

ORIGINAL ARTICLE

INVESTIGATION OF HEALTH CARE WORKERS' THOUGHTS ON PARENTING DURING THE COVID-19 PANDEMIC

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ÖZET

Amaç: COVID-19 pandemisi, sağlık çalışanlarının birçok stresörle karşı karşıya kalmasına ve artan iş yükü nedeniyle ailelerinden uzak kalmasına neden olmuştur. Bu çalışmada, çocuk sahibi olan sağlık çalışanlarının pandemi sürecinde ebeveynlik konusundaki düşüncelerini belirlenmesi amaçlanmıştır. **Yöntem:** Bu kesitsel çalışma, Ocak-Nisan 2022 tarihleri arasında Ankara İl Sağlık Müdürlüğü'nde görev yapan sağlık çalışanlarıyla gerçekleştirilmiştir. Sağlık çalışanlarının sosyo-demografik özellikleri, çalışma rutinleri ve ebeveynlik hakkındaki düşünceleri sorgulanmıştır. **Bulgular:** Çalışmaya 272 sağlık çalışanı katıldı. %68,4'ü kadın, %78,7'si üniversite mezunuydu. Sağlık çalışanlarının %41,5'i, ve %36'sının çocukları COVID-19 enfeksiyonu geçirmişti. Çocukları COVID-19 nedeniyle izole olan katılımcıların %43,9'u çocuğu hastayken iş yerine gitmek zorunda kalmıştı. Katılımcıların sadece %23,9'u çocuklarıyla yeterince ilgilenemediğini düşünürken, %69,9'u aile yaşamının olumsuz etkilendiğini düşünmekteydi. Katılımcıların %73,5'i işi nedeniyle çocuğunun/çocuklarının fiziksel sağlığını, %62,5'i çocuğunun ruh sağlığını tehlikeye ataktan ve %75'i pandemi döneminde çocuklarının ihtiyaçlarını ikinci plana ataktan endişe duymaktaydı. **Sonuç:** Sağlık çalışanı olan ebeveynler ebeveynlik konusunda kendilerini yetersiz hissetmekte ve iş yükleri nedeniyle çocuklarıyla diledikleri şekilde ilgilenememektedir. Çocuklarının fiziksel ve ruhsal sağlığını tehlikeye ataktan endişe duyan ve aile yaşamının olumsuz etkilendiğini düşünen sağlık çalışanlarının kendi ruh sağlıklarının da olumsuz etkilenmesi muhtemeldir. Olası yeni salgınlar göz önünde bulundurularak sağlık çalışanlarının çalışma koşullarının iyileştirilmesi, psikososyal yönden desteklenmesi ve ebeveyn desteğinin sağlanması kritik önem taşımaktadır.

Anahtar kelimeler: COVID-19, Ebeveynlik, Pandemi, Sağlık çalışanları, SARS-CoV-2

ABSTRACT

Aim: The COVID-19 pandemic has caused healthcare workers (HCWs) to face many stressors and stay away from their families due to increased workload. This study was aimed to determine the thoughts of HCWs who have children about parenting during the pandemic. **Methods:** This cross-sectional study was conducted on HCWs working in Ankara Provincial Health Directorate between January-April 2022. Socio-demographic characteristics, working routines and the propositions of HCWs' thoughts on parenting were questioned. **Results:** 272 HCWs participated in the study. 68.4% were female, and 78.7% were university graduates. 41.5% of the HCWs and the children of 36% had COVID-19 infection. Of the participants whose children were isolated due to COVID-19, 43.9% had to go to the workplace while their child was sick. Only 23.9% of the participants thought they could take care of their children adequately, while 69.9% thought their family life was adversely affected. 73.5% of the participants were worried about jeopardizing their child's physical health, 62.5% about their child's mental health, and 75% putting their child's needs in the background during the pandemic due to their work. **Conclusion:** Parents who are HCWs feel inadequate about parenting and cannot take care of their children as they would like due to their workload. The mental health of HCWs who are worried about endangering their children's physical and mental health and who think their family life is negatively affected may also be adversely affected. It is critical to improve the working conditions of HCWs, support them psychosocially and provide parental support, considering possible new outbreaks.

Keywords: COVID-19, Health care workers, Parenting, Pandemic, SARS-CoV-2

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INTRODUCTION

As a result of the global spread of Coronavirus disease-2019 (COVID-19), which was declared a pandemic in March 2020 (1), health care workers (HCWs) have been away from their families, and significant major psychological impacts have occurred due to the fear and severe morbidity and mortality risk of the infection. HCWs were compelled to live a life that could not spend as much time as they wished with their families for many reasons, such as the increased workload, the uncertainty about the infection at the beginning of the pandemic, the fear of getting infected and transmitting the infection to their families and loved ones (2-4).

As a consequence of the COVID-19 pandemic, parents are faced with many stressors such as dismissal, financial difficulties, uncertainty about the future, being away from their family and close circles, social isolation, being infected with COVID-19 and being a carrier, physical and mental health problems such as increased stress and burnout, nervous breakdowns and other mental problems of their children (5). In addition, due to the dilemmas HCWs experience between the increasing workload and responsibilities at home, especially female HCWs experience work-

family conflict during the COVID-19 pandemic (6, 7).

During the pandemic, factors such as marital satisfaction, social support, and harmony in the family have been reported as protective of parents' mental health, and perceived stress as a risk factor (8). Due to the increased and risky workload of HCWs, it is reported that they are fighting many mental problems, such as increased stress, burnout, anxiety, sleep disorders and depression during the pandemic (9-13). However, data related to the situation and thoughts of parents who are HCWs are limited.

This study aims to determine the thoughts of HCWs who have children about parenting during the pandemic.

MATERIALS AND METHODS

Study setting: This cross-sectional study was conducted at Ankara Provincial Health Directorate Numune Campus between January and April 2022.

Ethical considerations: After obtaining the necessary official permissions, Dr Abdurrahman Yurtaslan Ankara Oncology Training and Research Hospital Non-Invasive

Clinical Research Ethics Committee's approval dated 23.12.2021 and numbered 12/20 was received.

Participants and sampling: This study was carried out within the project "Assessment of the Psychosocial Status of HCWs During the Pandemic".

At the time of the study, 800 HCWs were working in the Ankara Provincial Health Directorate Numune Campus. Within the scope of the related project, the sample size was calculated as 363 in the OpenEpi statistical package program, with a 99% confidence interval, 5% margin of error and 50% anxiety frequency, considering that there may be an increase in the frequency of mental health problems during the pandemic. The number of HCWs in all units in the Numune Campus was determined and stratified to each unit. In the case of HCWs who did not agree to participate in the study in the specified unit, the sample size was tried to be reached by moving to the next unit. Of 381 HCWs reached within the scope of the "Assessment of the Psychosocial Status of HCWs During the Pandemic" project, 272 had a child/children. As a sub-study of the project, the survey form of the present study, which investigated HCWs' thoughts on parenting during the pandemic, was applied to the HCWs who have children.

Instrument and measures: The data were collected by a questionnaire prepared by the researchers, and the questionnaire form

consisted of 2 parts. The first part includes items questioning the socio-demographic and working characteristics of HCWs, and the second part includes propositions questioning the thoughts of HCWs whose children are educated in high school and below educational institutions, about parenting.

Data collection: Researchers visited HCWs during working days and hours. After explaining the subject and purpose of the study, the questionnaire forms, which took about 10-15 minutes to complete, were distributed to those who volunteered to participate and gave consent. A second visit was not made for the HCWs who could not be reached in the units that switched to the shift working system due to the pandemic.

Statistical analysis: The data were analysed using the IBM SPSS (version 23.0) program. Descriptive information was presented as number, percentage, standard deviation, and mean. The chi-square test was used to compare categorical data. Statistical significance was accepted as $p < 0.05$.

RESULTS

Of the participants, 186 (68.4%) were female, and 86 (31.6%) were male. Their ages ranged from 21.0 to 60.0 (mean \pm SD: 43.2 \pm 8.3; median: 44.0). 214 (78.7%) of the participants were university graduates. The socio-demographic and working characteristics of the participants are shown in Table 1.

Table 1. The socio-demographic and working characteristics of the participants

Characteristics		n (%)
Age group	≤39	90 (33.1)
	40-49	117 (43.0)
	≥50	65 (23.9)
Gender	Female	186 (68.4)
	Male	86 (31.6)
State of education	High school and below	58 (21.3)
	University	214 (78.7)
Marital status	Married	242 (89.0)
	Single or divorced	30 (11.0)
Perceived income level	Good	51 (18.8)
	Middle	191 (70.2)
	Bad	30 (11.0)
Profession	Medical Doctor / Dentist	35 (12.9)
	Nurse / Midwife / Health Officer	89 (32.7)
	Other*	148 (54.4)
Smoking	Never smoked	107 (39.3)
	Ex-smoker	56 (20.6)
	Smoker	109 (40.1)
Smoking during the pandemic	Increased	23 (8.5)
	Has not changed	228 (83.8)
	Decreased	21 (7.7)
Alcohol consumption	Never consumed	193 (71.0)
	Quitted	19 (7.0)
	Consuming	60 (22.1)
Alcohol consumption during the pandemic	Increased	6 (2.2)
	Has not changed	250 (91.9)
	Decreased	16 (5.9)
Keeping your pre-pandemic job	Yes	104 (38.2)
	No**	168 (61.8)
Duty period	Weekdays, 8 hours a day	220 (80.9)
	Shift	52 (19.1)
Did you have difficulty getting leave from your workplace during the pandemic?	Never	109 (40.1)
	Rarely	79 (29.0)
	Sometimes	41 (15.1)
	Often	43 (15.8)
How often did you have work on your mind while on leave?	Never	60 (22.1)
	Rarely	65 (23.9)
	Sometimes	63 (23.2)
	Often	84 (30.9)

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How often have you been called from your workplace while on leave?	Never	69 (25.4)
	Rarely	77 (28.3)
	Sometimes	73 (26.8)
	Often	53 (19.5)

*Health Technician, General administrative services, Employee

**Filiation (contact tracing) fieldworks, COVID-19 hotline, COVID-19 vaccination services

90 (33.1%) of the HCWs had a chronic disease, and 113 (41.5%) had COVID-19 infection before. Children of 98 (36%) participants have had COVID-19 infection. 43 (43.9%) of these

people reported that they had to go to work while their child was ill and in quarantine. The background characteristics of the participants and their children are shown in Table 2.

Table 2. Background characteristics of the participants and their children

Characteristics		n (%)
Physician-diagnosed chronic disease	Yes	90 (33.1)
	No	182 (66.9)
Being infected with the COVID-19	Yes	113 (41.5)
	No	159 (58.5)
COVID-19 quarantine process	Home isolation without treatment	49 (43.4)
	Antiviral treatment at home	57 (50.4)
	Inpatient treatment	7 (6.2)
Your child's/children's being infected with the COVID-19	Yes	98 (36.0)
	No	174 (64.0)
COVID-19 quarantine process of your child/children	Home isolation without antiviral treatment*	97 (60.2)
	Inpatient treatment	1 (1.0)
Parent's situation while the child is isolated due to the COVID-19	I was not isolated because I was vaccinated against COVID-19. I went to work.	43 (43.9)
	I was not isolated because I was vaccinated against COVID-19. I had to get permission to look after my child.	32 (32.7)
	I was in quarantine because I was unvaccinated.	23 (23.5)
Child's/children's school attendance	Yes	227 (83.5)
	No	45 (16.5)
Child's/children's transportation to school	With their own cars	103 (45.4)
	On foot	47 (20.7)
	With school bus service	33 (14.5)

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	Public transportation	44 (19.4)
Has your child's classroom been closed due to the COVID-19 infection?***	Yes	110 (48.5)
	No	117 (51.5)
Childcare while the classroom is closed	Our child left home alone	49 (44.5)
	My spouse took leave from work	19 (17.3)
	I took leave from work	29 (26.4)
	We got help from our relatives	13 (11.8)

* In our country, children under 18 are not given antiviral treatment at home.

** At the time of data collection, if there was one COVID-19 case in the classroom in preschool education and two COVID-19 cases in the classroom in primary & secondary education and high schools, the classroom was closed, and teachers and students were quarantined.

Table 3. Evaluation of the participants' relationships with their children during the pandemic

	Yes n (%)	Gender				Statistical analysis χ^2 ; p
		Female		Male		
		Yes n (%)	No n (%)	Yes n (%)	No n (%)	
I was able to take care of my child as much as I wanted during the pandemic.	65 (23.9)	32 (17.2)	154 (82.8)	33 (38.4)	53 (61.6)	14.489; <0.001
During the pandemic, someone other than me (or my spouse) took care of my child (family relative, caregiver, etc.).	153 (56.3)	107 (57.5)	79 (42.5)	46 (53.5)	40 (46.5)	0.390; 0.532
I was able to participate in sufficient social activities (parks, sports, events, etc.) with my child.	27 (9.9)	18 (9.7)	168 (90.3)	9 (10.5)	77 (89.5)	0.000; 1.000
I had to bring my child to my workplace because I could not find a caregiver and/or day care homes/schools were closed during the pandemic.	96 (35.3)	66 (35.5)	120 (64.5)	30 (34.9)	56 (65.1)	0.009; 0.923
I am concerned about endangering my child's physical health because of my job.	200 (73.5)	138 (74.2)	48 (25.8)	62 (72.1)	24 (27.9)	0.047; 0.828
I am concerned about endangering my child's mental health (psychological health) because of my job.	170 (62.5)	120 (64.5)	66 (35.5)	50 (58.1)	36 (41.9)	1.020; 0.312
Due to my job, I had to put some of my child's needs into the background during the pandemic.	204 (75.0)	138 (74.2)	48 (25.8)	66 (76.7)	20 (23.3)	0.091; 0.763
My work situation has negatively affected my child's education.	139 (51.1)	91 (48.9)	95 (51.1)	48 (55.8)	38 (44.2)	1.117; 0.291

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I find the amount of physical activity of my child sufficient.	56 (20.6)	42 (22.6)	144 (77.4)	14 (16.3)	72 (83.7)	1.069; 0.301
I can meet my child's needs without any problems.	72 (26.5)	48 (25.8)	138 (74.2)	24 (27.9)	62 (72.1)	0.047; 0.828
My child is acting more maverick than before the pandemic.	155 (57.0)	108 (58.1)	78 (41.9)	47 (54.7)	39 (45.3)	0.280; 0.597
My child's screen time increased comparing the pre-pandemic.	214 (78.7)	147 (79.0)	39 (21.0)	67 (77.9)	19 (22.1)	0.003; 0.959
I have seen negative changes in my child's analytical abilities.	144 (52.9)	100 (53.8)	86 (46.2)	44 (51.2)	42 (48.8)	0.160; 0.689
If the pandemic had not emerged, I could have spent more time with my child.	215 (79.0)	149 (80.1)	37 (19.9)	66 (76.7)	20 (23.3)	0.224; 0.636
The increased workload in the pandemic has negatively affected my family life.	190 (69.9)	132 (71.0)	54 (29.0)	58 (67.4)	28 (32.6)	0.347; 0.556

The number of people who thought they could take care of their children adequately during the pandemic was only 65 (23.9%), and the family life of 190 (69.9%) of the participants was negatively affected due to the increased workload. Propositions about parenting were compared according to gender. The frequency of female HCWs who thought that they could not take care of their children enough during the pandemic was higher compared to male participants ($p < 0.001$). The answers given by the HCWs to the statements questioning their relationships with their children during the pandemic and the comparison of HCWs' thoughts on parenting by gender are shown in Table 3.

DISCUSSION

The results of this study show that HCWs are exposed to an increased workload due to the pandemic, and as a result, they cannot spare enough time for their families. They often have to deal with work even when they are at home or on annual leave, and they feel inadequate as a parent, and they are worried about endangering their children's health and cannot devote enough time to their children even though valuable time with parents is essential in a child's psychosocial development.

41.5% of the HCWs in our study had COVID-19. According to the results of a Systematic Review and Meta-analysis conducted in 2021, the pooled prevalence of COVID-19 according to PCR test positivity among HCWs was reported as 11% (95% CI 7–16%) (14). 50.4% of HCWs with COVID-19 received antiviral treatment at home, and 6.2%

reported that they received treatment inpatient clinic. In a systematic review published in January 2022, selected antivirals, including favipiravir, which was used in our country during the study period, were reported not to be effective in reducing mortality (15). Despite this, the high rate of antiviral use among HCWs in the present study was probably due to the Ministry of Health's recommendation of antiviral to PCR-positive patients with no contraindications at the early stages of the pandemic (16). In the present study, the rate of contracting COVID-19 in children was 36%, which was similar to a cross-sectional study measuring the prevalence of COVID-19 among children and adolescents in Qatar (36.6%) (17).

In our country, HCWs have been assigned to many units related to the pandemic, such as contact tracing studies, COVID-19 inpatient and outpatient clinics, COVID-19 hotline, and vaccination services in managing the pandemic (2, 18). In the present study, 61% of the participants reported that they were engaged in a different job than in the pre-pandemic period. 30% of them sometimes and often had difficulty taking time off from work, 46% of them sometimes and often were called from work while on leave, and 53% of them reported that they sometimes and often had their pandemic duty on their mind while on leave. In other studies conducted with trainees and resident physicians, it has been shown that there were problems with taking annual leave during the pandemic (2, 19). However, job stress and presenteeism have been shown to have a significant negative impact on the job

performance of HCWs (20). In other words, it not only causes mental health problems such as burnout, but also reduces productivity at work. HCWs should be supported for their physical and mental well-being and the successful sustainability of the fight against the pandemic. Compelling and compulsory conditions in the workplace are likely to result in HCWs struggling with burnout, working inefficiently, and being exposed to greater physical and mental risks.

Due to the COVID-19 pandemic, parents are exposed to many stressors. In a study conducted in the USA, parents showed signs of stress-related symptoms such as fluctuations in general mood and stress levels, anxiety, depression, and sleep disturbance due to the pandemic; and about 21-47% reported that there are changes in their child's health status and learning/academic status (5). In our study, more than half of the participants reported that their children's education life was negatively affected by their jobs; and they have seen negative changes in their children's analytical abilities.

Parents with burnout are more prone to abuse and neglect their children. Thus, burnout negatively affects both parents and their children in the short and long term, and it has been reported to have harmful consequences on children's physical and mental health (21). In this study, only 26.5% of the participants stated that they could meet their child's needs without problems. 70% of the HCWs mentioned that their family life was negatively affected due to the increased workload. 62.5% of the

participants thought they endangered their child's mental health, and 73.5% thought they endangered their child's physical health because of their work.

79.4% of the participants found their children's physical activity insufficient during the pandemic. Results from a scoping review also support this finding, reporting a decrease in physical activity of children and adolescents of 10.8 - 91 min/day during the pandemic (22). Although the review includes publications indexed up to 1 July 2021, and curfews and restrictions are more stringent and comprehensive in the first 1.5 years of the pandemic, this result confirms parents' concern. It highlights the need for steps to encourage and support physical activity among children and adolescents. Seguin et al. reported an increase in children's screen time average of 3.2 hours/day after the closure of schools and that high levels of parental stress were associated with children's increased media screen time (23). In addition, the increase in screen time with the pandemic is related to a decrease in physical activity and an increase in noncommunicable diseases such as obesity, diabetes, visual impairments, and sleep disorders (24). In the present study, 79% of the participants reported that their children's screen time increased compared to the pre-pandemic period. In a study from Turkey, 71.7% of parents reported that their children's screen time increased with the pandemic (25). Increasing screen time is a growing public health problem. Supporting parents, caregivers and children, and policy-level interventions such as ensuring

access to school and high-quality extracurricular activities are needed to reduce screen time (26).

The increase in parenting stress and the necessity to stay home during the COVID-19 pandemic has negatively affected the parent-child relationship and increased the potential for harsh parenting and child abuse (27). On the other hand, HCWs have to work while their children stay at home and work at the expense of their lives as frontline workers, causing possible problems in the home-work balance and feeling inadequate as parents (4, 28). In our study, 43.9% of the participants reported that they had to go to work when their child was COVID-19 (+), and 44.5% reported that they had to leave their child alone at home when the child could not go to school due to contact with a COVID-19 case. Participants reported that someone other than themselves spent more time with their children during the pandemic (56%), they could not take care of their children enough (76%), they could not participate in enough social activities with their children (91%), they had to put their children's needs into the background due to their work (75%) and all this gave rise to the thought that if the COVID-19 pandemic had not emerged, they could have spent more time with their children.

While the stress burden increasing with the pandemic caused an increase in the idea of job resignation of HCWs (29), it has been reported as the main reasons for being laid off or resignation among HCWs were the COVID-19 pandemic itself, low-paid and inadequate working conditions, overwork, burnout,

insufficient security measures and caregiving responsibilities (30). While 21% of the participants reported that they experienced childcare stress in a comprehensive study conducted among US HCWs, in which 58408 HCWs participated, the study showed a relationship between childcare stress and burnout, depression, anxiety, intent to reduce clinical hours, and intent to leave (resignation); and the importance of urgent institutional and social interventions that support child care for health care workers (31). In the present study, situations include HCWs being called from their work even while on annual leave or having work-related problems in their minds, having to work or take annual leave while their children had infected with COVID-19 or were in quarantine, having to bring their child to work due to could not find a caregiver or the nurseries were closed, not being able to spare enough time for their children and families may cause childcare stress and burnout, and revealing the importance of immediate actions for the well-being of HCWs.

Limitations: Several limitations of this study need to be taken into account. Since the study was conducted in the Ankara Provincial Health Directorate Numune Campus, the generalizability of the results to HCWs working in other institutions in the province or other cities is limited, so the results should be interpreted with caution. Recall bias can be

mentioned as a feature of self-reported survey studies. Conducting a survey on HCWs in a period when the severity of the pandemic was relatively alleviated may have resulted in different results compared to the early periods of the pandemic. Furthermore, this study was cross-sectional, and longitudinal studies are needed to evaluate the psychosocial effects of the COVID-19 pandemic on both parents and children.

CONCLUSION

Research findings show that parents who are HCWs feel inadequate about parenting due to the pandemic and cannot take care of their children as much as they would like due to their workload. The mental health of HCWs who are worried about endangering their children's physical and mental health and who think their family life is negatively affected may also be adversely affected. It is not known when the COVID-19 pandemic will end, and it is critical to improve the working conditions of HCWs, support them psychosocially and provide parental support, considering possible new outbreaks.

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