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Determining the Fear of COVID-19 in Parents and Affecting Factors

Ebeveynlerde COVID-19 Korkusu ve Etkileyen Faktörlerin Belirlenmesi

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ABSTRACT

Aim: *This research was conducted to determine the fear of COVID-19 in parents during the pandemic and the factors affecting it.*

Material and Method: *This research is both a descriptive and cross-sectional study. The research was conducted with parents (both health personnel and not) inhabiting Erzurum. The sample group was determined by the smallest sampling method calculation formula and 511 parents were reached. "Introductory Information Form" and "COVID-19 Fear Scale," were used as data collection tools in the study.*

Results: *COVID-19 fear level of parents who had low income and sent their children to kindergartens/daycares was substantially high. The levels of COVID-19 fear in parents are on average.*

Conclusion: *According to the findings of the research, it was determined that the parents' COVID-19 fear levels are average. The COVID-19 fear level of parents who had low income and sent their children to kindergartens/daycares was substantially high. Besides, COVID-19-related fear affected the habit of going out and the life qualities of parents. The increased COVID-19 fear level has its negative share considering children, parents, and social background; therefore, every activity that can help social and mental health should be supported.*

Keywords: *COVID-19, Parents, Fear, Factors Affecting the fear*

ÖZET

Amaç: *Bu araştırma, pandemi sürecinde ebeveynlerde COVID-19 korkusunu ve etkileyen faktörleri belirlemek amacıyla yapılmıştır.*

Gereç ve Yöntem: *Bu araştırma hem tanımlayıcı hem de kesitsel bir araştırmadır. Araştırma, Erzurum'da ikamet eden ebeveynler (sağlık personeli olan ve olmayan) ile gerçekleştirilmiştir. Örneklem grubu en küçük örnekleme yöntemi hesaplama formülü ile belirlenmiş ve 511 ebeveyne ulaşılmıştır. Araştırmada veri toplama aracı olarak "Tanıtıcı Bilgi Formu" ve "COVID-19 Korku Ölçeği" kullanılmıştır.*

Bulgular: *Düşük gelirli ve çocuklarını anaokuluna/kreşe gönderen ebeveynlerin COVID-19 korku düzeyi oldukça yüksekti. Ebeveynlerde COVID-19 korku düzeyleri ortalama düzeydeydi.*

Sonuç: *Araştırma bulgularına göre ebeveynlerin COVID-19 korku düzeylerinin ortalama seviyede olduğu tespit edilmiştir. Düşük gelire sahip olan ve çocuklarını anaokullarına/gündüz bakımevlerine gönderen ebeveynlerin COVID-19 korku düzeyi oldukça yüksektir. Ayrıca, COVID-19 kaynaklı korku ebeveynlerin dışarı çıkma alışkanlıklarını ve yaşam kalitelerini etkilemiştir. Artan COVID-19 korku düzeyi, çocuklar, ebeveynler ve sosyal geçmiş dikkate alındığında olumsuz bir paya sahiptir; bu nedenle sosyal ve ruh sağlığına yardımcı olabilecek her türlü aktivite desteklenmelidir.*

Anahtar Kelimeler*: COVID-19, Ebeveynler, Korku, Korkuyu etkileyen faktörler*

GİRİŞ

COVID-19 emerged in China and then rapidly spread to several countries, which was eventually declared a global pandemic (Bao, Sun, Meng, Shi & Lu, 2020; WHO, 2020). Initial research reports linked the spread of COVID-19 from the livestock market in Wuhan City, China, shortly after it was reported that human strain viruses may be associated with bats. (Li et al., 2020). The COVID-19 transmission reached our country and the whole world and brought many new experiences with it (Duman, 2020). Over 75 million confirmed cases were registered, and nearly 2 million deaths were confirmed worldwide. In Turkey, the number of COVID-19-related cases was approximately 2.5 million, and confirmed deaths were nearly about 2.5 million (Republic of Turkey Ministry of Health Directorate General of Public Health, 2020). Despite prolonged research, currently used treatment methods are not standard, and vaccine studies are in progress.

The COVID-19 outbreak causes a significant increase in global anxiety and stress (Garfin, Silver & Holman, 2020). Uncertainty about when the infection period will be over becomes unclear among us about protecting our family and loved ones, and socio-economic challenges can cause anxiety and stress to occur (Çiçek & Almalı, 2020). However, people who were immune to COVID-19 have reported being to communicate with others who are infected (Lin, 2020).

Feelings such as anxiety and fear toward our family loved ones, community, and other people are accepted as usual to a certain degree (The Ministry of Education, 2020). However, extreme fear of COVID-19 may cause irrational and unstable behaviors (Ahorsu et al., 2020). To avoid severe mental health problems such as suicide caused by an extreme sense of COVID-19 fear, studying the precaution strategies is necessary (Mamun & Griffiths, 2020).

During the COVID-19 pandemic in which many obstacles were experienced, it is inevitable for parents who spend their entire time for the reason of physical and social isolation to reflect their emotions on their children (Mazza et al., 2020). As it is the same with adults, children indeed are affected dramatically by the outbreak too. It is vital to understand children's actions, feelings and needs correctly during the pandemic (Jiao et al., 2020). It is known that parents, who display behaviors of over-anxiety, panic, and fear can cause the same feelings in their children (Orgilés, Morales, Delvecchio, Mazzeschi & Espada, 2020). Reflection of such behaviors can cause permanent damage to their children (Ghosh, Dubey, Chatterjee & Dubey, 2020). Briefly, parents' emotions and reactions during a pandemic are crucial for both their and children's mental health (Orgilés, Morales, Delvecchio, Mazzeschi & Espada, 2020). Pediatric nurses who embrace family-centered care strongly acknowledge that the family is essential for the child's recovery and plays an important role in meeting the child's physical, emotional and spiritual needs. However, it is reported that the COVID-19 pandemic process disrupts the family-centered care provision process and psychosocial care of the child health professional team. Nurses should be aware of the feelings of children and families during the COVID-19 pandemic, know the psychosocial needs of children and families as well as physical care, evaluate them holistically and include them in the nursing process (Demir Acar & Çiftçi Ünal, 2022).

This study aimed to determine the fear of COVID-19 and affecting factors in parents during the pandemic process.

Research Questions

1. Is there a fear of COVID-19 in parents?
2. If there is, then what level is it?
3. What are the factors affecting the COVID-19 fear level of parents?

MATERIAL AND METHOD

Research Type

In this descriptive and cross-sectional study, parents were contacted and a data collection procedure was arranged.

Study Population and Sample

The research was carried out in Erzurum province and conducted from July 15 to August 31, 2020, with parents (both health personnel and not) inhabiting Erzurum. For the purposes set out by official institution statistics, population size was determined. In this study, the sample size was estimated using a sample size equation for a known population (N=1600). In the study, the smallest sample size calculated with the formula $n= [(N.\sigma 2.Z2\alpha/2) / d2.(N-1) + \sigma 2.Z2\alpha/2]$ was determined as 310 with 95% confidence interval.

A sufficient sample size was reached in the study (n=511). Nonprobability sampling (convenience sampling) was adopted for the study as it requires much less time and effort, and supports cost minimization. An unrestricted, self-selected survey which is a trending form of convenience sampling was applied (Taşdemir & Ergül, 2015).

This was through creating an e-survey link that was simply publicized and promoted via social media platforms; hence it was left up to each individual to choose to participate in the survey. Parents, who were willingly participating in the research, have kids, and are literate been included in the research. Regarding fulfilling the research data, 10 to 15 minutes of spare time were given to each parent.

Data Collection Tools

The data was collected with the help of the "Introductory Information Form" and "COVID-19 Fear Scale," which came up as a result of the literature review.

Introductory Information Form: This form was prepared by researchers at the end of a thorough literature analysis consisted of 15 questions (Ahorsu et al., 2020; Satici, Gocet Tekin, Deniz & Satici, 2020; Mazza et al., 2020). Of the 15 questions, 11 are related to socio-demographic features such as parent-child closeness, age, education, job, number of children, residential address, income level, and position of sending children either kindergarten or daycare. The other four questions respectively involved leaving home, COVID-19 infection, life quality affection, and smoking status, which determined the pandemic's effect on parents.

COVID-19 Fear Scale: COVID-19 Fear Scale, developed by Ahorsu et al. (2020), has its Turkish version, validity, and reliability adapted by Satıcı et al. (2020) (Ahorsu et al., 2020; Satici et al., 2020). The scale has an inventory of 7 items, and these items were scored positively. Questions were scored according to difficulty parameters using 5-point Likert Style. Scoring is 1: "strongly disagree", 2: "disagree", 3: "neither agree nor disagree", 4: "agree", 5: "strongly agree". There was no reverse scoring of items on the scale. The least score was seven, and the maximum score was 35 on the scale. Getting high scores on the scale means a high level of COVID-19 pandemic fear. Within the Turkish reliability and validity work, the Cronbach coefficient was found as 0.82. In this research, however, Cronbach's Alpha value was 0.88 with good internal consistency.

Data Collection

The data was collected between July 01 and August 31, 2020. The tools used were conveyed to parents in an online platform with a data collection link created over Google forms. Decoding of the questionnaire and iterative interferences were restricted. In this study, filling the Introductory Information Form and COVID-19 Fear Scale almost took 10 to 15 minutes.

Ethical Consideration

Ethics approval was obtained from research ethics committee (Date: 24.06.2020 and Approval no: 2020/9) and written permission from the Scientific Research Platform of the Turkish Ministry of Health. The research was conducted in accordance with Helsinki Declaration. Both scientific and universal principles were followed. At the same time, necessary permissions were obtained from authors who conducted the research's validity and reliability. Voluntary informed consent was received from parents in an online procedure.

Data Analysis

Research data were analyzed using IBM SPSS 23.0. Data were in 95% confidence interval and accepted statistically significant at p-value <0.05. The normal distribution of scales was assessed by the Shapiro-Wilk test. Within the research, descriptive statistics and nonparametric analyses (Kruskal-Wallis and Mann-Whitney U) were performed.

RESULTS

When parents' defining features were looked upon, it was realized that predominant participants were mothers (74.6%) between the ages of 31-39 (40.7%). Mothers with a university degree and above were 67.5%, and they were employed with 58.5%. A share of 25.4% of participants were fathers, and 46.9% were 40 years old and above with a university and above degree (69.2%). The employment status of fathers was "employed" with 93.1%.

Parents who were admitted to the research had single children with a ratio of 40.3%. Their residential places were mostly in the city center (68.5%), perception of income level was income=outcome (56.9%) and the choice to send children to either kindergarten or daycare was 29.4%. Due to the examination of the

demographic characteristics for COVID-19 fear levels, there was a significant difference in COVID-19 Fear Scale scores for parent-child closeness level (p≤0.001), income level (p≤0.005), sending children either kindergarten or daycare (p≤0.001) (Table 1).

Table 1. Socio-Demographic Profiles According to COVID-19 Fear Levels (N=511)

Characteristics	n	%	Mean ± SD	Median (Min-Max)	Test & p
Parent-Child Closeness					
Mother	381	74.6	19.69 ± 7.03	19.00(7.00-35.00)	U=18434.500
Father	130	25.4	16.58 ± 6.66	16.00 (7.00-32.00)	**p=0.000**
Mother's Age (n=381)					
30 and below	90	23.6	20.56 ± 6.79	19.50(7.00-34.00)	KW=2.367
31-39	155	40.7	19.34 ± 6.58	19.00 (7.00-35.00)	p=0.306
40 and above	136	35.7	19.50 ± 7.65	18.00 (7.00-35.00)	
Father's Age (n=130)					
30 and below	26	20.0	14.50 ± 6.08	12.50(7.00-31.00)	KW=3.806
31-39	43	33.1	16.53 ± 6.09	16.00 (7.00-32.00)	p=0.149
40 and above	61	46.9	17.50 ± 6.63	16.00 (7.00-31.00)	
Mother's Education (n=381)					
Lower-Higher Secondary	61	16.0	21.08 ± 7.10	20.00 (7.00-32.00)	KW= 0.109
High School	63	16.5	20.47 ± 7.88	21.00 (7.00-34.00)	p= 0.741
University and above	257	67.5	19.16 ± 6.75	19.00 (7.00-35.00)	
Father' Education (n=130)					
Lower-Higher Secondary	8	6.2	18.87 ± 6.74	16.50 (13.00-30.00)	KW=0.437
High School	32	24.6	17.84 ± 7.61	16.00 (7.00-31.00)	p=0.508
University and above	90	69.2	15.93 ± 6.25	15.00 (7.00-32.00)	
Mother's Employment (n=381)					
Employed	223	58.5	19.33 ± 6.61	19.00 (7.00-35.00)	U=16773.000
Unemployed	158	41.5	20.18 ± 7.57	19.00 (7.00-35.00)	p=0.425
Father's Employment (n=130)					
Employed	121	93.1	16.53 ± 6.65	16.00 (7.00-32.00)	U=514.000
Unemployed	9	6.9	17.22 ± 724	19.00 (7.00-26.00)	p=779
Number of Children					
1	206	40.3	19.11 ± 6.98	19.00 (7.00-35.00)	KW=3.022
2	175	34.2	18.19 ± 7.03	17.00 (7.00-35.00)	p=0.221
3 or more	130	25.4	19.50 ± 7.20	18.00 (7.00-35.00)	
Residential Place					
Village-Town	23	4.5	18.00 ± 7.24	19.00 (7.00-34.00)	KW=2.251
District	138	27.0	19.60 ± 7.28	19.00 (7.00-35.00)	p=0.324
Province	350	68.5	18.68 ± 6.96	17.00 (7.00-35.00)	
Income Level					
Income<outcome	120	23.5	20.65 ± 7.34	20.00 (7.00-35.00)	KW=10.661
Income=outcome	291	56.9	18.70 ± 7.14	17.00 (7.00-34.00)	**p=0.005**
Income>outcome	100	19.6	17.37 ± 6.04	17.00 (7.00-31.00)	
Sending the children either kindergarten or daycare					
Yes	150	29.4	22.22 ± 6.11	22.50 (7.00-35.00)	U=16101.000
No	361	70.6	17.51 ±6 .98	16.00 (7.00-35.00)	**p=0.000**

N= Sample size SD= Standard Deviation Min= Minimum Max= Maximum U= Mann-Whitney U KW= Kruskal-Wallis Test p= Significance p≤0.001 p≤0.005

Accordingly, 82.2% of participants were only left during mandatory occasions, COVID-19 did not infect 67.7%, and 85.7% were negatively affected by the pandemic in terms of living standards. In the measure of smoking, 76.1% quit smoking. In particular, with COVID-19 fear levels, it can be referred that there was a statistically meaningful difference among the scores taken from the COVID-19 Fear Scale regarding leaving home (p≤0.05), COVID-19 infection (p≤0.05), and the

effect of the pandemic on life qualities (p≤0.001) (Table 2).

When we examine the average scores of parents assessing the COVID-19 Fear Scale, the scale showed that mothers were 19.69 ± 7.03 (Mean ± SD), fathers were 16.58±6.66 (Mean ± SD) and total value was 18.90 ± 7.06 (Mean ± SD) which was considered to be medium level (Table 3).

Table 2. COVID-19 Fear Levels Associated with the Effect of Pandemic on Parents (N=511)

	N	%	Mean ± SD	Median (Min-Max)	Test & p
Leaving Home					
Mandatory occasions	420	82.2	19.16 ± 7.07	18.00 (7.00-35.00)	KW=10.055 **p=0.007**
Never	53	10.4	19.37 ± 7.64	18.00 (9.00-35.00)	
When bored	38	7.4	15.31 ± 4.91	15.00 (7.00-24.00)	
Covid-19 Infection					
Yes	165	32.3	17.89 ± 7.70	16.00 (7.00-35.00)	U=24719.500 **p=0.014**
No	346	67.7	19.38 ± 6.69	19.00 (7.00-35.00)	
Effect on Life Quality					
Negative	438	85.7	19.62 ± 6.84	19.00 (7.00-35.00)	KW=34,985 **p=0.000**
None	52	10.2	14.51 ± 6.43	13.50 (7.00-31.00)	
Positive	21	4.1	14.66 ± 7.96	11.00 (7.00-35.00)	
Smoking					
Yes	122	23.9	19.42 ± 7.02	19.00 (7.00-35.00)	U=22369.000 p=0.339
No	389	76.1	18.73 ± 7.07	18.00 (7.00-35.00)	

N= Sample size SD= Standard Deviation Min= Minimum Max= Maximum U= Mann-Whitney U KW= Kruskal-Wallis Test p= Significance p≤0.001 p≤0.005

Table 3. Average Scores of Parents for the COVID-19 Fear Scale

Scale	Mean ± SD	Median (Min-Max)
Mother (n=381)	19.69 ± 7.03	19.00 (7.00-35.00)
Father (n=130)	16.58 ± 6.66	16.00 (7.00-32.00)
Total (N=511)	18.90 ± 7.06	18.00 (7.00-35.00)

N= Sample size SD= Standard Deviation Min= Minimum Max= Maximum

DISCUSSION

In the research, which was aimed to determine the fear of COVID-19 in parents and the factors affecting it, results were discussed in line with literature related to the field.

Based on the parents' COVID-19-related fear levels, levels of COVID-19 fear in mothers were found to be substantially higher than in fathers. In several types of research conducted with adult individuals globally and in our country, it was observed that COVID-19 fear in females was higher than the fear in males (Limcaoco, Mateos, Fernandez & Roncero, 2020; Qiu, 2020; Bakioğlu, Korkmaz & Ercan, 2020). In another study examining the pandemic's psychological effect, it was found that the COVID-19 outbreak had its psychological effect more recognizable in females (Wang et al., 2020). Thus, the research finding was in line with the literature. During the outbreak, COVID-19 fear levels came up differently between mothers and fathers because mothers are more sensitive to stress, more emotional, and more fragile. This could be explained by the differences in the growing process of children, either boy or girl.

This study has shown that parents whose income was lower than the outcome had a higher potential for COVID-19 fear levels. Similarly, in other research, individuals earning much less than they were spending had a higher level of COVID-19 fear (Cao et al., 2020). However, another study reported that income-outcome levels during COVID-19 did not affect individuals' fear and anxiety levels (Doğan & Düzel, 2020). The reason lies behind this implication can be the different locations where studies have been conducted and the effect of cultural factors. Research administered to parents related to the pandemic stated that some families had some suspicion

about losing their income sources and, depending on that getting in trouble about paying their children's tuition fees. Therefore these possibilities could trigger fear and anxiety inside them (Peng et al., 2012).

This research emphasized that parents who sent their children to kindergartens/daycares had higher COVID-19 fear levels than those who did not send. Concerning the employment issue in research, mothers who were working chose to send their children to kindergartens not to delay their education process and provide a social environment for them to play and get social. In a study with parents and students, parents who are not sure of the hygiene conditions of the schools fear that their children will be installed with viruses (Erol & Erol, 2020). In a study conducted with parents, it was ascertained that parents did not want to send their children to school due to the stress caused by disease during the pandemic (Drane, Vernon & O'Shea, 2020). Especially since little children did not pay attention to hygiene rules and break social distance rules, COVID-19 viruses have a higher risk of spreading through daycares and educational institutions (Tarkoçin, Alagöz & Boğa, 2020). In addition to that, getting in contact with various places and living within a family can raise the rapid spread of COVID-19 in society.

In this research, when parental stress due to the pandemic was evaluation, it was seen that parents who did not go out had a higher level of fear of COVID-19. Studies conducted during the outbreak revealed that situations such as inter-communication deficiency, and long-lasting quarantine triggered the increase in anxiety and fear (Cao et al., 2020; Xiao, 2020; Kmietowicz, 2020). Therefore, the research finding has an acceptable correspondence with the literature. Parents who intensely live the fear of COVID-19 in the pandemic could give more controlled responses.

Based on a study source connected to a COVID-19-related mortal death in a family, the rise of fear was then triggered due to this disease (Bitan et al., 2020). In another study, individuals who heard their relatives getting infected by COVID-19 had no fear, but individuals who lost their relatives to COVID-19 had a high fear level (Van Hoek, Underwood, Jit, Miller & Edmunds, 2011). In this research, parents whom COVID-19 did not infect had higher fear levels. Perhaps, the reason behind this implication is that parents who were not infected had lost their relatives more than usual.

The larger portion of parents (85.7%) in this research stated that the pandemic period affected their life qualities negatively. In a study conducted in our country, it was found that due to the fear of COVID-19, the participants' life qualities were negatively affected (Van Hoek et al., 2011). In another research administered on the topic of life qualities related to COVID-19, avoiding aerobic physical activity influenced individuals' life quality badly during the pandemic. As for research conducted in Mexico, the pandemic widely appeared in media then long-lasting uncertainty caused increased levels of fear and decreased level of living standards among individuals (Van Hoek et al., 2011). Consequently, the research finding agrees with the literature.

The total score of the COVID-19 fear scale was found to be average level in this study. Other researchers conducted in our country confirmed that the same average level was found related to COVID-19 fear (Duman, 2020). From another study's perspective of COVID-19, the regression that comes out was also meaningful for these variables.

CONCLUSION

The present study concluded that the COVID-19 fear level of parents who had low income and sent their children to kindergartens/daycares was substantially high. Besides, COVID-19-related fear affected the habit of going out and the life qualities of parents. The levels of COVID-19 fear in parents are on average.

COVID-19 fear needs to be considered important for its negative and behavioral consequences in many ways. The ongoing pandemic process can cause intensive fear emotion. The increased COVID-19 fear level has its negative share considering children, parents, and social background; therefore, every activity that can help social and mental health should be supported. Also, there can be some suggestions about categorizing females, individuals with low socioeconomic status, and parents forced to send their children to school because of business life in a risk group. In future studies, it is recommended to carry out projects and researches to improve mental health by evaluating both children and families together with the philosophy of family-centered care.

Ethics Committe Approval

Ethics committee approval was received for this study from the Artvin Çoruh University Ethics Committee (Date: 24.06.2020 and Approval no: 2020/9).

Author Contributions

Idea/Concept: T.K., F.K., G.A. Design: T.K., F.K., G.A. Audit/Consultancy: T.K., F.K., G.A Analysis and/or Interpretation: T.K., F.K., G.A. Source Scan: T.K., F.K., G.A. Writing the Article: T.K., F.K., G.A. Critical Review: T.K., F.K., G.A

Peer-review

Externally peer-reviewed.

Conflict of Interest

The authors have no conflict of interest to declare.

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