

RESEARCH ARTICLE

Parents' view of traditional and complementary medicine practices in the Covid-19 process

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ABSTRACT

Objective: This study aimed to see whether there was a difference in the traditional and complementary medicine methods parents heard or used for their children during the COVID-19 outbreak.

Methods: The sample of the study consists of 180 parents with children under the age of 5 who applied to the General Pediatrics Polyclinic of a University Hospital between April and June 2021. In the study, the literature was scanned on 180 people who gave verbal consent; A survey form was applied to the parents, including their sociodemographic characteristics, their children's vaccination and routine follow-up status within the scope of the Expanded Immunization Program during the COVID-19 epidemic, and the traditional and complementary medicine methods they have heard of or used.

Results: During the COVID-19 outbreak, 90.6% of parents reported that their children had their children vaccinated and routinely monitored within the scope of the Expanded Immunization Program. 67.8% of the participants stated that they had heard of other methods other than medical drugs for the treatment of their children when they were sick. While 61.1% of the participants indicated that it is correct to swaddle babies, 6.7% stated that breast milk should not be given to the baby and 4.4% stated that waiting for three adhan after birth is necessary.

Conclusion: Healthcare professionals should be aware of the cultural practices of the community they live in and should provide accurate and continuous information to parents about how they should behave for their children's health, especially in the event of an epidemic.

Keywords: Parent, COVID-19, Complementary Therapies

ÖZET

Ebeveynlerin geleneksel ve tamamlayıcı tıp uygulamalarına Covid-19 sürecindeki bakışı

Amaç: Bu çalışma ebeveynlerin çocukları için duyduğu veya kullandığı geleneksel ve tamamlayıcı tıp yöntemlerinde COVID-19 salgını sırasında farklılık olup olmadığını görmeyi amaçlamıştır.

Yöntem: Araştırmanın örneklemi bir Üniversite Hastanesi'nin Genel Pediatri Polikliniği'ne Nisan 2021-Haziran 2021 tarihleri arasında başvuran 5 yaş altı çocuğu olan 180 ebeveyn den oluşmaktadır. Çalışmada sözlü onam veren 180 kişiye literatür taranarak; ebeveynlerin sosyodemografik özellikleri, COVID-19 salgını sırasında çocuklarının Genişletilmiş Bağışıklama Programı kapsamındaki aşı ve rutin izlemelerini yaptırma durumları, duydukları ya da kullandıkları geleneksel ve tamamlayıcı tıp yöntemlerini içeren anket formu uygulanmıştır.

Bulgular: COVID-19 salgını döneminde ebeveynlerin %90.6'sı çocuklarının Genişletilmiş Bağışıklama Programı kapsamındaki aşılama ve rutin izlemelerini yaptırdığını bildirdi. Katılımcıların %67.8'i çocukları hastalandığında tedavisi için tıbbi ilaç dışında uygulanan başka bir yöntem duyduğunu belirtmiştir. Katılımcıların %61.1'i bebekleri kundaklamanın doğru olduğunu, %6.7'si ağız sütünün bebeğe verilmemesi gerektiğini, %4.4'ü doğumdan sonra üç ezan beklemek gerektiğini bildirdiler.

Sonuç: Sağlık çalışanları yaşadıkları toplumun kültürel uygulamalarının farkında olmalı ve özellikle bir salgın durumunda ebeveynlere çocuklarının sağlığı için nasıl davranmaları gerektiği konusunda doğru ve sürekli bilgilendirme yapmalıdır.

Anahtar kelimeler: Ebeveyn, COVID-19, Tamamlayıcı tedavi

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INTRODUCTION

Complementary and alternative medicine is defined as a broad field of health that encompasses all health services, methods, practices, and accompanying theories and beliefs that fall outside the politically dominant health system in a given society or culture at a given point in time [1].

Complementary and alternative medicine practices are often based on unproven assumptions or, as in our country, are based on certain beliefs. These methods can be both directly harmful because of their side effects and indirectly harmful because they may be ineffective or cause delays in medical treatment [2].

Studies show that the rate of complementary and alternative treatment use is considerably high. Although studies in children are more limited, it is noteworthy that the rate of complementary and alternative treatment use tends to increase in the world and our country, more in chronic diseases [1-3].

The World Health Organization classified the COVID-19 outbreak as an "international public health emergency" on January 30. It defined it as a pandemic on March 11 due to the spread and severity of the virus [4].

COVID-19 infection affects the pediatric age group as well as adults. The first pediatric COVID-19 case in the literature was reported on January 20, 2020, as a 10-year-old boy living in Shenzhen, China, whose family had recently visited Wuhan [5]. Afterward, pediatric cases continued to be reported [6-8].

COVID-19 has caused stress and fear in people. In a study, 65.4% of mothers expressed concern that their children would get COVID-19 [9]. Since helplessness, ignorance and social pressures may push individuals to seek treatment methods other than medical ones and increase their tendency to use complementary and alternative medicine; it is observed in the literature that the fear of coronavirus increases individuals' tendency to use complementary and alternative treatment methods in addition to medical treatment [10, 11].

The aim of this study is to determine the precautions taken by parents of children under the age of 5 to protect their children from the COVID-19 pandemic, the status of their children's vaccinations and routine follow-ups under the Expanded Immunization Program, and the status of traditional and complementary medicine methods that parents have heard of or used for their children's COVID-19 or other illnesses during the COVID-19 process.

MATERIALS and METHODS

The study is a cross-sectional study. Ethical approval was obtained from Clinical Research Ethics Committee for the study (Decision no: 2021/79, Date: 07.04.2021).

The population consisted of parents with children under the age of five who applied to the General Pedi-

atrics Polyclinic of a university hospital between April 2021 and June 2021. In a previous similar study, the use of complementary and alternative medicine treatment in children was found to be 58.6%. Considering this rate, the minimum sample size was calculated as 176 in the Medcalc (version 11.5.1) program with 80% power, $\alpha=0.05$ and an effect size of 10%, and the random sampling method was used. The study's limitations are the sample selection method and the fact that the study was conducted in a university hospital.

A questionnaire form including the sociodemographic characteristics of the parents, the vaccination and routine follow-up of their children within the scope of the Expanded Immunization Program during the COVID-19 outbreak, the practices they performed to protect themselves from the outbreak, and the traditional and complementary medicine methods they heard or used was applied to 180 people who gave verbal consent in the study.

The dependent variables of this study were vaccination, use of food supplements, swaddling, waiting for three prayers for breastfeeding, and giving breast milk to the infant within the scope of the Expanded Immunization Program during the pandemic. In contrast, the independent variables were maternal age, educational level of mothers and fathers, and number of people per household.

SPSS 25.0 package program was used to analyze the data. Variables were analyzed with tests for conformity to normal distribution. Mean, median, standard deviation and minimum-maximum values were used to indicate descriptive statistics. The chi-square test was used in the analysis. The P-value was considered statistically significant when it was below 0.05.

RESULTS

One hundred eighty parents participated in the study. The mean ages of the parents were 29.70 ± 6.43 years (median value 29, minimum 19, maximum 55) and 33.94 ± 7.16 years (median value 33, minimum 20, maximum 65), respectively. The number of children the participants had was at least one and at most 7, and the total number of people per household was at least two and at most 13. On average, children were 21.54 ± 15.13 months old (median value 20, minimum 1, maximum 59). The highest rate of parental education was middle school-high school graduates. This rate was 38.3% for mothers ($n=69$) and 50% for fathers ($n=90$). 46.7% ($n=84$) of the families evaluated their economic status as 'we meet our daily needs.' The sociodemographic characteristics of parents and the number and age of children are summarized in Table 1.

163 (90.6%) of the parents stated that they had their children vaccinated and routinely monitored within the scope of the Expanded Immunization Program during the COVID-19 pandemic. There was no significant difference between the parents' educational level and the vaccination and routine follow-up of

| | | Number (n) | Percentage (%) | Mean±SD |
|--------------------------|---------------------------|------------|----------------|------------------|
| Age of the mother | 18-24 | 45 | 25.0 | 29.7±6.4 years |
| | 25-30 | 64 | 35.6 | |
| | 31-35 | 37 | 20.5 | |
| | 36 and above | 34 | 18.9 | |
| Your father age* | 18-24 | 10 | 5.6 | 33.9±7.2 years |
| | 25-30 | 54 | 30.3 | |
| | 31-35 | 48 | 27.0 | |
| | 36 and above | 66 | 37.1 | |
| Age of children | 0-24 months | 107 | 59.4 | 21.6±15.1 months |
| | 25-48 months | 64 | 35.6 | |
| | 49-59 months | 9 | 5.0 | |
| Number of children | 1 | 56 | 31.1 | |
| | 2 | 42 | 23.3 | |
| | 3 | 36 | 20.0 | |
| | Four and above | 46 | 25.6 | |
| Mother's education level | Illiterate | 9 | 5.0 | |
| | Literate | 13 | 7.2 | |
| | Primary School | 61 | 33.9 | |
| | Middle School/High School | 69 | 38.3 | |
| | University | 28 | 15.6 | |
| Father's education level | Illiterate | 6 | 3.3 | |
| | Literate | 4 | 2.2 | |
| | Primary School | 42 | 23.4 | |
| | Middle School/High School | 90 | 50.0 | |
| | University | 38 | 21.1 | |

Table 1. Sociodemographic characteristics of parents, number and age of children,

*The father of 2 people passed away.

their children within the scope of the Expanded Immunization Program during the pandemic ($p>0.05$).

111 (61.7%) of the participants stated they were afraid to take their children to the hospital when they got sick during the pandemic. 129 (71.7%) reported limiting their children from going to public playgrounds. Regarding the care of their children during the COVID-19 pandemic, 75 (49%) of the parents reported paying more attention to the child's nutrition, and 22 (14.4%) reported giving additional vitamin D. Parents' practices, and reasons for caring for their children during the pandemic are summarized in Table 2.

67.8% ($n=122$) of the participants stated that they had heard of a method other than medication for the treatment of their children when they were ill. Of these methods, 62.8% were herbal tea, 20.6% acupuncture and 10.6% hypnosis.

17.2% ($n=31$) of the parents stated that they used methods other than taking their children to the doctor when they were sick. The most common of these methods was prayer (10.6%).

Thirty percent of parents ($n=54$) reported using supplements for their children. Of these, 14.4% reported using vitamins and 11.1% reported using omega-3. Although mothers with secondary school, high school or university education had higher rates of supplementary food use than illiterate mothers, it was not statistically significant ($p>0.05$). Again, although not statistically significant, it was observed that the rate of supplement use by parents decreased as the number of people per household increased ($p>0.05$).

Alternative treatment methods used/heard by parents are summarized in Table 3.

While 61.1% ($n=110$) of the participants stated that it was correct to swaddle babies, 6.7% ($n=12$) stated that breast milk should not be given to the baby, and 4.4%

| Practices for the care of children during the pandemic | Number (n) | Percentage (%) |
|--------------------------------------------------------|------------|----------------|
| Paying more attention to nutrition | 75 | 41.7 |
| Giving additional vitamin D | 22 | 12.2 |
| Giving additional vitamin C | 16 | 8.9 |
| Giving fish oil | 12 | 6.7 |
| Giving probiotics | 12 | 6.7 |
| Drinking herbal tea | 7 | 3.9 |
| Paying attention to hygiene | 6 | 3.4 |
| Other* | 3 | 1.8 |

Table 2. Practices used by parents for the care of their children during the pandemic

* Calcium supplementation, Propolis, Turmeric-ginger-honey mixture

| Applications | | Number (n) | Percentage (%) |
|-----------------------------|-------------------------------------------------------------------------------------|------------|----------------|
| Commonly heard methods | Herbal tea | 113 | 62.8 |
| | Hot spring, spa | 74 | 41.1 |
| | Massage | 41 | 22.8 |
| | Acupuncture | 37 | 20.6 |
| | Breath therapy | 35 | 19.4 |
| | Yoga/Meditation | 20 | 11.1 |
| | Hypnosis | 19 | 10.6 |
| | Bioenergy | 18 | 10.0 |
| | Aromatherapy | 14 | 7.8 |
| | Treatment with colors | 11 | 6.1 |
| | Reiki energy | 8 | 4.4 |
| Traditional methods applied | Prayer reading | 19 | 10.6 |
| | Applying kohl to your eyes | 7 | 3.9 |
| | Taking to the mausoleum | 4 | 2.2 |
| | Making a mark on the forehead, arm, and leg with the soot from the pot on the stove | 3 | 1.7 |
| | To make the hodja write an amulet | 3 | 1.7 |
| | Taking to a fracture and dislocation doctor | 2 | 1.1 |
| | Lead pouring | 1 | 0.6 |
| Food supplements | Vitamin | 26 | 14.4 |
| | Omega 3 fatty acid | 20 | 11.1 |
| | Probiotic formula/yogurt | 17 | 9.4 |
| | Kefir | 10 | 5.6 |
| | Immunity booster | 9 | 5.0 |
| | Immunex | 1 | 0.6 |

Table 3. Alternative treatment methods used/heard by parents

(n=8) stated that one should wait for three adhan after birth. Mothers under 30 years of age stated that swaddling was correct at a higher rate than older mothers ($p=0.045$). Mothers with a higher level of education reported that it was wrong to wait for three adhans for breastfeeding at a higher rate ($p=0.008$). Mothers with six or more persons per household re-

ported that swaddling, not giving breast milk, and waiting for three adhan for breastfeeding were correct at higher rates than those with 5 or fewer persons per household. However, no statistically significant difference was found ($p=0.530$, $p=0.385$, $p=0.405$, respectively)

Details are given in Tables 4, 5 and 6.

| | | Baby swaddling | | | | | | P |
|--------------|---------|----------------|----------------|------------|----------------|------------|----------------|-------|
| | | True | | False | | No idea | | |
| | | Number (n) | Percentage (%) | Number (n) | Percentage (%) | Number (n) | Percentage (%) | |
| Mother's age | ≤30 yaş | 73 | 67,0 | 22 | 20,2 | 14 | 12,8 | 0,045 |
| | >30 yaş | 37 | 52,1 | 21 | 29,6 | 13 | 18,3 | |

Table 4. Mothers' thoughts on swaddling their babies according to their age

| | | Three adhan must be waited for breastfeeding | | | | | | P |
|------------------------|-----------------------------------------|----------------------------------------------|----------------|------------|----------------|------------|----------------|-------|
| | | True | | False | | No idea | | |
| | | Number (n) | Percentage (%) | Number (n) | Percentage (%) | Number (n) | Percentage (%) | |
| Mother education level | Illiterate | 2 | 22,2 | 4 | 44,4 | 3 | 33,3 | 0,008 |
| | Literate-Primary school | 5 | 6,8 | 45 | 60,8 | 24 | 32,4 | |
| | Secondary School/High School-University | 8 | 4,4 | 123 | 68,3 | 49 | 27,2 | |

Table 5. Mothers' waiting for three adhan for breastfeeding according to their level of education

| | | | Number of persons per household | | P |
|----------------------------------------------|---------|----------------|---------------------------------|------|-------|
| | | | ≤5 | >5 | |
| Baby swaddling | True | Number (n) | 76 | 34 | 0,530 |
| | | Percentage (%) | 60,8 | 61,8 | |
| | False | Number (n) | 28 | 15 | |
| | | Percentage (%) | 22,4 | 27,3 | |
| | No idea | Number (n) | 21 | 6 | |
| | | Percentage (%) | 16,8 | 10,9 | |
| Mouth milk should not be given | True | Number (n) | 7 | 5 | 0,385 |
| | | Percentage (%) | 5,6 | 9,1 | |
| | False | Number (n) | 93 | 43 | |
| | | Percentage (%) | 74,4 | 78,2 | |
| | No idea | Number (n) | 25 | 7 | |
| | | Percentage (%) | 20,0 | 12,7 | |
| Three adhan must be waited for breastfeeding | True | Number (n) | 4 | 4 | 0,405 |
| | | Percentage (%) | 3,2 | 7,3 | |
| | False | Number (n) | 85 | 38 | |
| | | Percentage (%) | 68,0 | 69,1 | |
| | No idea | Number (n) | 36 | 13 | |
| | | Percentage (%) | 28,8 | 23,6 | |

Table 6. Swaddling, breastfeeding and waiting for three adhan for breastfeeding according to the number of people per household

DISCUSSION

In this study, which was conducted to see whether there was a difference in the traditional and complementary medicine methods that parents heard or used for their children during the COVID-19 outbreak period, the mean age of mothers and fathers was 29.70 ± 6.43 years (19-55 years) and 33.94 ± 7.16 years (20-65 years), respectively, the mean number of children the participants had was 2.57 ± 1.49 (1-7) and the mean number of people per household was 4.83 ± 1.78 (2-13). These numbers were similar to a previous study conducted in the Pediatrics Outpatient Clinic of Gaziantep University Faculty of Medicine Hospital [12].

In our study, it was found that the participants most frequently heard of herbal teas (62.8%) among complementary and alternative medicine options. In studies conducted on complementary and alternative medicine at different dates, this rate varies between 71.4% and 82.7% (1,12,13). It is known that herbal products may have side effects and may cause delays or discontinuation of medical treatment. Providing education and counseling services to families on this subject may be useful.

Sociocultural and religious beliefs of the society also impact the use of complementary and alternative medicine options. In this study, 10.6% of the parents stated that they had their children pray when they were ill, in addition to taking them to the doctor. In a study on complementary and alternative medicine conducted at Gazi University Faculty of Medicine in 1999-2001, the rate of using religious methods was 40.8% [14], and 54% [15] in a study conducted in the USA in 2002. A study conducted in 1995 in Israel found that 30% of families used amulets and talismans [16]. A 2015 study conducted in a Neonatal Unit in Spain found that 55.9% of parents recited prayers, 40% believed in magical concepts such as the evil eye, and 26.6% of children were found to have amulets [17]. Religious and magical healing methods have been known and practiced since the beginning of human history [16]. Although these practices psychologically relieve parents, they may delay the medical treatment of diseases.

In our study, 30% of parents reported using supplements for their children. During the COVID-19 pandemic, 85% of participants in a study conducted in Saudi Arabia [18], 70% in a study conducted in Poland [19], and 29.7-41.2% in studies conducted in Turkey were found to use food supplements [20]. Food supplements are most commonly used to improve general health and maintain a healthy state [21]. There has been an increase in the use of food supplements during the COVID-19 pandemic to ensure adequate and balanced nutrition and to increase body resistance [22].

Our study found that mothers whose education level was middle school, high school or university were more likely to use dietary supplements. This may be because these mothers have better access to informa-

tion. Supplementary food use has various benefits and an important disadvantage, such as drug interaction [23]. Therefore, it may be more beneficial to use these supplements consciously and when recommended by a physician.

In our study, 90.6% of parents stated that they had routine vaccination and follow-up of their children during the pandemic. In a study conducted in Colombia, childhood routine vaccination rates decreased by 14.4% between 2019 and 2020 [24]. The decline in routine childhood immunization rates during the COVID-19 pandemic was 13.4% in a study conducted in Gambia, 52.8% in Pakistan and 45.6% in Northern Ghana [25]. Data collected by WHO, UNICEF, Gavi and Sabin Vaccine Institute showed that the quarantine measures in the country significantly prevented the provision of vaccination services in at least 68 low- and middle-income countries and increased the risk of preventable diseases in approximately 80 million children under the age of 1 year [26]. The reason why the rate was found to be high in our study may be the increase in information and normalization due to the passage of time since the outbreak started, the participation of families with a relatively higher level of education compared to the society and the fact that the study site was a university hospital.

4.4% of the families said it was correct to wait for three adhan after birth to breastfeed. In the 2006 study conducted in Tokat, this rate was 20.8% [27]; in the 2008 study conducted in Gaziantep, it was 4.5% (12); and in the 2019 study conducted in Batman, it was 2% [28]. According to TDHS 2008 data, the breastfeeding rate in the first 24 hours after birth is 73.4%, 70% according to TDHS 2013 data, and 86% according to TDHS 2018 data [29]. Late breastfeeding of the child after birth is important in terms of preventing the development of the relationship between mother and baby in the early period, reducing the mother's milk production, and causing various adverse effects such as hypoglycemia in the newborn [30]. In recent years, it has been observed that breastfeeding is initiated earlier after birth. The reason for this may be increased access to accurate information, mothers giving birth in hospitals, easier access to healthcare personnel and incentives for breastfeeding in hospitals.

In our study, mothers with a higher level of education reported that it was wrong to wait for three adhan for breastfeeding at a higher rate. This may be due to the positive effect of maternal education on health literacy.

75.6% of the parents said breast milk should be given to the baby. When we look at the literature, this rate was 88.4% in one study [31] and 69.3% in another study [32]. When we look at the situation in the world, it was observed that women in South Asia did not give colostrum to the baby because they thought that it could not be digested by the baby and was pus-like [33]. Approximately one-third of midwives in Guatemala think that breastfeeding should be postponed for

three days because colostrum is contaminated and may cause diarrhea [34]. In Saudi Arabia, Brazil, Sri Lanka, Pakistan, and India, breastfeeding is also delayed [35]. The reason for the high rate of exclusive breastfeeding in our country, which is a promising finding, maybe the studies conducted in recent years to raise public awareness about the benefits of breast milk, encourage mothers to breastfeed, and increase the number of baby-friendly hospitals.

In our study, 61.1% of the families stated that babies should be swaddled. This rate was 54.5% [36] in a study conducted at Family Health Centers in Diyarbakır and 61% [28] in a study conducted at Batman Maternity and Children's Hospital. The tradition of swaddling is a very common practice in our society. In many studies conducted in our country, it has been observed that mothers mostly swaddle their babies to keep them warm, prevent their legs from crooked, and keep their hands and feet straight [27,32,37]. Swaddling that wraps the legs tightly may cause hip dislocation in infants with a tendency to congenital hip dislocation and may cause the child to feel uncomfortable and restless [38]. However, the traditional technique of swaddling a baby tightly has been greatly reduced in the Western world since the 18th century and replaced by the half swaddle, or safe swaddle. The practice of tying or wrapping the arms not too tightly with the help of a cloth, known as half swaddling, is thought to relax the baby by mimicking the tightness of the uterus.

In our study, it was observed that mothers under the age of 30 swaddled at a higher rate than older mot-

hers. This may be due to the new generation's understanding of half-swaddling.

In our study, those who said that swaddling, not breastfeeding and waiting for three adhan for breastfeeding are correct are more common in families living in larger numbers. This may be due to the fact that family elders also live in crowded families and are influential in the decision-making mechanism.

As a result, parents still resort to traditional practices for their children. In events that affect the whole world, such as COVID-19, mothers are especially concerned about their children. Healthcare professionals should be aware of the cultural practices and religious beliefs of the communities they live in and provide accurate and continuous information to parents about how they should behave for the health of their children, especially in the event of an outbreak. This study, which evaluated the possibility of situations such as uncertainty about the disease during the COVID-19 outbreak, lack of information, parents' turning to traditional practices, and hesitation in applying to the physician due to the policies implemented to prevent the outbreak, was found that these were not very effective. The reason for this may be that the study was conducted in a university hospital, families with a relatively higher level of education than the general population participated in the study, and the increase in knowledge and normalization occurred due to the passage of time since the outbreak began.

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