I wish we had teachers to work with him one-on-one... either in an empty classroom at school or in our house at least for 1 hour or 2 hours a day with the teacher one-on-one."*

Different Educational Platforms Used

Parents reported using different educational platforms to support development and learning of their children at home during the pandemic. These included applications developed by the Tohum Autism Foundation (a non-profit organization), Turkcell (a phone company), Turkish Radio and Television Kids (TRT Kids), Toddlev, and Otsimo, web-based platforms such as Morpa campus, and educational resources on YouTube, Instagram, and Facebook. One parent mentioned the following about the different platforms they used: *"With my child, we used the application from Tohum Autism Foundation. Turkcell had an application that we used sometime. They're a little alike, I guess. We got support that way... TRT Kids had a kindergarten application; we used that instead of him watching cartoons on the phone..."* Another parent interviewed reported their use of education platforms as follows: *"Many teachers, doctoral teachers, lecturers, professors, associations for individual with disabilities etc. organized live online trainings and programs on Instagram... There are websites opened after the pandemic that has activities to teach academic skill. Teachers prepared activities for these websites that were very useful for us, at least."*

Relationships among Family Members

As described earlier, some parents reported that the changes in their daily routines due to pandemic caused difficulties and problems in their relations with their children and spouses. Other participating parents, on the other hand, stated that family relationships were positively affected during the pandemic. Specifically, they reported that family ties were strengthened as they spent more time with their children and spouses. In addition, some parents stated that the relationship between siblings improved during these difficult times. A participant summarized the positive effects of the pandemic on their relationship with their children as follows: *"You know, we played games together at home. We played different games in our backyard. You know, we are more connected to each other during the pandemic."* Another participant stated the positive effects of the pandemic on his relationship with his wife as follows: *"During the pandemic, our family became more connected. Because we switched to work remotely, I was always at home helping my wife etc. We are definitely more connected to each other now. Another parent gave the following example of the positive effect of the pandemic on the relationships between siblings: *"The brothers bonded more; they spent more time together... they tried to play games together more often... I think it help my son with autism."**

Supports Families of Children with Disabilities Needed to Cope with Challenges Faced

As shown in Figure 1, two sub-themes grouped under the Family's Daily Life and Children's Education themes were used to answer the third research question: (a) types of supports needed and (b) family education and training.

Types of Supports Needed

Data under this sub-theme showed that among the supports needed by parents to cope with the challenges faced during the pandemic were psychological support due to the increasing anxiety, economic support, educational support to increase quality of learning at home, and opening special education schools during summer period in order to close the gap for children with disabilities.

Intensity of supports needed increased as the severity of the child's disability increased. A participant expressed the support they needed during the pandemic as follows: *"Actually, our most important thing was psychological... If we had received psychological support, we would get over it faster, I think it wouldn't take that long. We needed a separate psychological support for both us and the child..."* Another participant explained their support needs as follows: *"With my child, the school must continue with no interruption even during summer. We don't go to vacation so that he continues to receive services. We needed special education and therapy services to continue during the pandemic. Not online, but face-to-face, one-on-one. It is imperative for our children to have uninterrupted services in schools."*

Family Education and Training

Parents reported training needs in a number of different areas to support development, leaning and overall well-being of their children while they are at home during the pandemic. These included training in behavior management, interventions during crisis such as tantrums and prolonged crying, teaching strategies to support language, academic and play skills, child development, nutrition, toilet training, and sexual education. One of the parents who participated in the interviews expressed their training needs as follows: *"... family training can be given about behavioral problem; we are burnt out and overwhelmed... practical strategies to use at home would really be helpful..."* Similarly, another participant expressed his views on family training needs as follows: *"I needed to learn how to approach to my child. A training on child development... Because teachers approach my child different then we do... Then, my child struggles and does not know what to do, frankly... A piece of information on any subject..."*

DISCUSSION

During the COVID-19 pandemic, many precautionary measures were taken to reduce the spread of the virus in public spaces. Many individuals began to work remotely from home or lost their jobs because of the economic impact of the pandemic. Moreover, children continued their education through virtual learning environments due to school closures. These and other factors have impacted all families including those who have children with disabilities by significantly changing daily routines. In the current study, using a qualitative approach, we investigated the challenges faced by families of children with disabilities during the COVID-19 pandemic; examined the strategies and resources families used to address these challenges; and identified the supports the families needed to cope with them. In this section, the main findings of the current study are discussed on the basis of the relevant literature.

Challenges Parents Faced During the Pandemic

Challenges Regarding Children

In this study, parents stated that the most basic problems they encountered with their children during the pandemic are "not being able to go to school (interruption of education), not being able to socialize, and having to be locked at home". Mandatory isolation to prevent the spread of virus have restricted children's access to other people and the services they need. Although the pandemic has resulted in many issues in terms of education for all children (Başaran & Aksoy, 2020), children with disabilities who are in need of extensive healthcare services, individualized and systematic instruction and special education services are among the most affected groups as their mental health can be more fragile (Garbe et al., 2020). Findings of the current study supports the findings of earlier studies reporting that children with disabilities have significant limitations in accessing therapy services, special education adaptations, and materials during the pandemic (Warner-Richter & Lloyd, 2020)

Studies conducted during the pandemic have reported that children's sleep and eating habits were disrupted and their addiction to technology increased (Basaran & Aksoy, 2020). Findings of the current study also shows that daily routines of families were disrupted due to social restrictions and

stay-at-home orders. These included changes in children's sleep routines (i.e., increased or decreased time in sleep), increase in the frequency of taking bath due to fear of the infection, increase in non-educational use of devices such as phones, tablets and computers, and loss of appetite.

Another negative effect of staying home for extended period of time and not being able to go out is the increase in the problem and compulsive behaviors of children. Especially the frequency of obsessive, aggressive, and disruptive behaviors as well as anger and tantrums used to get attention and opposition increased. Moreover, children's mobility in the house and their fear of being infected increased as the pandemic progressed. Studies in the literature have reported similar findings. For example, Alhuzimi (2021) found that young children's problem and compulsive behaviors increased during the pandemic. Studies investigating the impact of the COVID-19 pandemic on children with disabilities have reported that home closure measures reduced children's motivation, social interactions and negatively impacted their behaviors such as resisting to wear a mask or frequently wash hands (Brown et al., 2020). Moreover, mental health problems among children, including emotional and behavioral difficulties (anxiety and depression) has significantly increased during the pandemic (Basaran & Aksoy, 2020; Racine et al., 2020).

In addition to behavioral problems, findings of this study showed that children's development was also negatively affected during the pandemic, primarily in the areas of language and communication, academic, independent living (e.g., self-eating ability) and social skills. Garbe et al. (2020) stated that parents were afraid that their children staying away from the school during the pandemic would negatively affect their social and academic development. Parents are also concerned that the loss of special education services and social participation opportunities during the pandemic will have long-term negative effects on their children (Rakap et al., 2022).

The impact of these changes in children's daily routines and behaviors has become more significant as the in-person therapy supports, and special education services are interrupted during the pandemic. This has required re-thinking of how to support children with disabilities and their families during a pandemic. Alhuzimi (2021) suggests the development and implementation of technology-supported parent education programs focused on maintaining routines and addressing aggressive or repetitive behaviors of children. Delivered using web-based technologies, these programs should offer parents practical strategies that can be used in home environment with little support from professionals. For some children and families, these supports may not be sufficient. Therefore, institutions serving children with disabilities and their families should develop a protocol regarding how face-to-face sessions will be maintained during a pandemic within the limits of rules and requirements imposed by the governmental authorities.

Challenges Regarding Virtual Learning

With the closure of the schools, children started to receive their education using information and communication technologies through a government-supported system (i.e., EBA) in the home environment. Families faced many technological and pedagogical difficulties during this virtual learning process. The most important challenge expressed by parents regarding the virtual learning process was that the contents in EBA were not suitable for the level and needs of their children; therefore, children minimally benefit from EBA. Ayda et al. (2020) also reported that distance education practices were not adequate to meet the needs of children with disabilities as the educational materials and content are not suitable for most children with disabilities. In addition, the use of inadequate or inappropriate materials and content reduce children's motivation for learning (Garbe et al., 2020).

Other challenges reported by parents in terms of virtual learning and distance education includes children getting bored quickly, wanting to play games only on the computer and getting distracted more quickly. Tso et al. (2020) reported that use of technological devices for gaming and entertainment have increased after school closure for children with disabilities. In addition to child-level challenges, many parents also faced difficulties in relation to technology use during virtual

learning. This included lack of technological devices such as computers, tablets, and televisions in the home environment, lack of or very weak internet connection, insufficient internet data plan, lack of parental knowledge in using information and communication technologies. Moreover, some parents emphasized that they could not support their children's learning due to the increasing intensity of house chores during the pandemic.

To address changes children with disabilities and their families encounter, technological resources should be enriched in order to ensure these children benefit from educational opportunities at the highest possible level (Masonbrink & Hurley, 2020). Moreover, it is necessary to make further adaptations of educational resources and materials used during virtual learning to address individual needs and level of children with disabilities (Rakap et al., 2023). In addition, families that do not have resources (e.g., devices, internet, data plan) and skills for their children to benefit from virtual learning opportunities should be provided technology support and training to gain necessary skills to use technology to enhance their children development and learning.

Challenges among Family Members

Some participants in this study reported that they experienced more frequent tensions with their spouses during the pandemic compared to the past. A recent study has asserted that as a result of social isolation and the increase in time spent together in the home environment, spouses feel more pressured; therefore, domestic conflicts and even divorce rates increase (Ahmen et al., 2020). In addition, different studies have reported pandemic-specific mental health problems and strained family relationships (Evans et al., 2020; Prime et al., 2020). Findings also revealed that relationships among children in the same family were affected during the pandemic in that siblings demonstrated increased level of negative behaviors towards each other. Studies have emphasized that the pandemic and associated restrictions may increase the probability of problems between siblings, and such a deterioration in sibling relationships may put families at risk for relational disconnection and stress (Prime et al., 2020). Moreover, Tippet and Wolke (2015) associated factors such as economic difficulties, changing routines in the home environment, and constant TV exposure to high aggression among siblings.

Contrary to these findings, some participants in this study reported that increased time spent with their spouses at home during the pandemic has strengthened family ties and relationships with their spouses. In parallel with this finding, a recent study found that family relations have been strengthened due to the fact that family members attach more importance to supporting each other, taking care of each other and being harmonious in the family during the pandemic (Bentenuto et al., 2021; Ergul & Yilmaz, 2020). Moreover, families who stated that they had the opportunity to find new hobbies, develop positive qualities such as appreciation, gratitude and tolerance were not negatively affected by social restrictions (Evans et al., 2020). These findings suggest that social restrictions and stay-at-home orders due to the pandemic have increased the time spouses spent together and this, in turn resulted in increased positive intra-family interactions (Başaran & Aksoy, 2020) which contributes to the formation of stronger marital ties, and can positively affect marital relationships (Ahmen et al., 2020).

Systematic psychological support provided through e-consultancy models may be beneficial to families that have struggled with family relationships during the pandemic (Tsibidaki, 2021). In addition, considering that the social support children with disabilities and their families receive during the pandemic is a protective factor to alleviate negative impact of the pandemic on family interactions (Rakap et al., 2022), e-consultancy practices or other web-based supports can be used to provide social support to all family members (Tsibidaki, 2021).

Challenges in Meeting Individual Needs

The increase in household chores, time required for the care and education of the children, hand washing and general hygiene behaviors due to the fear of infection, and the decrease in social

support and the time that the participants allocate for themselves are among the daily challenges reported by parents. In addition to these daily challenges, some participants stated that they have concerns about their children's future as there may not be anyone to take care of the children if something happens to them. Therefore, they give more importance to increasing the independent living skills of their children during the pandemic. Recent studies have shown that parental burden has increased during the pandemic as parents have to take care of their children (Rakap et al., 2022), professional work (Brown et al., 2020), and house chores at the same time (Evans et al., 2020). These difficulties have caused mental burden on families and negatively impacted their psychology (Rakap et al., 2022).

Another challenge mentioned by participants was the increase in their workload and the emergence of new areas of responsibilities, as they have to manage their children's educational processes at home during the pandemic. This has created additional challenges for parents of children with disabilities. For example, parents had to follow the class schedule so that their children attend the classes on time; they did not know how to support their children's academic and play skills; and it was difficult to switch from parental role to the role of teacher. Parents also had difficulties in managing their children's behaviors which resulted in increased negative parental behaviors. Other studies have reported that in addition to parenting roles, the role of educator has been added to families (Cahapay, 2020; Warner-Richter & Lloyd, 2020); parents had to teach academic skills (Brown et al., 2020) as well as additional safety skills brought about by the pandemic (Cahapay, 2020). Telehealth and tele-rehabilitation practices (Bentenuto et al., 2021) can be used to provide families with web-based interventions and trainings to improve their competencies in these areas.

Financial Challenges

A significant challenge parents experienced during the pandemic was related to economy. Especially due to job loss, families had hard time in meeting the basic needs of their household and needed to act more economically by limiting non-essential expenses. Losing jobs (Brown et al., 2020; Warner-Richter & Lloyd, 2020) and experiencing economic difficulties (Evans et al., 2020; Prime et al., 2020) during the pandemic are among the important difficulties noted in the international literature. Considering the relationship between family quality of life and socioeconomic level, these findings are considered to be more important. In addition, there are findings in the literature that the economic distress caused by the pandemic makes family relationships difficult (Brown et al., 2020) and that increasing tension among family members can trigger domestic violence (Zhang, 2020). To lessen negative impact of financial difficulties, families should be offered financial assistance by the government such as stimulus payments, unemployment insurance, utility bill relief. Research has also shown that families with low socioeconomic status are more likely to be impacted by the pandemic (Rakap et al., 2022), therefore, this group should be the primary target for any financial support provided during the pandemic.

Strategies and Resources Parents Used During the Pandemic

In the current study, along with the challenges faced by parents during the pandemic, the strategies and resources they used to overcome these difficulties were also examined. Participating parents reported the use of strategies in relation to health such as using nutritional supplements and going out during more secluded hours to reduce the risk of contamination; in relation to education such as receiving supports from different teachers and other professionals, doing their own research using search engines, and asking for help from spouse, close family and friends; and in relation to mental health such as getting psychological support, spending time alone/on their own, thinking and being grateful for those who are worse off, praying and showing patience. Similarly, studies in the literature reported that parents try to overcome their problems by using religious coping methods and meeting other families who have children with disabilities. Aksoy and Demirli (2020) found that parents of children with disabilities see teachers as the most reliable source of information. However, they also use internet to gather information about topics related to their child's disability. In addition,

Scheffers et al. (2021) reported an increase in the use of distal methods of support such as telephone calls, video calling, and WhatsApp or text messaging during COVID-19 pandemic.

Although families of children with disabilities experience greater difficulties and concerns during the pandemic, they can activate mechanisms such as self-efficacy and resilience to protect their psychological balance and mental health (Tsibidaki, 2021). These mechanisms are important psychological resources for families to cope with the difficulties they face (Rakap et al., 2022). Research has shown that caregivers who received tele-rehabilitation and tele-consultation services have less depression, anxiety and stress symptoms. Therefore, psychological support services should be provided to improve coping skills and increase psychological resources of parents of children with disabilities using telehealth (Bentenuto et al., 2021), e-consultancy and e-support (Tsibidaki, 2021) practices.

Supports Parents Needed During the Pandemic

Findings in relation to the supports that parents needed to overcome the difficulties faced during the pandemic have shown that primary support needed by parents was the psychological support to deal with their increasing anxiety. Supporting mental health is a priority in order for parents to cope with the high stress that occurs during the pandemic (Racine et al., 2020). The existence of family support is critical for the mental health of parents who have children with disabilities. For this reason, it is recommended to provide supportive counseling services focused on family interactions and parenting to parents of children with disabilities during the pandemic (Ergul & Yilmaz, 2020). Several parents in the current study reported that they needed more financial support due to their declining income during the pandemic. Declining income and economic difficulties can increase family stress and reduce the quality of life as their access to basic life needs may be limited. In this direction, it is an inevitable necessity to provide financial support to families during the pandemic in order to increase their access to essential needs and services.

With the closure of schools during the pandemic, children had to continue their education using information and communication technologies from home through virtual learning and distance education. The responsibility of facilitating virtual learning at home falls on the parents. However, in this study, parents reported that they did not feel themselves competent in supporting their children's development and learning. In addition, participants noted that they need training on technology use, behavior management, nutrition, supporting academic, language and communication skills. Studies in the literature also reveal that parents find the help and support offered to them during the pandemic insufficient. These findings highlight the need for ensuring that families have easier access to intervention programs and services during the pandemic (Racine et al., 2020). To this end, researchers have suggested that telehealth practices (Bentenuto et al., 2021), tele-rehabilitation and homecare therapy, web-based interventions, and e-counseling/e-support (Tsibidaki, 2021) can be used to psychological supports to parents during the pandemic. Nevertheless, systemic changes are needed, especially for socioeconomically disadvantaged families to have easier access to support services.

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