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Cyberchondria, Covid-19 phobia, and well-being: a relational study on teachers

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KEYWORDS: Cyberchondria; COVID-19 phobia scale; infodemic; psychological well-being

ABSTRACT

Background: This study aims at investigating level and contributor factors of Cyberchondria, COVID-19-related Phobia, and Well-Being in a sample of teachers in Turkey. Methods: The study was conducted on teachers (n=1000) working in a province in eastern Turkey. Data for the study were collected using a form that included participants' descriptive characteristics, the COVID-19 Phobia Scale (C19P-SE), the Cyberchondria Severity Scale, and the World Health Organization-5 Well-Being Index (WHO-5). Spearman correlation analysis, Mann-Whitney U test, and Kruskal Wallis analysis of variance were used to analyze the data. Results: As participant's cyberchondria levels rose, C19P-SE scores increased (r=0.271, p<0.001), and WHO-5 scores decreased (r=0.224, p<0.05). Corona-phobia was higher in those who used social media than in those who did not (p<0.05). Cyberchondria scale scores were higher among those who had taken medications without a physician's recommendation during the pandemic. Participants who had a disabled person or a person in need of care in their household had higher scores for distrust of the physician and C19P-SE than for the cyberchondria severity scale sub-dimension, and the WHO-5 mean scores were lower (p<0.001, P=0.016, and P=0.020, respectively). Conclusions: The study results show that increasing levels of cyberchondria trigger COVID-19 phobias in teachers during the COVID-19 pandemic and negatively affect their well-being. This descriptive study can help understand the risk group for cyberchondria, the influencing factors, and the health and economic consequences, and identify strategies for effective combating with cyberchondria.

1. Introduction

Throughout the history of humankind, there have been epidemic diseases that spread over vast areas, causing illness and death. The last of these epidemics is the COVID-19 pandemic [1, 2]. The COVID-19 pandemic continues to threaten public health physically, psychologically, and socially. In today's world, where health communication is rapidly moving to the Internet, the number of searches on the Internet about health has accelerated.

In today's world, where it is very easy to get all kinds of information in the field of health, it is so difficult to find the correct information [3]. An infodemic is defined by the WHO as too much information that contains false or misleading information in digital and physical media during a disease outbreak [4]. This situation can affect the course of the pandemic even worse than the virus. In the study, which examined the rumors, stigmas, and conspiracy theories about COVID-19 circulating on online platforms in 25 languages from

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87 countries, 82% of the reports and claims were found to be false [5]. At the beginning of the pandemic, the concept of "infodemia" attracted worldwide attention in the COVID-19 pandemic, with the statement of WHO Director-General Dr. Tedros, "We are not only fighting the pandemic, but also the infodemia" [6]. Laotte et al. report that a person's reliance on online information and perceived information overload are strong predictors of unverified information sharing [7].

Thanks to advances in digital technology, the Internet is now the primary source for many people seeking health information. Heightened health anxiety or distress associated with excessive or repeated searches online for health-related information is referred to as cyberchondria [8]. People with cyberchondria are called cyberchondriacs. With their repeated searches, cyberchondriacs not only increase their anxiety but also increase the density and workload of hospitals, consume unnecessary resources, and result in incorrect treatment [9, 10]. The COVID-19 pandemic, like other epidemics, forces society to experience psychological difficulties such as fear, panic, and phobia [11-13]. It exacerbates people's fears and anxieties about themselves and their loved ones. In their study, Arpacı et al. classified COVID-19 phobia as a specific phobia. They defined it as persistent and extreme fear of coronavirus [13].

In their study, Deniz et al. determined that nearly half of the teachers had inadequate or problematic health literacy [14]. Teachers' values, attitudes, experiences, and behaviors greatly impact students and indirectly on society. Therefore, it may be difficult for teachers to combat infodemia, which is as dangerous as the virus during the pandemic. This situation has a significant impact not only on teachers' general well-being and anxiety but also on society as a whole, especially on students. No study was found in the literature on the subject of our research during the COVID-19 pandemic. From this point of view, this study aims at investigating level and contributor factors of Cyberchondria, Covid-related Phobia, and Well-Being in a sample of teachers in Turkey.

2. METHODS

2.1. Design

The research was planned as a descriptive-relational study. The study aims at investigating level and contributor factors of Cyberchondria, Covid-related Phobia, and Well-Being in a sample of teachers in Turkey.

2.2. Population and Sampling

The universe of the research consists of 13,000 teachers working in the province where the research was conducted between June 2020 and December 2020. The Epi Info computer program was used to calculate the study's sample size. The sample size of the study was calculated as 1000 with 50% unknown prevalence value, 99.9% confidence interval, 1.0 pattern effect, 5% error. Stratified sampling method was used as the sampling method. The sample was weighted according to the number of teachers in each school and it was tried to reach a sufficient number of teachers. Data was collected online via Google Forms. The link containing the questionnaire was sent via Google Forms to school groups created by teachers via WhatsApp. Only the participants who sent a link to the questionnaire and ticked the box "I agree to participate in the research in accordance with the informed consent" to start the form could access the questionnaire. Access was stopped when the required number of samples was reached for each school.

2.3. Data Collection Tools

The data of the study were collected with the help of a questionnaire consisting of four parts. In the first part of the form, the descriptive characteristics of teachers; in the second part, the COVID-19 Phobia Scale; in the third part, Cyberchondria Severity Scale; and in the last part, the World Health Organisation-5 Well-Being Index (WHO-5).

2.3.1. Descriptive characteristics of teachers

In this section, there were questions about the sociodemographic characteristics of the participant, the presence of a chronic disease of the participant and/or their relative, the presence of a dependent and/or disabled person in their household, the diagnosis COVID-19 of the participant, and/or their relative and the use of social media. In addition, smoking status, time spent on the Internet, preferred communication channels regarding COVID-19 developments, and use of medications without a physician's recommendation during the pandemic.

2.3.2. COVID-19 phobia scale (C19P-SE)

The COVID-19 phobia scale was developed by Arpacı et al. to measure the severity of COVID-19 phobia. The COVID-19 phobia scale is a self-assessment scale with a 5-point Likert scale. Scale items range from 1 "Strongly Disagree" to 5 "Strongly Agree". Items 1, 5, 9, 13, 17 and 20 measure the psychological sub-dimension; items 2, 6, 10, 14, and 18 measure the somatic sub-dimension; items 3, 7, 11, 15, and 19 measure the social sub-dimension; items 4, 8, 12, and 16 measure the economic sub-dimension. The C19P-SEtotal score ranges from 20 to 100 points, with higher scores indicating more severe sub-dimensions and general COVID-19 phobia [13].

2.3.3. Cyberchondria Severity Scale

Cyberchondria Severity Scale is a psychometric scale developed by Mc Elroy and Shevlin to measure cyberchondria. The Turkish validity and reliability of the scale were performed by Zencir et al. [15, 16]. The scale consists of 33 items in a 5-point Likert-type and has 5 sub-dimensions: Compulsion, Excessive Anxiety, Extremism, Reassurance, and Distrust of Physician. The scale, whose total score ranges from 33 to 165, has no threshold. An increase in the scale score shows that cyberchondria is becoming more severe [16].

2.3.4. World Health Organization-5 Well-Being Index (WHO-5)

The World Health Organization Well-Being Index (WHO-5), introduced by WHO in 1998, is one of the most widely used scales measuring subjective well-being with a limited number of items [17, 18]. Turkish validity and reliability were performed by Eser et al. [19]. The scale contains five positive statements about the participant's feelings in the last two weeks. Each item is scored on a 6-point Likert-type

scale ranging from 0 to 5. The raw score is calculated by adding the five answers in the range of 0 to 25. 0 stands for the worst possible quality of life and 25 for the best possible quality of life. A raw score of less than 13 indicates poor quality of life and requires ICD-10 depression testing.

2.4. Variables of the study

The study's dependent variables were the participants' level of cyberchondria, level of COVID-19 phobia, and their well-being. The independent variables of the study were the sociodemographic characteristics of the participant, the presence of a chronic disease of the participant and/or their relative, the presence of a dependent and/or disabled person in their household, the COVID-19 diagnosis of the participant, and/or their relative and the use of social media. In addition, smoking status, time spent on the Internet, preferred communication channels regarding COVID-19 developments, and use of medications without a physician's recommendation during the pandemic were other independent variables in the study.

2.5. Analysis of Data

Since the data of the study did not meet the assumptions of the parametric tests, the Mann-Whitney U test and Kruskal Wallis analysis of variance were used to analyze the data. When a significant difference was found after the Kruskal Wallis analysis of variance, the Bonferroni-corrected Mann Whitney U test was used to determine between which groups the difference existed.

3. RESULTS

3.1. Cyberchondria Severity scores of teachers

The median score of the cyberchondria severity scale of the teachers in the study was 65 (min 34 max 144), the WHO-5 median was 17 (min 0, max 25), and the C19P-SEscore median was 44 (min 20, max 9) (Table 1). Participant's median scores on the cyberchondria severity scale subdimensions were 11 (min 8 max 37) for compulsion, 18 (min 8 max 36) for excessive anxiety, and 19 (min 8 max 38) for extremism (Table 1).

Table 1. Participants' Cyberchondria severity scale and sub-dimensions, C19P-SE, WHO-5 mean scores.

	f	Median	Min-Max
Cyberchondria	1000	65	34-141
Compulsion	1000	11	8-37
Excessive anxiety	1000	14	8-36
Extremism	1000	19	8-38
Reassurance	1000	12	6-28
Distrust of the physician	1000	7	3-15
WHO-5	1000	17	0-25
C19-SE	1000	44	20-9

3.2. Cyberchondria severity scores of participants

37.6% of the 1000 teachers involved in the study were between 35 and 45 years old. 61.7% of the teachers were women. 79.1% of teachers had a bachelor's degree. Mean scores on the cyberchondria severity scale and its sub-dimensions differed statistically significantly by participant age. The total cyberchondria severity scale score was lowest in the 55+ age group, and it was the group that made the difference. Mean C19P-SE scores differed by the participants' age. The group aged 35-45 years had the least coronaphobia, making the difference (Table 2). WHO-5 mean scores differed by teachers' age. The WHO-5 mean score of the under-35 group was the lowest (Table 2). While females had higher cyberchondria and coronaphobia, their quality of life scores were lower than males. Cyberchondria severity scale total score, C19P-S, WHO-5 mean scores did not differ according to the participants' education levels. While preschool teachers had higher levels of cyberchondria than the other participants, the mean scores of C19P-SEand WHO-5 did not differ by education level. The mean cyberchondria score of those with chronic disease was lower than that of the group with and without the chronic disease, and those with chronic disease in one of their relatives had higher levels of corona phobia. Participants with healthcare personnel in their families had lower mean scores on the cyberchondria severity scale and levels of corona phobia. As many as 93.6% of participants used social media. Social media users had higher mean scores on the

Cyberchondria Severity Scale for compulsion, excessive anxiety, extremism, and total scores. In addition, Corona-phobia was higher among those who used social media. The vast majority of participants (n=480) spent 1-3 hours on the Internet. The Cyberchondria Severity Scale and mean sub-dimension scores of those who spent less than one hour on the Internet were lower than those who spent more time on the Internet. Those who spent more than 3 hours per day on the Internet had a higher C19P-SE mean score, while those who spent less time on the Internet had a lower WHO-5 mean score.

Only 3.2% of participants followed up-to-date information about COVID-19 only through official channels. While levels of cyberchondria and Corona-phobia were lower, WHO-5 score averages were higher in the group that followed current COVID-19 information only through official channels, and 7.2% of the teachers had a disabled person or a person in need of care in their household. Participants who had a disabled person or a person in need of care in their household had higher mean scores for distrust of the physician and C19P-SE scores on the cyberchondria severity scale subdimension, while WHO-5 mean scores were lower, and 15.2% of participants took medications without a physician's recommendation for protection during the pandemic.

The total cyberchondria scale score was higher among those taking medications without a physician's recommendation during the pandemic, and subscale scores for difficulty, excessive anxiety and reassurance, and distrust of the physician were higher. Moreover, C19P-SE scores of the same group were high, while WHO-5 scores were low. During the pandemic, the rate of taking medication from a source other than a pharmacy for protection was 14.4%. Those who took medication from a place other than a pharmacy for prevention had higher scores on the Cyberchondria Severity Scale total score and the excessive anxiety, extremism, and reassurance subdimensions. While mean scores on the cyberchondria severity scale, distrust of the physician, and C19P-SE score were higher among those who took medications from a place other than a pharmacy for protection during the pandemic, there was no statistically significant difference between the WHO-

Table 2. Cyberchondria severity scale and its sub-dimensions, C19P-S, WHO-5 score distributions according to descriptive characteristics.

acteristics of th	e part	ticipants-1.			,			0	1
	f	Compulsion	Excessive anxiety	Extremism	Reassurance	Distrust of the physician	Cyberchondria	C19P-SE	WHO-5
Age						priyorcium			
<35	360	516.16 ^a	523.61 ^a	554.81 ^a	510.99 ^a	473.92 ^a	523.61a	574.72°	374.46 ^a
35-45	376	657.10 ^a	505.78a	521.86a	516.76 ^a	507.48 ^b	512.50 ^a	427.14 ^b	516.16 ^b
45-55	160	639.27 ^a	509.10 ^a	418.50 ^b	490.30 ^a	519.50°	480.50 ^a	515.10 ^a	657.10°
>55	104	374.46 ^b	388.19 ^b	361.42 ^b	421.12^{b}	538.04°	407.88 ^b	486.35 ^a	639.27°
df	3	$c^2=14.43$ p=0.009	c ² =18.37 p<0.001	c ² =51.96 p<0.001	$c^2=9.79$ p=0.020	$c^2=5.83$ p<0.001	$c^2=14.43$ p=0.002	c ² =48.78 p<0.001	c ² =142.13 p<0.001
Gender					<u> </u>				
Female	616	504.40	539.15	540.60	529.54	459.67	530.84	548.08	454.42
Male	384	494.25	438.50	436.17	453.92	566.00	451.83	424.17	574.42
df	1	U=11587 p=0.584	U=94464 p<0.001	U=93568 p<0.001	U=100384 p<0.001	U=93120 p<0.001	U=99584 p<0.001	U=88960 p<0.001	U=89888 p<0.001
Educational B	acker			p 10.001	p 10.001	p 10.001	p 10.001	p 10.001	p 10.001
Associate	48	522.50 ^a	373.17^{a}	442.50 ^a	385.17 ^a	629.83ª	472.50	404.00	580.50
Bachelor	791	500.21 ^a	506.99ª	509.37 ^a	498.73 ^b	487.09 ^b	497.68	503.04	503.19
PostBachelor	145	522.62ª	511.67 ^a	454.96 ^{a,b}	547.48 ^a	555.56 ^{a,c}	530.21	504.00	453.44
PhD Degree	16	248.50^{b}	460.50 ^b	648.50 ^{a,c}	508.50°	276.50 ^{a,d}	454.50	601.50	520.00
df	3	$c^2=13.70$ p=0.003	c^2 =10.29 p=0.016	$c^2=10.52$ p=0.015	c^2 =11.61 p=0.008	c^2 =26.720 p<0.001	c^2 =2.468 p=0.481	c^2 =7.424 p=0.060	c^2 =7.737 p=0.052
School where	he/sh		p 0.020	_ P 0.010	p 0.000	P 101001	p 001	Р 0.000	P 0.002
PreSchool	128	564.25 ^a	562.25 ^a	570.75 ^a	537.75 ^a	627.50 ^a	576.25 ^a	531.50	492.50
Primary	416	$477.27^{\rm b}$	478.50^{b}	503.27 ^{a,b}	463.88 ^b	463.50 ^b	472.58 ^b	504.27	507.50
Secondary	456	503.80^{b}	503.24 ^b	478.25 ^b	523.45 ^a	498.61 ^b	504.71 ^b	488.36	496.36
df	2	c^2 =9.25 p=0.010	c^2 =8.34 p=.015	$c^2=10.35$ p=0.006	$c^2=11.77$ p=0.003	c^2 =32.193 p<0.001	$c^2=12.798$ p=0.002	c^2 =2.356 p=0.307	c^2 =0.440 p=0.802
Chronic Disea	ıse	1			<u> </u>	1			
No	404	527.87 ^a	492.03 ^a	463.35 ^a	483.67 ^a	558.70	501.73 ^a	459.59 ^a	470.50
Yes,participant	160	430.45 ^b	436.58 ^b	424.47 ^a	386.83 ^b	522.55	418.65 ^b	442.50^{b}	523.45
Yes, relative	416	477.31 ^b	509.75 ^a	542.26 ^b	537.01°	411.94	507.23 ^a	538.98^{b}	497.25
df	2	$c^2=15.586$ p<0.001	c^2 =7.776 p=0.020	c^2 =26.417 p<0.001	c ² =33.149 p<0.001	c^2 =58.641 p<0.001	$c^2=12.408$ p=0.002	c ² =21.66 p<0.001	c^2 =4.468 p=0.107
Presence of mo	edical			_ F 5.002	F 3,002		F 3.002	_ r	_ F 3.23/
Yes	416	531.50	489.73	436.27	471.19	529.04	476.73	470.27	518.35
No	584	478.42	508.17	546.25	521.38	480.17	517.43	522.03	487.79
df	1	U=108576 p=0.004	U=116992 p=0.318	U=94752 p<0.001	U=109280 p=0.007	U=109600 p=0.008	U=111584 p=0.0280	U=108896 p=0.005	U=114048 p=0.097

5 mean scores. During the pandemic process, total scores on the Cyberchondria Scale and scores on the Compulsion, Excessive Anxiety, and Reassurance sub-dimensions were lower among those who

themselves and/or their loved ones were not diagnosed with COVID-19 than those who were. While the WHO-5 mean scores of participants and their relatives with COVID-19 were lower than those of

Table 3. Cyberchondria severity scale and its sub-dimensions, C19P-S, WHO-5 score distributions according to descriptive characteristics of the participants-2.

istics of the partic	_			_	_					
	f	Compulsion	Excessive anxiety	Extremism	Reassurance	Distrust of the physician	Cyber- chondria	C19P-S	WHO-5	
Social Media Us	age									
Yes	936	508.74	509.22	505.70	499.82	500.23	506.14		504.71	
No	64	380.00	373.00	424.50	510.50	504.50	418.00	495.41	439.00	
df	1	U=22240	U=21792	U=25088	U=29312	U=29696	U=24672	U=25184	U=26016	
		p<0.001	p<0.001	p=0.0293	p=0.774	p=0.907	p=0.018	p=0.033	p=0.077	
Average time spe	ent o	nline								
<1 hour	280	383.47^{a}	447.13 ^a	447.13 ^a	450.21 ^a	455.70 ^b	418.56 ^a	415.24 ^a	525.41 ^a	
1-3 hours	480	$555.97^{\rm b}$	516.63 ^b	516.63 ^b	496.23 ^a	567.37 ^a	524.77 ^b	486.97^{b}	537.03 ^a	
>3 hours	240	526.10^{b}	530.50^{b}	530.50°	567.70^{b}	419.03 ^b	547.57 ^b	627.03°	398.37^{b}	
df	2	c^2 =67.492	$c^2=13.706$	c^2 =38.561	c^2 =21.732	$c^2=52.533$	$c^2=32.322$	c^2 =71.659	c^2 =40.182	
		p<0.001	p=0.001	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001	
The communication channel through which they are following developments concerning Covid-19										
Television	40	558.90 ^a	527.70 ^a	492.50 ^a	582.10 ^a	534.90 ^a	546.90^{a}	152.50^{a}	512.50 ^{a,b}	
Othermedia	48	689.83 ^b	837.17 ^c	799.83 ^b	771.17^{b}	469.17 ^a	799.17^{b}	559.83 ^b	$367.17^{a,b}$	
Social	8	616.50^{a}	$268.50^{\rm d}$	172.50°	444.50°	852.50 ^b	424.50 ^a	972.50 ^c	560.50 ^{a,c}	
Official Channel	32	327.50°	219.50^{b}	395.50^{a}	397.50^{a}	422.50^{a}	326.50°	282.50^{d}	569.50 ^{a,c}	
Multiple	872	492.68 ^a	493.16 ^a	491.25 ^a	486.15 ^a	500.28 ^a	489.01 ^a	516.87^{b}	504.21 ^{a,d}	
df	4	c^2 =36.725	c^2 =102.019	c^2 =67.240	$c^2=52.223$	$c^2=15.639$	c^2 =65.952	c^2 =102.698	c^2 =12.743	
		p<0.001	p<0.001	p<0.001	p<0.001	p=0.004	p<0.001	p<0.001	p=0.013	
Presence at the l	ome	of a person in	need of care or a d	isabled perso	n					
Yes	72	526.28	508.50	432.06	466.72	624.50	508.06	579.61	424.50	
No	928	498.50	499.88	505.81	503.12	490.88	499.91	494.36	506.40	
df	1	U=31552	U=32832	U=28480	U=30976	U=24480	U=32864	U=27712	U=27936	
		p=0.425	p=0.807	p=0.037	p=.301	p<0.001	p=0.818	p=0.016	p=0.020	
Use of medicine	s with	nout a physicia	an's recommendatio	on for preven	ition during th	e pandemic				
Yes	152	659.24	576.50	533.13	569.13	567.66	593.97	692.50	374.39	
No	848	472.05	486.88	494.65	488.20	488.46	483.75	466.08	523.10	
df	1	U=40320.0	U=52896.0	U=59488	U=54016	U=54240	U=50240	U=35264	U=45280	
		p<0.001	p<0.001	p=0.130	p=0.001	p=0.002	p<0.001	p<0.001	p<0.001	
Buy medicines a	t a pl	ace other thar	a pharmacy to pro	tect against t	the pandemic					
Yes	144		609.39	573.61	579.83	540.50	612.72	580.50	477.39	
No	856	480.72	482.18	488.20	487.15	493.77	481.62	487.04	504.39	
df	1	U=44704	U=44704	U=51104	U=50208	U=55872	U=45472	U=50112	U=58304	
		p<0.001	p<0.001	p=0.001	p<0.001	p=0.070	p<0.001	p<0.001	p=0.297	
-	-		/her relative being	_						
Yes, relative	48	613.17 ^a	633.17 ^a	623.17 ^a	510.50 ^a	490.50	613.17a	589.17 ^a	599.17 ^a	
Yes,me&relative	16	802.50^{b}	622.50 ^b	558.50 ^{a,b}	$706.50^{a,b}$	598.50	698.50 ^a	948.50 ^b	322.50^{b}	
No	936	489.56°	491.61 ^b	493.22 ^b	496.47 ^{a,c}	499.34	491.34 ^b	488.29 ^a	498.48 ^b	
df	2	c^2 =26.912	c^2 =13.928	$c^2=9.930$	c^2 =8.437	$c^2=1.951$	$c^2=15.776$	c^2 =44.781	c^2 =11.844	
		p<0.001	p=0.001	p=0.007	p=0.015	p=.377	p<0.001	p<0.001	p=0.003	

Table 4. Correlation *Cyberchondria*, *C19P-SE*, Beck Anxiety Inventory (BAI), and *WHO-5* score averages.

		WHO-5	Cyberchondria	C19P-SE
WHO-5	r	1,000	-,224**	-,292**
	p		,000	,000
	f	1000	1000	1000
Cyberchon-	r	-,224**	1,000	,271**
dria	p	,000		,000
	f	1000	1000	1000
C19P-SE	r	-,292**	,271**	1,000
	p	,000	,000	
	f	1000	1000	1000

the other groups, the same group's mean C19P-SE scores was higher. As can be seen in Table 4, as participants' cyberchondria increased, C19P-SE scores increased, while WHO-5 scores decreased.

4. DISCUSSION

Misra and Stokols reported that cyberchondria negatively affects general health and increases the level of anxiety [20]. Anxiety and fear, which naturally increase in society during a pandemic, may cause people to seek more health information from online sources. In our study, as teachers' cyberchondria levels rose, their Corona-phobia levels also increased, and their well-being decreased. Infodemia may increase the severity of cyberchondria and Corona-phobia [21]. In the course of a pandemic, it can become at least as dangerous to public health as the virus [22, 23].

In our study, teachers had higher levels of cyberchondria and coronaphobia, while their quality of life score was lower than males. Wu et al. also found that women had higher levels of cyberchondria than men [24]. Corona-phobia was higher among teachers whose relatives had a chronic disease. This situation can be explained by concerns about the poor outcome of COVID-19 in people with chronic illnesses. This shows us how important it is not to ignore the psychological needs of the relatives of people with chronic diseases. In this context, in our study, those who had a disabled person in their household had higher levels of Corona-phobia and lower well-being than other groups. This situation

shows us that it is necessary to carry out studies that include the needs of those who care for the patient at home, especially during the pandemic process.

Tarhan et al., in their study examining the relationship between Cyberchondria Levels and Health Literacy, determined that the cyberchondria levels of individuals defined as Baby Boomer (BB) and born between 1946 and 1964 were lower than those of younger generations [25]. In our study, the level of cyberchondria was lowest in the 55+ age group. The group with the lowest well-being was the group under 35 years old. This can be explained by the decrease in social media and internet use with advancing age, reducing exposure to infodemia. Ho et al. reported that Facebook addiction is higher in stressed people [26]. Although social media is now accepted as an important reference source for health-related issues, it attracts attention to infodemia, especially during a pandemic [25, 27]. In our study, those who spent more than 3 hours per day on the Internet had a higher C19P-SEmean and a lower WHO-5 mean than those who spent less time on the Internet. In this study, the group that followed current COVID-19 information only through official channels had lower levels of cyberchondria and Corona-phobia and higher WHO-5 mean scores. This demonstrates how critical it is for public health to have access to accurate health information.

The diagnosis and treatment process of COV-ID-19 is a traumatic experience for many patients and their families [28]. Nguyen et al. reported that COVID-19 patients have higher levels of depression and lower quality of life [29]. Also, in this study, those diagnosed with COVID-19 and/or their relatives had higher levels of cyberchondria and Corona-phobia and lower well-being than those who did not.

Cyberchondriacs increase the intensity and work-load of hospitals as well as their anxiety through repeated searches; they naturally consume unnecessary resources and resort to incorrect treatments. In this study, cyberchondria levels and Corona-phobia levels were higher in those who had taken medications without a physician's recommendation during the pandemic and in those who had obtained drugs from somewhere other than a pharmacy for their protection.

5. CONCLUSION

The study results show that increasing levels of cyberchondria trigger COVID-19 phobias in teachers during the COVID-19 pandemic and negatively affect their well-being. The study of cyberchondria, which attracted more attention during the COV-ID-19 pandemic process, is extremely limited in the literature. This descriptive study can help understand the risk group for cyberchondria, the influencing factors, and their health and economic consequences, and identify strategies for effective combating with cyberchondria. The limitations of the study are that the study was cross-sectional and it was impossible to specify the direction of relationships, so we do not know whether cyberchondria trigger COVID-19 phobias or vice versa.

DECLARATION OF INTERESTS. The authors declare no conflict of interest.

RESEARCH ETHICS. The Inonu University Health Sciences Non-Interventional Clinical Research Ethics Committee approved the study on June 16, 2020, with decision number 2020/804-11. The study consent questionnaires were completed online.

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