



Knowledge, Attitudes and Behaviors of Parents of Healthcare Workers Towards Rotavirus Vaccination in Turkey

Türkiye'de Sağlık Çalışanı Ebeveynlerin Rotavirüs Aşılmasına Yönelik Bilgi, Tutum ve Davranışları

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Abstract

Aim: This study aims to reveal what parents with children under the age of five working in health services in Turkey know, what they think, and what their attitudes and behaviors are about the rotavirus (RV) vaccine, RV infection, and RV vaccination rates.

Material and Method: The 'Demographic Characteristics Questionnaire' and the 'RV Information/Vaccination Status Survey' both online surveys, were the two main tools used in this descriptive study, which involved 1317 willing participants who were parents of healthcare workers and was conducted between December 1, 2021, and May 1, 2022. The first focused on gathering crucial demographic information, while the second examined participant knowledge, attitudes, and behaviors related to rotavirus and its vaccination.

Results: The mean age of participants was 33.76±5.28 years. Of the participants, 70.3% were women, 47.3% were doctors, and 90.9% had a university or higher education level. 91.% stated that their children do not have any chronic disease and it was determined that 94.2% of them had their children regularly vaccinated with childhood vaccines. The RV vaccination rate was 55.6%, and 60.9% stated that their children had no previous RV infection. Of those who were infected with RV, 38.3% were hospitalized and treated. 85.2% of those with RV-infected children had no RV vaccine, and the reason why they did not have the vaccine was its high cost.

Conclusions: This finding emphasizes how crucial it is to remove financial obstacles and improve accessibility to guarantee broader access to necessary vaccines, including the RV vaccine, to protect public health.

Keywords: Rotavirus, child, vaccine, parents, awareness, attitude and behavior

Öz

Amaç: Bu çalışmanın amacı, Türkiye'de sağlık hizmetlerinde çalışan beş yaş altı çocuğu olan ebeveynlerin rotavirüs (RV) aşısı, RV enfeksiyonu ve RV aşılama oranları hakkında ne bildiklerini, ne düşündüklerini ve nasıl bir tutum ve davranış içerisinde olduklarını ortaya çıkarmaktır.

Gereç ve Yöntem: Her ikisi de çevrimiçi anket olan 'Demografik Özellikler Anketi' ve 'RV Bilgi/Aşı Durum Anketi', sağlık çalışanlarının ebeveynleri olan 1317 gönüllü katılımcının dahil edildiği bu tanımlayıcı çalışmada iki ana veri toplama aracı olarak kullanıldı. Çalışma 1 Aralık 2021 ile 1 Mayıs 2022 arasında yürütüldü. İlk önemli demografik bilgilerin toplanmasına odaklanırken, ikincisi katılımcıların rotavirüs ve aşısına ilişkin bilgi, tutum ve davranışlarını inceledi.

Bulgular: Katılımcıların yaş ortalaması 33,76±5,28 yıl idi. Katılımcıların %70,3'si kadın, %47,3'u doktor ve %90,9'u üniversite ve üzeri eğitim seviyesine sahipti. Katılımcıların %91,1'i çocuklarında herhangi bir kronik hastalığın bulunmadığını belirtirken, %94,2'sinin çocuklarına düzenli olarak çocukluk çağı aşılarını yaptırdıkları belirlendi. RV aşılama oranı %55,6 olup, %60,9'ı çocuklarının daha önce RV enfeksiyonu geçirmediğini belirtmiştir. RV enfeksiyonuna yakalananların %38,3'si hastaneye kaldırılarak tedavi altına alındı. RV enfeksiyonu olan çocukların %85,2'unun RV aşısı olmadığı, aşı yaptırmamalarının nedeni ise maliyetinin yüksek olduğu görüldü.

Sonuç: Bu bulgular, halk sağlığını korumak için RV aşısı da dahil olmak üzere gerekli aşılarla daha geniş erişimi garanti altına almak için finansal engelleri kaldırmanın ve erişilebilirliği artırmanın ne kadar önemli olduğunu vurgulamaktadır.

Anahtar Kelimeler: Rotavirus, çocuk, aşı, ebeveynler, farkındalık, tutum ve davranış



INTRODUCTION

Childhood vaccination programs are the most effective practices carried out to protect and improve health in children, reduce child mortality and maintain public health for older ages.^[1,2] The Rotavirus (RV) is one of the leading causes of gastroenteritis in children aged up to 5 years.^[3] Globally, the RV infection incidence rate was reported as 5-25% in the United States of America (USA), 20-40% in Europe, 30-50% in Asia, and 10-65% in Africa. In studies from Turkey, The RV infection incidence has been reported as 9.8-39.8%.^[4-6] In times when the RV vaccine was not mandatory or inadequate, RV disease and death rates were around 453.000.^[7] With increasing RV vaccination coverage rates and awareness, this rate has fallen to 128.500-146.000.^[6,7] In terms of global rates, in its 2016 report the World Health Organization (WHO) stated that 528.000 mortality due to RV in 2000 declined to 215.000 in 2013.^[8,9] WHO has recommended vaccination against RV in all national immunization programs since 2009 and reported that RV vaccination is an indication of a country's level of development.^[7,11-13] RV vaccine has been placed in the routine vaccination schedule in the USA, South Africa, Australia, Finland, 5 countries from the Middle East, and 4 countries from Europe. One other point is that children going to communal living spaces like kindergartens or nursing homes and hospitalized children are at risk of the disease.^[7,8,10-13]

Turkey has low vaccination rates because it is a non-mandatory vaccine. As an important healthcare problem, the reasons for these low vaccination rates against RV disease were parents' doubt about the vaccine, its being non-mandatory, lack of accurate information and practice and most important of all the fact that it is not free. In the literature, there have been many regional studies in Turkey, but there has not been a study performed across Turkey.^[5,6] This study aims to reveal what parents with children under the age of five working in health services in Turkey know, what they think, and what their attitudes and behaviors are about the rotavirus (RV) vaccine, RV infection, and RV vaccination rates.

MATERIAL AND METHOD

Study Design and Objectives

This study was performed in a cross-sectional descriptive type.

Study Universe and Sampling

The population of the study consisted of parents who had children under the age of five and were healthcare professionals. Individuals who met these criteria and voluntarily agreed to participate verbally and in writing were included in the study. The study was conducted with a total of 1317 parents with children under 5 years old.

Data Collection

The study's data was obtained from an online survey performed between December 1, 2021, and April 30, 2022, online on social media (WhatsApp, Telegram, Facebook, and

Twitter). The Demographic Characteristics Questionnaire and The RV Information/Vaccination Status Survey were used to collect data. Surveys were prepared through Google Forms and submitted to participants online.

Data Collecting Tools

Demographic Characteristics Questionnaire: It was formed by examiners in parallel to the literature.^[13,14] Eight questions about participants' demographic characteristics (age, sex, education, marital status, monthly income, study year) and the number of children up to 5 years of age were included.

The RV Information/Vaccination Status Survey: This survey includes 19 questions. Number of children, the presence of chronic disease in children, the number and causes of hospital admission, and their information and attitudes about the RV disease and its vaccine.^[6,15-18]

Ethics Committee Approval: Our study was approved by Ethics Committee with 21/13-1 and E.1342 decision and document numbers, respectively. The students who agreed to participate in the study were informed that the purpose of the study and personal information will be kept confidential, participation is in line with the principle of volunteering, and their permission was obtained. In the study, the principles of the Helsinki Declaration were followed.

Statistical Analysis

Data were analyzed with the SPSS 22 package program (IBM Corp. Released 2013. IBM SPSS Statistics for Windows, Version 22.0. Armonk, NY: IBM Corp.). The age analysis of 1317 people was presented as means and standard deviation; answers to questions about sex, marital status, occupation, working time, educational status, monthly income, and other demographic characteristics and information and attitudes about the RV infection and vaccine were presented as percent and frequency distribution. The Chi-square test was used to detect a statistical relationship between occupation, educational status, monthly income, the status of children's RV vaccination and vaccine dose, and history of the RV infection. The Chi-square test was used to analyze any statistical relationship between whether a vaccine was implemented and the need for outpatient and inpatient treatment after contracting the RV. A p-value of <0.05 is considered statistically significant.

RESULTS

The study's participants had an average age of 33.76±5.28 years. In this study, 70.3% of the participants were women, 47.3% were doctors, and 97.1% were married. In addition, 49.9% of the participants stated that they had worked for more than ten years. A high percentage of the participants (90.9%) had a university degree or higher. About forty-one percent of participants reported having a monthly income of at least 10,000 Turkish Lira (TL). Additionally, 77.5% of individuals had one child, while 22.2% had two children under the age of five. **Table 1** provides a thorough description of these demographic factors.

Table 1. Distribution of demographic characteristics

Age		
Mean±Standard deviation (years)	33,76±5,28	
	Number	Percent
Sex (n=1314)		
Women	924	70.3%
Men	390	29.7%
Occupation (n=1373) (more than one option can be selected)		
Doctor	620	47.3%
Academician	103	7.9%
Nurse/midwife/EMT	588	44.9%
Lab tech/rad tech	23	1.8%
Dietitian/physiotherapist	12	0.9%
Medical Secretary	27	2.1%
Marital status (n=1317)		
Married	1276	97.1%
Other	38	2.9%
Working Year (n=1317)		
<1 year	13	0.9%
1-5 years	189	14.4%
6-9 years	457	34.7%
>10 years	658	49.9%
Educational status (n=1317)		
High school and/or under	120	9.1%
University and/or over	1197	90.9%
Monthly income (n=1310)		
≤5000TL	49	3.7%
5001-7500TL	497	37.9%
7501-10000TL	223	17.0%
≥10001TL	541	41.3%
No children aged <5 years (n=1317)		
1	1021	77.5%
2	292	22.2%
4	4	0.3%
Owning children aged <1 year (n= 1313)		
Absent	1040	79.2%
Present	273	20.8%

A total of 91.1% of participants stated that their children do not have a chronic disease, and 94.2% said they had their children regularly vaccinated with childhood vaccines. In the current, 83.1% of mothers made vaccine follow-ups, 92.3% did not give frequent hospital admissions and 96.9% knew about the RV. About forty-three of the participants did not get any education on RV infection, 60.1% had enough information about RV infection and 60.9% said that their children did not get RV infection. In addition, 61.7% of RV-infected children took outpatient treatment, 38.3% were hospitalized, and 85.2% of the RV-infected children were not vaccinated against the RV. However, %95.8 knew about the RV vaccine, 48.4% were not educated about the RV vaccine and 55.6% had their children vaccinated against RV. Furthermore, 45.4% of participants had 2 doses of vaccine, 44.3% stated that they followed instructions of the RT Ministry of Health about the RV vaccine and 43.6% followed instructions of the World Health Organization. In this study, 75.9% knew that the RV vaccine is not mandatory

in Turkey; 66.9% thought that the RV infection might cause life-threatening complications in children and 64.5% of the reasons for not getting the vaccine was its high cost. The distribution of answers to the rest of the survey questions given by participants are presented in **Table 2**.

Table 2. Distribution of Responses to Survey Questions

	Number	Percent
Child/children's chronic disease (n=1307)		
No	1190	91.1%
Yes	117	8.9%
Children regularly vaccinated with childhood vaccines (n=1314)		
No	35	2.7%
Yes	1238	94.2%
Not remember	41	3.1%
The child's history of frequent hospitalizations (n=1314)		
No	1213	92.3%
Yes	101	7.7%
The person who follows vaccination (n=1314)		
Mother	1092	83.1%
Mother and father	27	2.1%
Father	161	12.3%
Family physician/nurse/midwife	29	2.2%
Nursemaid	5	0.4%
Information about RV (n=1317)		
No	40	3.1%
Yes	1277	96.9%
Status of RV infection (n=1317)		
No	802	60.9%
Yes	162	12.3%
Not remember	353	26.8%
Mode of RV infection treatment (n=162)		
Outpatient	100	61.7%
Inpatient	62	38.3%
Intensive care		0%
The RV vaccination status of child/children with RV infection (n=162)		
No	138	%85,2
Yes	24	%14,8
Thinking that information about RV infection is enough (n=1317)		
No	314	23.8%
Yes	792	60.1%
Uncertain	211	16.1%
Education on RV infection (n=1317)		
No	572	43.4%
Yes	581	44.1%
Not know/not remember	164	12.5%
Awareness about the RV vaccine (n=1317)		
Yes	1262	95.8%
Not know/not remember	55	4.2%
Education on RV vaccine (n=1317)		
No	638	48.4%
Yes	516	39.2%
Not know/not remember	163	12.4%
Child/Children vaccinated against RV (n=1317)		
No	525	39.9%
Yes	732	55.6%
Not know/not remember	60	4.5%

Table 2. Distribution of Responses to Survey Questions (Cont...)

	Number	Percent
No of RV vaccine doses (n=1317)		
0 dose	525	39.9%
1 dose	96	7.3%
2 doses	598	45.4%
3 doses	38	2.9%
not remember	60	4.5%
Following RT Ministry of Health data/ recommendations on RV vaccine (n=1317)		
Not follow	734	55.7%
Follow	583	44.3%
Following World Health Organization data/recommendations on RV vaccine (n=1317)		
Not follow	743	56.4%
Follow	574	43.6%
Knowing that RV vaccine is not mandatory in Turkey (n=1307)		
No	41	3.1%
Yes	999	75.9%
Indecisive	277	21.0%
Thinking that RV infection causes life-threatening/severe complications in children (n=1317)		
No	123	9.3%
Yes	881	66.9%
Indecisive	313	23.8%
Reason for not getting the vaccine (n=569)		
Vaccine not free	367	64.5%
Hesitancy about vaccine's efficacy	124	21.8%
Fear of vaccine's side effects	63	11.1%
Not have time for a vaccine	15	2.6%

There was a statistically significant relationship between occupation ($p=0.002$), monthly income ($p=0.017$), vaccine doses received by children ($p=0.032$), and whether children were infected with the RV. On the other hand, no statistically significant relationship was found between participants' educational status ($p=0.115$) whether parents had their children vaccinated against RV ($p=0.365$), and whether children were infected with the RV. There was a statistically significant relationship between whether participants had their children inoculated with the vaccine and the type of treatment ($p < 0.001$). Evaluation of the relationship between having a RV infection and occupation, educational status, monthly income, status of vaccination, and vaccine dose are presented. Parents' employment status, income status and associated rotavirus vaccination status, and number of doses administered are presented in **Table 3**.

DISCUSSION

The study participants' demographic profile offers important context for comprehending the variables influencing parental RV vaccine coverage among Turkish healthcare workers' children. These demographic characteristics shed light on the profile of the healthcare worker parents participating in the study and show that they are well-educated, mostly married and wealthy.

The findings of our study revealed that a sizable majority of participants (94.2%) adhered to routine immunization protocols for their children, including receiving their typical childhood vaccines. Unexpectedly, since the vaccine is not in our country's routine vaccination program and is a paid vaccine, these findings are consistent with recent scientific studies on related subjects. The study carried out by Odabaş and Kuzlu Ayyıldız in 2020^[19] reported a nearly identical vaccination rate of 95.5% among parents, covering both routine and required vaccines. Similar to what was stated above, Üzümlü et al.'s study on relatives of patients who applied to the pediatric outpatient clinic reported a high compliance rate, with 94% of parents ensuring regular and routine vaccinations for their children.^[20] The general homogeneity of our study's findings with the literature, despite some reported rates having varied, highlights the strength of the trend toward widespread routine child immunization.^[19,20]

According to the findings from this study, 12.3% of children had RV infection. This rate is within the range of 14–62% recorded worldwide, highlighting the significant variation in RV incidence rates between various countries.^[21–24] Regarding RV prevalence in children, our study's findings are consistent with those found in the literature.^[25,26] These reported variations in RV infection rates can be related to several variables, including regional, climatic, and socioeconomic changes as well as differences in healthcare practices and vaccine coverage among communities.^[21,22]

When the findings of the study were evaluated, it was determined that 96.9% of the parents had high awareness about RV infection and vaccines. This level of awareness is higher than previous academic articles on the subject. For example, in the research conducted by Odabaş and Kuzlu Ayyıldız^[19] in 2020, 57.6% of parents showed that they were knowledgeable about Caravans. Additionally, in Çoklar and Güner's study^[25] on childhood vaccinations, 24.6% of the participants were aware of the RV vaccine and its cost. It is thought that this high rate is due to the fact that the parents included in the study are healthcare professionals.

The RV vaccination rate in our study was 55.6%. This rate indicates that the vaccination rate is at a moderate level. However, in other studies vaccination rate has been lower. In their study among parents in 2020, Barutçu et al reported that only 27.7% of parents had their children vaccinated against RV.^[6] In a similar study by Kaçmaz Eru et al. in 2016, it was reported that 29% of participants were aware of the RV vaccine, however, due to a lack of confidence in the vaccine and its non-mandatory nature only 7% had the RV vaccine.^[15] In a study conducted with parents from Italy; 40.7% reported that they heard about RV infection however, only 15.3% had their children vaccinated.^[18] In this study, the higher RV vaccination rate compared to the literature is considered a positive development. This positive situation obtained in the study can be explained by the fact that the participating parents are healthcare professionals and vaccination awareness has increased in recent years.

Table 3. Parent's employment status, income status, and associated rotavirus vaccination status and number of doses administered and evaluation of the relationship between having a RV infection and occupation, educational status, monthly income, status of vaccination, and vaccine dose

		Test statistics	Degree of freedom (df)		P value
Occupation		17.844 (Fisher's Exact)			0.002
Educational status		2.482 (Yates Chi-square)	1		0.115
Monthly income		10.251 (Pearson Chi-square)	3		0.017
Vaccine status		0.820 (Pearson Chi-square)	1		0.365
Vaccine dose		6.906 (Pearson Chi-square)	2		0.032
		The RV Infection			
			No RV infection	History of RV infection	Total
Occupation	Doctor	No	444	85	529
		Percent	83.9%	16.1%	100.0%
	Academician	No	81	16	97
		Percent	83.5%	16.5%	100.0%
	Nurse/midwife/EMT	No	243	45	288
		Percent	84.4%	15.6%	100.0%
	Lab tech/rad tech	No	0	4	4
		Percent	0.0%	100.0%	100.0%
	Dietitian/physiotherapist	No	8	0	8
		Percent	100.0%	0.0%	100.0%
	Medical Secretary	No	12	6	18
		Percent	66.7%	33.3%	100.0%
	Total	No	788	156	944
		Percent	83.5%	16.5%	100.0%
Monthly income and RV infection					
Monthly income					
≤5000TL	No	29	11	40	
	Percent	72.5%	27.5%	100.0%	
5001-7500TL	No	208	43	251	
	Percent	82.9%	17.1%	100.0%	
7501-10000TL	No	178	20	198	
	Percent	89.9%	10.1%	100.0%	
>10001 TL	No	372	82	454	
	Percent	81.9%	18.1%	100.0%	
	No	787	156	943	
	Percent	83.5%	16.5%	100.0%	
The RV vaccine dose and RV infection					
The RV vaccine dose					
1.00	No	73	15	88	
	Percent	83.0%	17.0%	100.0%	
	% Total	10.7%	2.2%	12.9%	
2.00	No	465	92	557	
	Percent	83.5%	16.5%	100.0%	
	% Total	68.4%	13.5%	81.9%	
3.00	No	35	0	35	
	Percent	100.0%	0.0%	100.0%	
	% Total	5.1%	0.0%	5.1%	
Total	Count	573	107	680	
	% within the RV vaccine dose	84.3%	15.7%	100.0%	
	% Total	84.3%	15.7%	100.0%	
The RV Treatment Mode					
The RV vaccine					
No Vaccine	No	17	32	49	
	Percent	34.7%	65.3%	100.0%	
Vaccinated	No	77	30	107	
	Percent	72.0%	28.0%	100.0%	
Total	No	94	62	156	
	Percent	60.3%	39.7%	100.0%	

*TL: Turkish liras

In our study, it was detected that 85.2% of children had RV infection history, who had not been vaccinated against RV. This finding indicated the vaccine's efficacy. When the study findings were compared with the literature, some similar studies were found. In the Kaçmaz Ersu et al. study, it was reported that 93% of those who had RV were not vaccinated against RV.^[15] When the literature was reviewed, the reasons for parents not having the RV vaccine were lack of information, the cost, the side effects, and the non-mandatory nature of the vaccine. In Odabaş and Kuzlu Ayyıldız,^[19] it was reported that the first three reasons why parents did not have the RV vaccine were lack of information about the vaccine, mistrust in the vaccine, and side effects. When parents of unvaccinated children were asked "the reasons for not getting the RV vaccine", 80.3% said they did not hear and know about the vaccine. In many studies, the important reason has been the cost of the vaccine.^[14,21] In a similar study (Hasar et al. 2023), 59% of the participants stated the reason for parents' refusal of vaccination as "Vaccines are safe" "I do not think there are side effects/I am worried" (96.7%), while 53 parents stated "Negative information about vaccines" "There is," he said. "From the media" (86.9%). Approximately 64% of the participants stated that the reason for not getting vaccinated was the high cost. One of the most important findings of the same research was that approximately 64 percent of the participants stated the high cost as the reason for not getting vaccinated.^[27] In the current study, a comprehensive analysis was conducted to see if there was a link between the respondents' level of education and history of RV infection in children. In the statistical study, no statistically significant relationship was found between the education level of the participants and whether their children had rotavirus infection or not. There are contrary studies in the literature. The results of the study conducted by Apa et al. revealed a positive relationship between socioeconomic status in terms of educational status and level and vaccination uptake.^[26] According to the results of the study, there was no statistically significant relationship between the participants' education level and whether their children had rotavirus infection. In the literature, there are studies that show similarities with the findings of the study, as well as studies that report contrary results. The degree of education a mother had was also found to be significantly correlated with her children's vaccination rates in earlier studies that evaluated maternal educational status and vaccine knowledge.^[27,28] Additionally, numerous studies have repeatedly shown that parental education is a strong predictor of vaccine compliance.^[19,20,28-30] This is especially true for parents with less education. These cumulative research findings highlight the important role that socioeconomic and educational factors play in vaccine compliance and uptake. Higher levels of education are thought to be favorable to improved vaccine acceptability, which is further supported by the positive association between educational status and vaccination rates that Apa et al.'s study^[26] found. Similar to this, the findings that are

consistent across numerous studies evaluating the impact of maternal education on vaccination rates emphasize the significance of health literacy and awareness in influencing immunization decisions.^[19,20,28,30]

According to the study findings, there was a statistically significant relationship between the monthly income of the participants and whether the children had RV infection. There are parallel and controversial studies in the literature. In a similar study by Çıklar and Döner Güler, it was reported that age and monthly income do not affect the paid vaccination rate.^[25] In a similar study by Kaçmaz Ersu et al., any significant relationship between participants' income and infection rate was not reported.^[15] However, in a study Gencer et al. performed with parents in 2015, it was reported that household income and non-routine and paid vaccination rates are parallel.^[28] In many international studies, it was reported that misinformation of families about vaccines, resistance to vaccines, household income, and distrust of the vaccine negatively affect the vaccination rate. Therefore, it is emphasized that, from time to time, eradicated disease might cause epidemics.^[31-35]

An important finding of the study was that there was a statistically significant relationship between the occupation of the participants and whether their children had rotavirus infection. The literature is similar to this finding. When the studies are examined, educational status and occupation with occupation positively affect the vaccination rate. This finding can be explained by the fact that the participant parents are health professionals.^[19,20,26,28,29]

The kid vaccination rate in this comprehensive epidemiological study conducted throughout Turkey was determined to be 94.2%, indicating a reassuringly high level of immunization coverage. The percentage was significantly lower at 55.6% for the RV vaccine, though. It was determined that the RV vaccine's expensive price, which posed a significant barrier for many families, was a major contributing factor in children's inadequate uptake of the vaccination.

Rotavirus incidence rate and age of incidence vary from time to time. In the study conducted by Taşkın Dalgıç et al. age and incidence before and after the Covid 19 pandemic were found to be different. This situation shows that the disease and vaccination should be kept up-to-date in children under 5 years of age.^[37]

In the study limitations: The study has two important limitations. First, the data obtained from the study are based only on the opinions of individuals who voluntarily participated in the study, and the results cannot be generalized to the population.

CONCLUSION

Implementing targeted educational campaigns, improving vaccine accessibility, and addressing potential immunization barriers will help maintain high vaccination rates and

build public health defenses against preventable diseases. Further investigation into the factors influencing vaccination behaviors in different communities can also aid in better understanding the complexities involved and direct evidence-based solutions to increase vaccine acceptance and compliance among parents and caregivers. To sum up, we may work to close the immunization gap and increase the RV vaccination rate in our nation by creating and enacting health policies that include the RV vaccine in routine pediatric vaccination practices or provide it free of charge. A population that is healthier and more resistant to the burden of RV-related diseases will be created as a result of such proactive actions, which will not only protect the health of particular children but also strengthen herd immunity.

ETHICAL DECLARATIONS

Ethics Committee Approval: The current study was approved by Ethics Committee of Bitlis Eren University (date: 10.11.2021, session no: 21/13-1, decision no: E.1342).

Informed Consent: Informed consent was obtained from all individual participants in present study.

Referee Evaluation Process: Externally peer-reviewed.

Conflict of Interest Statement: The authors have no conflicts of interest to declare.

Financial Disclosure: The authors declared that this study has received no financial support.

Author Contributions: All of the authors declare that they have all participated in the design, execution, and analysis of the paper, and that they have approved the final version.

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