

Determining the Traditional Methods and Complementary Therapies Used by Parents of Children with Special Healthcare Needs: Descriptive Study

Özel Bakım Gereksinimi Olan Çocukların Ebeveynleri Tarafından Uygulanan Geleneksel Yöntemlerin ve Tamamlayıcı Terapilerin Belirlenmesi: Tanımlayıcı Araştırma

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ABSTRACT Objective: This study aimed to determine the traditional methods and complementary therapies applied by the parents of children with special healthcare needs and to reveal the reasons on which these practices are based. **Material and Methods:** This descriptive study was conducted with 53 parents who have children with special healthcare needs. The study was conducted at a rehabilitation center. Parents with children with special healthcare needs participated in the study. **Results:** The average age of the children in this study was 9.50±4.86. The average age of mothers and fathers was 39.73±10.12, 42.73±8.89, respectively. As a result of the study, it was determined that 30.1% of the parents used traditional methods, and 67.9% of them applied complementary therapies. Among the traditional methods, faith healing and resorting to an amulet are used mostly. When the reasons for applying traditional methods are examined, the first is to provide benefits to the mental development of the child, the 2nd is to prevent seizures. Among the complementary therapies, meditation-prayer, which is one of the mental-physical practices, is in the first place. The second is natural product applications. The first two problems why complementary therapies are used are providing benefits to the mental development of the child, supporting his/her mobility. **Conclusion:** It is seen that a significant part of the parents apply traditional methods and/or complementary therapies for the mental and physical well-being of their children. Determining traditional methods and complementary therapies used by parents and guiding them in an appropriate way will contribute to improving children's health and increasing well-being levels.

ÖZET Amaç: Bu çalışma, özel bakım gereksinimi olan çocukların ebeveynlerinin uyguladığı geleneksel yöntemlerin ve tamamlayıcı terapilerin ve bunların uygulanma nedenlerinin belirlenmesi amacıyla yapılmıştır. **Gereç ve Yöntemler:** Tanımlayıcı tipteki bu çalışma, özel bir rehabilitasyon merkezinde çocuğu tedavi alan ve çalışmaya katılmayı kabul eden 53 ebeveyn ile yürütülmüştür. **Bulgular:** Çalışmamızdaki çocukların yaş ortalaması 9,50±4,86'dır. Annelerin yaş ortalaması 39,73±10,12 iken, babaların yaş ortalaması 42,73±8,89'dur. Ebeveynlerin %30,1'inin geleneksel yöntemleri ve %67,9'unun tamamlayıcı terapileri uyguladığı belirlenmiştir. Geleneksel yöntemler arasında en fazla hocaya okutmak ve muska yazdırmak bulunmaktadır. Geleneksel yöntemleri uygulama nedeni incelendiğinde, ilk sırada zihinsel gelişimine fayda sağlamak, 2. sırada epileptik nöbetleri önlemek yer almaktadır. Tamamlayıcı terapilerden ilk sırada psikolojik uygulamalar içinde yer alan meditasyon-dua bulunurken; 2. sırada doğal ürün uygulamaları gelmektedir. Tamamlayıcı terapileri uygulama nedenlerinin başında, çocuğun zihinsel gelişimini desteklemek ve mobiliteyi desteklemek yer almaktadır. **Sonuç:** Ebeveynlerin önemli bir kısmının çocuklarının zihinsel ve fiziksel iyi oluşu için geleneksel yöntem ve/veya tamamlayıcı terapileri uyguladığı görülmektedir. Ebeveynlerin kullandığı geleneksel yöntem ve tamamlayıcı terapilerin belirlenmesi ve uygun şekilde yönlendirilmesi, çocukların sağlığının geliştirilmesine ve iyi-oluşluk düzeylerinin artırılmasına katkı sağlayacaktır.

Keywords: Child with special healthcare needs; complementary therapy; parent; traditional method

Anahtar Kelimeler: Özel bakım gereksinimi olan çocuk; tamamlayıcı terapi; ebeveyn; geleneksel yöntem

Children with special healthcare needs are at risk of a chronic physical, developmental, behavioral or emotional condition and who also require more

care for their physical, emotional, behavioral, social, and developmental differences than their peers.^{1,2} A special healthcare need can include physical, intel-

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lectual, and developmental disabilities, also long term medical conditions, such as asthma, diabetes, epilepsy, muscular dystrophy.¹ Approximately in the U.S. 15 percent of all people under the age of 18 have special healthcare needs.² Although there is no current national data on the number of children with special healthcare needs in Türkiye, the Türkiye Disability Study (2002) concluded that the number of individuals with disabilities constituted 12.29% of the population.³ Moreover, according to the Study on the Problems and Expectations of the People with Disabilities (2011), conducted by the Turkish Statistical Institute, 4.9% of children in the 0-6 age group, 16.2% of the 7-14 age group, and 17.2% of the 15-24 age group are disabled.⁴

The number of children with special healthcare needs has doubled in the last 50 years. It is thought that this rate will increase in the coming years due to the increase in chronic health problems.⁵ There are some challenges in meeting the healthcare needs of the children. These challenges can be listed as unsuitable environmental conditions, remoteness to cities, and excessive economic burden.⁶ The treatment and care of children with special healthcare needs are a long, tiring, and expensive processes.^{7,8} During this process, parents may seek different treatment methods and supportive systems in addition to medical treatment. In this context, parents often use traditional methods and complementary therapies to solve their children's health problems.⁸⁻¹⁰ The implementation of complementary therapies at least once may vary by country. These rates are 48% in Australia, 70% in Canada, 42% in the United States, 38% in Belgium, and 75% in France.¹¹ According to various studies, this ratio is between 25% and 77% in Türkiye.¹²⁻¹⁷

Complementary therapies are most commonly used in children with special healthcare needs.^{18,19} Complementary therapies are used in oncology, neurology, cardiology, gastroenterology, respiratory, infantile colic, asthma, allergic rhinitis, nausea, vomiting, pain management, dysmenorrhea, infection, musculoskeletal problems and psychological problems in pediatrics.^{18,20,21} According to the World Health Organization, traditional medicine refers to the combination of various health practices and approaches that cover all of the knowledge, skills, and

methods that are used in the maintenance, prevention and diagnosis of physical and mental diseases, based on the beliefs and experience of different cultures.¹² Traditional methods may include useful applications. However, unlike medicine, they may involve unhealthful applications inherited from generation to generation, as well. However, complementary therapies are used along with medical treatment and are intended to support scientific medicine. The types of complementary therapies are divided into 3 main categories: natural products, mental-physical practices (such as yoga, chiropractic, osteopathic manipulation, meditation), and other complementary health approaches (such as Ayurvedic medicine, Traditional Chinese medicine, homeopathy, and naturopathy).²²

An essential aspect of traditional methods and complementary therapies for children is that parents can use these methods on their own without medical evaluation and care.^{23,24} Moreover, the lack of knowledge about the risks of the method and the increase in complications that may occur in children due to delayed treatment are among the essential problems. This leads to a poor prognosis of the disease and an increase in healthcare costs.²⁵ Knowing the cultural characteristics of the society in which they live, and the traditional methods and complementary therapies used in their health practices will increase the quality and effectiveness of nursing care. This study determines the traditional methods and complementary therapies applied by the parents of children with special healthcare needs, to reveal the reasons for applying these methods and the adverse effects encountered. The research questions are as follows: a) What are the traditional methods and complementary therapies used by parents of children with special healthcare needs? b) What are the reasons for parents of children with special healthcare must use traditional methods and complementary therapies? c) Do traditional methods and complementary therapies implemented by parents of children with special healthcare needs have adverse effects on children?

MATERIAL AND METHODS

DESIGN

This descriptive study was conducted between May 28 and September 28, 2018 to determine the tradi-

tional methods and complementary therapies applied by parents to children with special healthcare needs. The study is in thorough compliance with the Declaration of Helsinki. Written permissions were obtained from the ethics committee of Gazi University (date: May 08, 2018, no: 77082166-604.01.02-E.125948) and from the rehabilitation center where the study was conducted. Parents of children with special healthcare needs were informed about the study. Written consent was obtained from the parents who agreed to participate in the study. Parents were told that they could withdraw from the study at any time without giving any reason and that the data obtained would be used only for the study.

SETTING

The study was conducted in a rehabilitation center. There were children who had mental disability, physical disability, autism spectrum disorder, cerebral palsy, epilepsy, Down syndrome, attention defecency and hyperactivity disorder (ADHD) in the rehabilitation center. The children were receiving special education and physical therapy at the center.

PARTICIPANTS

The criteria for the inclusion of children and parents in the study are as follows: a) the child must be 1-18 years old, b) the child must have special healthcare needs, c) the child should be monitored at the rehabilitation center for at least 1 month, d) the parent must have written consent to participate in the study. At the time of the study, there were 240 children enrolled in the institution. One hundred forty parents came to the center for the rehabilitation of their child during the same period.

All parents who agreed to participate in the study and met the criteria were included in the study without any sample selection. The research sample consisted of 53 parents since the age of one child was older 18, and 86 parents did not want to participate in the study.

MAIN OUTCOME MEASURES

Data were collected using 2 forms: a) a descriptive information form for children and parents and b) a data collection form for traditional methods and complementary therapies.

DESCRIPTIVE INFORMATION FORM FOR CHILDREN AND PARENTS

This form was prepared by the researchers using literature review to obtain information about the socio-demographic characteristics of children with special healthcare needs and their families.²³⁻²⁸ The descriptive information form has 23 questions for the following data: age of the child, diagnosis of the disease, questions about the treatment process and the age of the parents, place of residence, educational status, number of children, family's socioeconomic status, support status, the impacts of the child's disease in the family and the degree of these impacts.

DATA COLLECTION FORM FOR TRADITIONAL METHODS AND COMPLEMENTARY THERAPIES

The form includes 6 questions about: what methods are used for families with children with special healthcare needs, what they are used for, what impacts they have, from whom the parents learned the traditional methods and complementary therapies, whether they continued medical treatment during the implementation of these methods and whether they provided information to health professionals about this issue. The form was created by the researchers using the literature.^{8,12,20,25,26}

DATA COLLECTION AND PROCEDURES

Parents who came to the rehabilitation center were interviewed and informed about the research. Written consent was obtained from the parents who volunteered to participate in the study. While the children were treated by the staff, the forms were completed by the parents in the waiting room within approximately 10-20 minutes. The parents were given a blank envelope along with the forms. The parents who filled in the forms put the forms in the envelope and left it in the closed box in the waiting room. The forms did not contain any information, including the identity of the parents.

STATISTICS

The data obtained from the study were evaluated by using the SPSS 20.0 (IBM Corp. in Armonk, New York, USA) packaged software, and the values were expressed as numbers and percentages. Chi-square

and Mann-Whitney U test were used to analyze the relationship between the parents apply to traditional methods and complementary therapies and their socio-demographic characteristics, and the relationship between the age of children, the age at diagnosis and apply to traditional methods and complementary therapies.

The independent variables of the study were demographic characteristics such as age of physically and mentally disabled children, diagnosis, duration of treatment, and age of parents, educational background of parents, parents' income, and working status. Dependent variables were traditional methods and complementary therapies for children and the reasons for their use. Open-ended questions were grouped and coded by the researchers.

RESULTS

Children were diagnosed with a mean age of 1.95 ± 1.42 years. Most children with disabilities (60.4%) were boys. Nearly all children included in our study were diagnosed with a mental disability (92.5%). All children receive rehabilitation treatment. 62.3% of those receiving rehabilitation treatment receive special education only. The other children receive either physical therapy alone or physical therapy and special education together. Children with the comorbid disease also receive medication (50.9%). The primary caregiver of most children (81.1%) was the mother (Table 1). Interviews were mostly conducted with mothers. Among mothers (39.6%) and fathers (35.9%), primary school graduates were the most common (Table 2).

30.1% of the parents stated that they used traditional methods, and 67.9% indicated that they applied complementary therapy methods. When parents were asked about the reasons for applying traditional methods or complementary therapies, the majority (64.7%) responded that they wanted to contribute to the recovery of children. Among the traditional methods, the first is to take the child to a clergy, and the second is applying to an amulet. When the reasons for applying traditional methods are examined, the first is to provide benefits to the mental development of the child (50%), the second is to prevent seizures

TABLE 1: Sociodemographic characteristics of children.

Characteristics	M±SD	Minimum-maximum
Age of child	9.50±4.86	1.5-18
Age at diagnosis	1.95±1.42	0.0-5.0
Absence of treatment (month)	2.25±1.48	1.0-4.0
	n	%
Child's gender		
Girl	21	39.6
Boy	32	60.4
Medical diagnosis ^a		
Mental disability	49	92.5
Autism spectrum disorder	23	43.4
Physical disability	18	34.0
Epilepsy	16	30.2
Cerebral palsy	8	15.1
ADHD ^b	5	9.4
Down syndrome	5	9.4
Hypotiroidi	1	1.9
Medical treatment ^c		
Antipsychotic	11	40.7
Anticonvulsant	15	55.5
Hypotiroidi	1	3.7
Rehabilitation treatment		
Special education	33	62.3
Physical therapy	6	11.3
Special education and physical therapy	14	26.4
Having regular treatment		
Yes	45	84.9
No ^d	8	15.1
According to parents cost of treatment		
Low	3	5.7
Middle	20	37.7
High	30	56.6
Primary caregiver		
Mother	43	81.1
Mother and father	10	18.9
Supporting		
Maintenance fees	16	30.2
Institutional support	49	92.5
Social support	13	24.5
Effect of child with special needs on family		
Psychological	35	66.0
Social	30	56.6
Economic	25	47.2

^aThere are children diagnosed with more than one chronic disease. Every child has a physical or mental disability; ^bThe percentages are based on children who are taking medicine (n=27); ^cADHD: Attention defecency and hyperactivity disorder; ^dCause of irregularity; illness %13.2, attack %1.9; SD: Standard deviation.

(25%), and the third is to protect from the evil eye (12.5%). Most of the families (72.2%) who tried complementary therapies applied to mental-physical

TABLE 2: Sociodemographic characteristics of family.

Characteristics	M±SD	Minimum-maximum
Age of mother	39.73±10.12	22-70
Age of father	42.73±8.89	31-72
Children number of family	2.16±1.08	1-6
Effect of illness on family	5.71±3.41	0.0-10.0
	n ^b	%
Interviewed person		
Mother	48	90.6
Father	5	9.4
Mother's education level		
Primary	21	39.6
High	19	35.8
University	13	24.6
Father's education level		
Primary	19	35.9
High	19	35.8
University	15	28.3
Working status of the mother		
Work	7	13.2
Not work	46	86.8
Working status of the father		
Work	44	83.0
Not work	9	17.0
Having another children with special needs		
No	52	98.1
Yes	1	1.9
Family income level ^a		
Not enough	26	49.1
Good	22	41.5
Better	5	9.4

^aParents were determined according to their own statements; ^bThe percentages are based on n=53; SD: Standard deviation.

practices. The first 3 problems why complementary therapies are used are providing benefits to the mental development of the child (55.5%), supporting his/her mobility (22.2%), and calming the child (19.4%). Only a parent stated that complementary therapy had a negative effect. This negative effect developed in a child with epilepsy. The parents gave their children a cup of lemon balm tea every morning. He stated that this caused dizziness in the child and that the symptoms disappeared when the children did not drink the tea. 60.4% of the parents indicated that they did not provide information about the methods they applied to health professionals (Table 3). Although not included in the table, 60.4% of parents stated that they did not inform the health professionals because they thought the

method they used had no adverse effect, and they were afraid of criticism and misunderstanding.

The complementary therapies used by the parents were examined into three categories according to the classification of the National Center for Com-

TABLE 3: Parental status and reasons for applying traditional method and complementary therapy.

Characteristics	n	%
Applying to traditional method/complementary therapy ^a		
Applying to complementary therapy	36	67.9
Applying to traditional method	16	30.1
Not applying any method	10	18.8
Reason for applying traditional method/complementary therapy ^b		
To contribute to the healing of the child	26	60.5
Despair	9	21.0
Parent feeling well	5	11.6
Have no regrets of not saying	2	4.6
Belief/faith	1	2.3
Development of a negative impact on the child		
Yes	1	2.3
No	52	97.6
Traditional method ^c		
Clergy	12	75.0
Amulet	8	50.0
Visit to the shrine	4	25.0
Zamzam water	3	18.7
Reasons for applying traditional method ^c (n=16)		
To benefit mental development	8	50.0
To prevent seizures	4	25.0
To protect evil eye	2	12.5
Sleep problem	2	12.5
Complementary therapy ^d (n=36)		
Mental-physical	26	72.2
Natural product	19	52.7
Others (bloodsucker, cupping)	3	8.3
Reasons for applying complementary therapy ^d		
Providing benefit to the mental development	20	55.5
Supporting her/his mobility	8	22.2
Appease	7	19.4
To prevent seizures	6	16.6
Constipation	4	11.1
Providing social development	2	5.5
Sleep problem	2	5.5
Informing the health professional		
No	26	60.4
Yes	17	39.5

^aThe percentages are based on n=53; ^bIt was analyzed applying traditional methods and complementary therapies (n=43); ^cIt was analyzed applying traditional methods (n=16); ^dThe percentages are based on n=36; There are parents who applied more than one method.

plementary and Integrative Health. These categories are natural products, mental-physical practices, and other methods.²⁴ Parents who applied complementary therapies mostly used meditation (30.5%) and hydrotherapy (27.7%) in their mental-physical practices. Among the natural products, which are in the second place, they mostly used herbals (22.2%) and oils (22.2%) (Table 4). Although not shown in the table, it was found that natural products were mostly fennel, orange flower, lemon balm tea, oregano, fish oil, and black seed oil.

Parents mostly applied natural methods to provide the mental development of their children and prevent/eliminate constipation. Parents primarily used mental-physical complementary therapies methods to provide physical development of their children, prevent attacks, calm them down, and overcome sleep problems (Table 5). Additionally, there was no significant relationship between the sociodemographic characteristics of children and parents and their apply to traditional method/complementary therapy ($p>0.05$) (Table 6).

DISCUSSION

The interest in traditional methods and complementary therapies and the frequency of use of such methods have increased due to reasons such as ease of access to information, increased inter-communal interaction, increased confidence in these practices, and because they are cheaper than medical treatment.¹⁶ In our study, we examined the parents' use of traditional methods and complementary therapies for treating their children with special healthcare needs. The parents applied to traditional methods and complementary therapies because they wanted to contribute to the healing of the child, they felt responsible, they felt despair, they didn't want to regret, and they had faith. Among the traditional methods used by parents, faith healing, and application to an amulet are at the forefront. Traditional methods were used to provide the physical development of children, prevent attacks, calm them down and overcome sleep problems. Carman et al. stated that the most common traditional practices were religious practices (praying and using amulets).¹² However, Treat et al. reported that herbal products were preferred the most.²⁷ Some studies in

TABLE 4: The traditional method and complementary therapy used by parents.

Methods	n ^a	%
Natural products		
Herbal	8	22.2
Oils	8	22.2
Vitamin-mineral	4	11.1
Probiotic	3	8.3
Honey and related products	2	5.5
Mental-physical		
Meditation-prayer	11	30.5
Hydrotherapy	10	27.7
Reflexology	3	8.3
Massage	3	8.3
Hypotherapy	3	8.3
Music	2	5.5
Acupuncture	1	2.7
Others		
Cupping	3	8.3
Bloodsucker	1	2.7

^aThe percentages are based on n=36.

TABLE 5: According to children problems applying complementary therapy.

Characteristics	n ^a	%
Mental development		
Natural products	13	36.1
Mental-physical	12	33.3
Physical development		
Mental-physical	10	27.7
Natural products	4	11.1
Social development		
Natural products	1	2.7
Mental-physical	1	2.7
To prevent seizures		
Mental-physical	7	19.4
Natural products	3	8.3
Calm down		
Mental-physical	8	22.2
Natural products	4	11.1
To find a solution sleep problems		
Mental-physical	2	5.5
Natural products	1	2.7
To prevent constipation		
Natural products	2	5.5

^aThe percentages are based on n=36.

the literature have concluded that traditional methods are applied the most, while other studies have found that complementary therapies are preferred the most.

TABLE 6: The relationship between education status/average age and traditional method/complementary therapy trial status.

	Traditional method	Complementary therapy
Pearson' chi-square Test		
Mothers' education	0.428	0.304
Fathers' education	0.458	0.174
Mann-Whitney U Test		
Average age of mothers	0.922	0.433
Average age of fathers	0.803	0.913

p<0.05.

The socio-cultural structure of the study group, the type and degree of chronic disease of children, and the values and beliefs of the parents are the determinants of the application type.

Among the complementary therapy methods used by parents, mental-physical practices are the first, and natural products are the 2nd. The mental-physical practices used in our study included meditation-prayer, reflexology, massage, hydrotherapy, music, and acupuncture, while natural products included herbal products, oil, vitamin-mineral, probiotics and honey products, respectively. Complementary therapy methods are mostly used to help the child's mental development, to support mobility, to calm them, and to prevent epileptic attacks. Similar to our study, Ustuner-Top et al., in a study conducted with pediatric patients, mental-physical practices took the first place. These included massage, music, and cold treatments.²⁸ Hopf et al. conducted a study to measure the frequency with which parents of children with autism apply complementary methods and to assess their perceived effectiveness.⁸ Distinct from our research, parents used natural products (multivitamins) most frequently (58.6%) in that study. Huang et al. concluded that 55.0% of children with autism and 15% of children with ADHD used natural products the most in the context of complementary therapy products. Mental-physical practices were used in 14% of children with autism.²⁵ Adams et al. found the most commonly used complementary therapy products as vitamins and minerals, plants, and homeopathic, respectively. The most popular complementary therapies are massage, faith healing, chiropractic, aromatherapy, and relaxation, respec-

tively.²⁰ Carman et al. found that herbal products were the most commonly used among complementary therapy products. Other complementary therapy methods are acupuncture, bioenergy, honey, and products, respectively, according to the frequency of use.¹² Mosavat et al. found that the usage rate of complementary therapies was to be 49%, and herbal products were mostly used. Among mental-physical methods, spiritual practices were the most common and energy practices were second.²⁹ In the study by Owen-Smith et al., 88% of the individuals who comprised the research sample currently used or were still using complementary treatment methods. Multivitamins are the most used complementary treatment products. Other commonly used complementary therapy products are fish oil, melatonin, vitamins C, D, B₁₂, and probiotics, respectively. The most preferred mental-physical practices included yoga, tai chi, qi gong.³⁰ As can be seen, some studies in the literature have reached similar results to our research. However, also studies that have different results than ours. The research articles we have selected in the discussion section include studies with pediatric patients. However, each study included children with different disease groups. Our study included children with autism, ADHD and cerebral palsy in a combination of children with physical or mental disabilities. It is thought that the following factors may influence the parents apply to complementary therapies: the type of child's disease, the age at which the child is diagnosed, the level of knowledge of the treatment method, the source of information, the demographic characteristics and socio-cultural environment.

In our study, 56.7% of the parents who expressed their opinions on traditional and complementary therapy methods stated that the methods they applied were useful. 23,3% indicated that they did not see any benefit or harm, 16.7% said that they did not have any information and 3.3% stated that they experienced side effects. In some studies, parents stated the practices were beneficial.^{8,25} Adams et al. (2013) reported that side effects of complementary therapies were observed. These include vitamins, herbal products, homeopathic, acupuncture, aromatherapy, chiropractic, probiotic, and yoga.²⁰ In the study of Mosavat et al., parents stated that side effects oc-

curred.²⁹ In another study, 75% of parents said that complementary methods applied to their children had no harmful effect and that they did not believe they would not interact with the medications used.¹⁸ In another study, 27% of those using herbal products stated that they thought that these products did not cause any harm.¹² Side effects may be encountered by traditional methods and complementary therapies. Health professionals should first be aware of this situation. Parents should be reminded that healthcare professionals should be consulted before such practices.

It was found in our study that the number of parents who did not consult health professionals about the methods applied was higher than those who consulted. When the parents were asked about the reasons for not consulting a health professional, they stated that they were afraid of being criticized and did not need to consult because they thought it would not be harmful. Carman et al. reported that 5.8% of the parents gave information to the doctor about the practices.¹² In another study, it was reported that the rate of parents receiving recommendations from healthcare professional about the use of complementary therapy was 20.4%.²⁹ In another study, 47.0% of those who applied to complementary therapy informed their doctors about their practices.¹⁸ The information obtained from the literature gave similar results to our study. A significant number of parents who apply to traditional methods or complementary therapies do not inform health professionals about their practices for various reasons. Health professionals should draw attention to this issue when taking the medical history of the patients and obtain data on the situation without judging and guiding parents.

CONCLUSION

The use of traditional methods and complementary therapies in children increases regardless of the medical diagnosis. Parents, based on the information they have heard from others or read from different

sources, conduct these practices themselves or consult health professionals. The fact that such practices are carried out with the advice of relatives or neighbors may increase the risk of adverse effects on children's health. The percentage of parents who inform health professionals about the methods they use is very low. In the context of holistic care, it is recommended that traditional methods and complementary therapies be applied under the guidance of a specialist health professional. Determining traditional method and complementary therapy used by parents and guiding them appropriately will contribute to improving children's health and increasing well-being levels. The small sample size is a limitation of the study. It is recommended that future studies be performed with larger sample sizes.

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No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

Idea/Concept: Gizem Çakır; Ebru Kılıçarslan Törüner; Naime Altay; **Design:** Ebru Kılıçarslan Törüner; Naime Altay, Gizem Çakır; **Control/Supervision:** Naime Altay, Ebru Kılıçarslan Törüner; **Data Collection and/or Processing:** Gizem Çakır; **Analysis and/or Interpretation:** Gizem Çakır, Ebru Kılıçarslan Törüner, Naime Altay; **Literature Review:** Gizem Çakır; **Writing the Article:** Gizem Çakır; **Critical Review:** Naime Altay, Ebru Kılıçarslan Törüner.

REFERENCES

- Centers for Disease Control and Prevention [Internet]. [Cited: June 19, 2022]. Children with special healthcare needs. 2019. Available from: [\[Link\]](#)
- Genetic Alliance; Family voices. children and youth with special healthcare needs in healthy people 2020: a consumer perspective. children and youth with special healthcare needs, then and now (Chapter 1): Washington (DC) 2013. Available from: [\[Link\]](#)
- State Statistical Institute Administration of the Disabled. Basic indicators of disability survey (Section 1). Türkiye disabled study -2002 (Second edition), State Statistical Institute Printing House, Ankara 2009; p. 5.
- Türkiye Statistical Institute and Republic of Turkey Ministry of Family and Social Policies. Survey on problems and expectations of disabled people 2010. Printing Division, Ankara 2011. [Accessed October 20, 2022]. [\[Link\]](#)
- Centers for Disease Control and Prevention (CDC). Ten great public health achievements--United States, 2001-2010. *MMWR Morb Mortal Wkly Rep*. 2011;60(19):619-23. [\[PubMed\]](#)
- Taderera C, Hall H. Challenges faced by parents of children with learning disabilities in Opuwo, Namibia. *Afr J Disabil*. 2017;6:283. [\[Crossref\]](#) [\[PubMed\]](#) [\[PMC\]](#)
- Thwala SK, Ntinda K, Hlanze B. Lived experiences of parents' of children with disabilities in Swaziland. *Journal of Education and Training Studies*. 2015;3(4):206-15. [\[Crossref\]](#)
- Hopf KP, Madren E, Santianni KA. Use and perceived effectiveness of complementary and alternative medicine to treat and manage the symptoms of autism in children: a survey of parents in a community population. *J Altern Complement Med*. 2016;22(1):25-32. [\[Crossref\]](#) [\[PubMed\]](#) [\[PMC\]](#)
- American Academy of Pediatrics [Internet]. © Copyright 2022 American Academy of Pediatrics. [Cited: March 12, 2022]. Use of alternative medicine is increasing in pediatrics. 2013. Available from: [\[Link\]](#)
- Wang C, Li K, Gaylord S. Prevalence, patterns, and predictors of meditation use among U.S. children: Results from the National Health Interview Survey. *Complement Ther Med*. 2019;43:271-6. [\[Crossref\]](#) [\[PubMed\]](#) [\[PMC\]](#)
- World Health Organization. WHO traditional medicine strategy: 2014-2023. 2013. Cited: February 21, 2022. Available from: [\[Link\]](#)
- Carman KB, Gürlevik SL, Kaplan E, Dinleyici M, Yazar C, Arslantas D. The evaluation of use of complementary and alternative medicine practices in the treatment of children with chronic neurological disease. *Haydarpaşa Numune Med J*. 2018;58(3):117-21. [\[Crossref\]](#)
- Gürol A, Şener Taplak A, Polat S. Herbal supplement products used by mothers to cope with the common health problems in childhood. *Complement Ther Med*. 2019;47:102214. [\[Crossref\]](#) [\[PubMed\]](#)
- Konuk Sener D, Karaca A. Use of complementary and alternative medicine treatments by mothers of children with developmental disabilities: a cross sectional study. *Nurs Health Sci*. 2020;22(2):328-38. [\[Crossref\]](#) [\[PubMed\]](#)
- Erdem E, Sezer Efe Y, Bayat M, Uslu N, Sivacı L, Yılmaz E. Complementary and alternative medicine methods used among Turkish pediatric oncology patients. *J Pediatr Nurs*. 2020;52:e103-7. [\[Crossref\]](#) [\[PubMed\]](#)
- Araz N, Bulbul S. Use of complementary and alternative medicine in a pediatric population in southern Turkey. *Clin Invest Med*. 2011;34(1):E21-9. [\[Crossref\]](#) [\[PubMed\]](#)
- Bilgiç A, Cöngöloğlu A, Hergüner S, Türkoğlu S, Bahali K, Gürkan K, et al. Use of complementary and alternative medicine in children with autism spectrum disorders: a multicenter study. *Noro Psikiyatrs Ars*. 2013;50(3):237-43. [\[PubMed\]](#) [\[PMC\]](#)
- Lam CS, Cheng YM, Li HS, Koon HK, Li CK, Ewig CLY, et al. Use of complementary or alternative medicine and potential interactions with chronic medications among Chinese survivors of childhood cancer. *J Cancer Surviv*. 2022;16(3):568-81. [\[Crossref\]](#) [\[PubMed\]](#)
- Zhu Z, Mittal R, Walsler SA, Lehman E, Kumar A, Paudel S, et al. Complementary and alternative medicine (CAM) use in children with epilepsy. *J Child Neurol*. 2022;37(5):334-9. [\[Crossref\]](#) [\[PubMed\]](#)
- Adams D, Dagenais S, Clifford T, Baydala L, King WJ, Hervas-Malo M, et al. Complementary and alternative medicine use by pediatric specialty outpatients. *Pediatrics*. 2013;131(2):225-32. [\[Crossref\]](#) [\[PubMed\]](#)
- Brittner M, Le Pertel N, Gold MA. Acupuncture in pediatrics. *Curr Probl Pediatr Adolesc Health Care*. 2016;46(6):179-83. [\[Crossref\]](#) [\[PubMed\]](#)
- National Center for Complementary and Integrative Health [Internet]. [Cited: June 3, 2022]. Complementary, Alternative, or Integrative Health: What's in a Name? 2021. Available from: [\[Link\]](#)
- Lindly OJ, Thorburn S, Heisler K, Reyes NM, Zuckerman KE. Parents' use of complementary health approaches for young children with autism spectrum disorder. *J Autism Dev Disord*. 2018;48(5):1803-18. [\[Crossref\]](#) [\[PubMed\]](#) [\[PMC\]](#)
- Aydin D, Karaca Ciftci E, Karatas H. Identification of the traditional methods of newborn mothers regarding jaundice in Turkey. *J Clin Nurs*. 2014;23(3-4):524-30. [\[Crossref\]](#) [\[PubMed\]](#)
- Huang A, Seshadri K, Matthews TA, Ostfeld BM. Parental perspectives on use, benefits, and physician knowledge of complementary and alternative medicine in children with autistic disorder and attention-deficit/hyperactivity disorder. *J Altern Complement Med*. 2013;19(9):746-50. [\[Crossref\]](#) [\[PubMed\]](#) [\[PMC\]](#)
- Yılmaz D, Kısa S, Zeyneloğlu S, Güner T. Determination of the use of traditional practices to ease labour among Turkish women. *Int J Nurs Pract*. 2013;19(1):65-73. [\[Crossref\]](#) [\[PubMed\]](#)
- Treat L, Liesinger J, Ziegenfuss JY, Humeniuk K, Prasad K, Tilburt JC. Patterns of complementary and alternative medicine use in children with common neurological conditions. *Glob Adv Health Med*. 2014;3(1):18-24. [\[Crossref\]](#) [\[PubMed\]](#) [\[PMC\]](#)
- Ustuner Top F, Konuk Sener D, Cangur S. Parental attitudes toward pediatric use of complementary/alternative medicine in Turkey. *J Spec Pediatr Nurs*. 2017;22(3). [\[Crossref\]](#) [\[PubMed\]](#)
- Mosavat SH, Heydari M, Hashempour MH, Dehghani SM. Use of complementary and alternative medicine among paediatric patients with hepatogastrointestinal diseases. *East Mediterr Health J*. 2018;24(10):1018-25. [\[Crossref\]](#) [\[PubMed\]](#)
- Owen-Smith AA, Bent S, Lynch FL, Coleman KJ, Yau VM, Pearson KA, et al. Prevalence and predictors of complementary and alternative medicine use in a large insured sample of children with autism spectrum disorders. *Res Autism Spectr Disord*. 2015;17:40-51. [\[Crossref\]](#) [\[PubMed\]](#) [\[PMC\]](#)