




ORIGINAL ARTICLE

The effect of the COVID-19 social distancing measures on Turkish women's mental well-being and burnout levels: A cross-sectional study

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ABSTRACT: Lockdown and social distancing measures during the COVID-19 pandemic increase women's responsibilities and influence their mental health. This study aimed to assess the effect of COVID-19 social distancing measures on mental well-being and burnout levels of women using an online cross-sectional survey in Turkey. The Warwick-Edinburgh Mental Well-being Scale, The Burnout Measure, and Sociodemographic form were used in this study. All analyses were performed on a sample of 438 women aged between 18 and 65. The mean score of mental well-being was 47.86 (SD = 10.04) and the mean score of burnout was 3.86 (SD = 1.16). Being younger than 30 years old ($t = 2.14$, $P = 0.033$), having undergraduate education or above ($F = 5.09$, $P = 0.007$), part-time working ($F = 5.39$, $P = 0.005$), attending to school ($t = 2.68$, $P = 0.008$), having COVID-19 symptoms ($t = 6.01$, $P < 0.001$), and perceiving spousal emotional support ($F = 3.47$, $P = 0.016$) were the factors associated with high burnout. Being older than 30 years old ($z = -3.11$, $P = 0.002$), full time working ($H = 11.96$, $P = 0.003$), not attending to school ($z = -2.09$, $P = 0.036$), perceiving spousal emotional ($H = 13.22$, $P = 0.004$), or social ($H = 13.11$, $P = 0.004$) support were the factors associated with higher mental well-being. Age ($\beta = -0.03$, $P = 0.001$), having two or more children ($\beta = 0.42$, $P = 0.015$), and perceiving COVID-19 symptoms ($\beta = -0.73$, $P < 0.001$) were the predictors of women's burnout. This study shows that mental well-being and burnout levels of women in Turkey have been considerably affected as a result of social distancing measures taken with the first wave of the pandemic. Findings signal the immediate need for targeted mental health nursing interventions. Therefore, technology-based mental health support programmes are recommended to be designed and utilized by mental health nurses.

KEY WORDS: burnout, COVID-19, mental well-being, social distancing, women.

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INTRODUCTION

The COVID-19 pandemic has a profound effect on each and every sphere of life across the world. The World Health Organization reports that more men have died than women due to the COVID-19 pandemic (reported deaths 2.8% among women, 4.8% among men); however, the mental health of women has been affected more negatively than men during this period (World Health Organization 2020). Studies have shown that women are more exposed to physical violence and are more affected by economic inequality during the pandemic (Aygüneş & Ok 2020; Peterman *et al.* 2020). According to the study examining the impact of the pandemic on violence against women through the cases reflected in the print media in Turkey, the killing of women with firearms is more common during the pandemic period than before the pandemic, and that women are exposed to physical violence in their own homes and generally during the daytime (Sahin *et al.* 2021). In addition, "The Impact of COVID-19 on Women", published by the United Nations, indicates that care burden on women who care for their children or their family members has increased due to the pandemic, which also increases gender inequality, and thus they should be considered a high-risk population (United Nations Population Fund 2020).

Staying at home and meeting the needs of family members under quarantine conditions and social distancing measures increase women's responsibilities and workload. This situation affects mothers who work and have school-age children even more (Alon *et al.* 2020; DelBoca *et al.* 2020; Sevilla & Smith 2020). The COVID-19 pandemic does not only affect women physically but can also impair their psychosocial mental health, and lead to burnout (Fiorillo & Gorwood 2020). In addition, issues caused by the pandemic such as physical and emotional fatigue and boredom, fear of being infected, financial challenges, and feeling uncertain about future affect the mental well-being of women (Ergül-Topçu *et al.* 2021). The World Health Organization (2004) defined mental well-being as "a state in which individuals realize their own abilities, can cope with the normal stresses of life, can work productively and fruitfully and contribute to their society in accordance with their abilities." Positive experiences that occur in life support psychological-subjective well-being, while negative experiences have the opposite impact (Diener & Diener 1996). The global pandemic

is one of the factors that adversely affects the psychological well-being in this regard (Salehinejad *et al.* 2020; Sonderskov *et al.* 2020). Recent research has shown that feeling of loneliness due to social distancing, anxiety, and suicidal thoughts (Armbruster & Klotzbucher 2020; Chatterjee & Chauhan 2020) cause poor perceived social support and emotional detachment, which is also associated with low self-esteem and low mental well-being (Emerson *et al.* 2021).

Due to the fact that the pandemic has changed the dynamics of family, as well as relationships and roles during social isolation, family members may face mental problems, family relationships and roles may be adversely affected, and psychological problems and signs of illness may be observed more frequently (Bao *et al.* 2020). Qiu *et al.* (2020) reported in their study conducted in China during the COVID-19 pandemic that 35% of the population experienced psychological distress, and that those aged between 18 and 30, and over 60, and women were more vulnerable to stress and more likely to develop post-traumatic stress disorders. In a report published by the United Kingdom government, both men and women reported a decrease in mental health and well-being during the early lockdown. This deterioration was greater among women, while self-reported mental health problems were also more common and severe on average (United Kingdom National Mental Health Intelligence Network 2021). Studies found that more than half of the participants were psychologically affected by the COVID-19 pandemic, while one third had anxiety symptoms and some had depressive symptoms. In addition, it was reported that the participants experienced severe feelings such as anxiety, hopelessness, burnout in combination with sleep and adjustment disorders, increased alcohol and substance use, and mental problems (Bao *et al.* 2020; Wang *et al.* 2020).

Burnout, a phenomenon that harms both the individual and social functioning, is defined as a state of physical, emotional and mental exhaustion caused by prolonged exposure to situations that require emotional demands (Pines 2005). It is also expressed as the spiritual and physical exhaustion of individuals occurs as a result of the inability to eliminate the causes of stress with the resources they have (Ari & Bal 2008). Burnout, which can be observed at almost any age, not only adversely affects individuals' physical and psychological health, and work and family life but also the life of people around them, and leads to inefficiency. Prasad *et al.* (2021) found that women reported greater fear of

exposure, prevalence of anxiety and depression, burnout, and work overload, while feeling less valued by their organization. In a study by Dillon *et al.* (2020), it was stated that 29.2% of healthcare workers reported that they experience burnout, which was more common in women than in men. In other studies, age was also found to contribute to decreased well-being during the pandemic, since younger physicians reported higher levels of depression, stress, anxiety, psychological burden, emotional exhaustion, and less personal accomplishment compared to older colleagues (Elbay *et al.* 2020; Zhang *et al.* 2020).

It should be noted that the negative effects of the COVID-19 have a significant impact on women's life and physical and mental health in various aspects such as social, family, and work life, and economic and psychological problems, which have put them at greater risk and prevent them from accessing the support they need. The improvement of women's health is associated with improved family and community health. Therefore, evaluating the impact of the COVID-19 pandemic on women's burnout and mental well-being, and identifying factors that affect burnout and mental well-being will contribute to taking measures that can serve to improve these effects.

Aim

To determine the effect of social distancing implemented due to the prevention of the spread of COVID-19 on the mental well-being and burnout levels of women aged between 18 and 65 years.

Research questions

1. Is there any relationship between women's sociodemographic and COVID-19-related characteristics and burnout?
2. Is there any relationship between women's sociodemographic and COVID-19-related characteristics and well-being?
3. To what degree do women's sociodemographic and COVID-19-related characteristics predict women's burnout and well-being?

In this study, the participants' sociodemographic characteristics include age, marital status, education level, employment status, family type, number of children, number of household, number of household aged 65 and above, the presence of chronic disease, and

attending to school variables. Additionally, COVID-19-related characteristics of the women are Perception of having any COVID-19 symptoms, having any COVID-19 PCR test, losing a relative/acquaintance due to COVID-19, working type during COVID-19, adoption to social distancing measures during COVID-19 (adoption to staying home, adoption to not seeing friends and relatives, and adoption to keep social distancing), and perceived emotional, social, or financial spousal support during COVID-19.

METHODS

Design and sample

This descriptive, cross-sectional study was conducted via an anonymous online survey in Turkey between June and July 2020. Women aged between 18 and 65 were included in the sample due to the fact that those aged under 18 were minors and those aged over 65 were not actively working. Additionally, the curfew restrictions were imposed on people aged under 20 and over 65 in Turkey as part of the pandemic measures. The population of the study was calculated to be 5 177 090 individuals by using Qualtrics Sample Size Calculator based on a 95% confidence interval and a 5% margin of error, and the sample size was determined as 385. Eventually, the study was carried out with a total of 438 women.

Data collection

Due to social distance rules and lockdown enforcement put into effect by the Government of Turkish Republic, physical interaction was not possible, so the data were collected through an online survey using purposive and snowball sampling techniques. Potential respondents were purposively sent the link to the online survey via social media (WhatsApp, Facebook, Instagram, and LinkedIn) or through email to invite them to participate in an online survey hosted on Qualtrics XM, which is a secure online system licensed by Koc University. A snowball sampling technique was employed to recruit more Turkish women from the country's seven geopolitical regions during the COVID-19 pandemic by encouraging those who were sent the link to kindly share it with their contacts. The online survey took about 20 min to complete and ran for two months (June and July 2020). All participants were informed of voluntary participation. A total of 438 respondents completed the online survey.

Measures

In the present study, a three-part questionnaire was used for data collection. The first part of the questionnaire included women's sociodemographic characteristics, compliance with social distancing measures, changes in lifestyles and workload before and during the COVID-19, and perceived physical, psychological, social, and financial support levels from husbands during the COVID-19 pandemic. The second part included the 14-item Warwick-Edinburgh Mental Well-being Scale, and the third part included the 21-item Burnout Measure.

The Warwick-Edinburgh Mental Well-being Scale

Mental well-being was measured through the Turkish validation (Keldal 2015) of the Warwick-Edinburgh Mental Well-being Scale (WEMWBS) developed by Tennant *et al.* (2007). WEMWBS comprises 14 positively worded items to which participants respond using a 5-point Likert scale (1, none of the time; 2, rarely; 3, some of the time; 4, often; 5, all of the time), thereby providing a total score of 14 to 70. Responses are based on a participant's feelings over the last 2 weeks. Higher levels of positive mental well-being are indicated by higher score. More, the data can also be analysed using a categorical approach. The scores obtained from the scale is interpreted as follows: (a) "between 14–42", low mental well-being, (b) "between 43–59", medium mental well-being, (c) "between 60–70", high well-being (Tennant *et al.* 2007). The Turkish validity and reliability study of the scale was conducted by Keldal (2015), and Cronbach's alpha internal consistency coefficient was found as 0.92. In this study, Cronbach's alpha coefficient of the scale was found as 0.92.

The burnout measure short version

Burnout was measured through the Turkish validation (Capri 2006) of the Burnout Measure short version developed by Pines (2005). Burnout Measure (BM) short version includes 10 items that measures levels of physical, emotional, and mental exhaustion of the individual. The items on the scale are scored between "1-never" and "7-always". In this case, the highest score that can be obtained from the scale is "7", and the lowest score is "1". While calculating the scale score, items with positive expressions of burnout (3, 6, 19, and 20) are reversed, and the remaining items (1, 2, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 21) are scored directly. The scores obtained from the scale are interpreted as follows: (a) " ≤ 3 ", no burnout; (b) "between 3–4", a signal of risk for burnout; (c) "between 4–5",

experiencing burnout; (d) " ≥ 5 " experiencing burnout that requires urgent help. The scale consists of a single factor, but it has a three-component structure: emotional exhaustion (items 2, 5, 8, 12, 14, 17, 21); mental exhaustion (items 3, 6, 9, 11, 15, 18, 19); and physical exhaustion (1, 4, 7, 10, 13, 16, 20). The Turkish validity and reliability study of the scale was conducted by Capri (2006) and the Cronbach's alpha internal consistency coefficient of overall BM was found as 0.93, and the values were 0.83, 0.75, and 0.88 for emotional, mental, and physical subcomponents, respectively (Capri 2006). In this study, Cronbach's alpha internal consistency coefficient of overall BM was found as 0.95, and as 0.92, 0.85, and 0.87 for emotional, mental, and physical subcomponents, respectively.

Data analysis

The IBM SPSS Statistics v.24.0 was employed for statistical analysis. Sociodemographic characteristics, features related to the COVID-19 period, compliance with precautions, lifestyle behaviours, or habits were analysed with descriptive statistics (numbers, percentages, mean, and standard deviation (SD) values). The fit of the variables to normal distribution was evaluated using skewness and kurtosis values and the Kolmogorov–Smirnov/Shapiro–Wilk test. Student's *t*-test, Mann–Whitney *U* test, one-way ANOVA, or Kruskal–Wallis-H were used for the analysis of variance between the sociodemographic characteristics of the women and their mean scores from BM and its sub-dimensions and WEMWBS. Multiple comparisons of these variables used Hochberg's GT2 and LSD (least significant difference) when the variances were equal, and Tamhane's T2 or Mann–Whitney *U* with Bonferroni correction test when not equal. Linear regression analysis was performed to determine the factors predicting the burnout levels of the participants. Since mental well-being, another dependent variable of this study, was not normally distributed, regression analysis could not be performed. The significance level was accepted as $P < 0.05$. The relationship between BM and WEMWBS scores was analysed using Pearson correlation analysis. The significance level was accepted as $P < 0.01$.

RESULTS

Sociodemographic characteristics

The mean age of women was 31.90 ± 9.07 (min = 18, max = 63), 50.23% were single, 84.25% had an

undergraduate degree, 57.08% were worked full-time, 78.54% had a nuclear family, 58.00% had no children, 50.23% lived with two individuals at home, 11.87% lived with at least one individual over the age of 65 at home, 15.53% had a chronic disease, and 39.27% were attending to school (Table 1).

COVID-19-related characteristics

When the characteristics of the participants relating to the COVID-19 period and their compliance with social distancing measures were examined, it was determined that 23.52% of them perceived that they had COVID-19 symptoms during this period and 9.14% of the participants had COVID-19 PCR test. Only 0.46% of the participants had positive COVID-19 test result at the time of data collection in this study. Regarding the working status of the participants, 22.83% of them worked from home, 43.15% obeyed the lockdown, 48.63% did not meet with friends or relatives, and that 55.25% always complied with social distance rules. Relating to the spousal support during the COVID-19 period, participants stated that they received a moderate level of emotional (24.20%), social (25.79%), and financial (24.20%) support (Table 1).

Regarding the time allocated for personal and family care before the COVID-19 period, it was determined that the participants spent around 0–2 hours doing household jobs (50.46%), personal care (79.68%), exercise (86.53%), and childcare (37.22%). During the COVID-19 period, the time allocated for different activities and the rate of participants were found as follows: around 3–6 hours for doing household jobs (52.28%) and about 0–2 hours for doing personal care (76.25%), exercise (84.25%), and childcare (35.15%) (Table 2).

The relationship between women's sociodemographic characteristics and burnout

The mean scale and subscale scores of women were 3.86 ± 1.16 for BM and 4.02 ± 1.38 , 3.54 ± 1.14 , and 4.02 ± 1.13 for emotional, mental, and physical burnout sub-dimensions, respectively. While the mean scores of women aged 30 or younger from the BM ($t = 2.14$, $P = 0.033$) and emotional ($z = -2.46$, $P = 0.014$) and mental burnout ($z = -2.30$, $P = 0.022$) sub-dimensions were significantly higher, no statistically significant difference was found between the mean physical burnout sub-dimension scores ($z = -0.70$, $p = 0.484$). The mean scores of women with an

TABLE 1 Sociodemographic characteristics of women and their compliance with social distancing measures during COVID-19

Characteristics	n	%
Age (years) (Mean \pm SD) (min–max)	31.90 \pm 9.07 (18–63)	
Marital Status		
Married	218	49.77
Single	220	50.23
Educational Level		
Primary School	13	2.97
High School	56	12.78
University or higher education	369	84.25
Employment Status		
Unemployed/Housewife	143	32.65
Full-time employed	250	57.08
Part-time employed	45	10.27
Family type		
Extended family	40	9.13
Nuclear family	344	78.54
Other	54	12.33
Number of children		
0	254	58.00
1	99	22.60
2	74	16.89
3 and above	11	2.51
Number of households		
1	48	10.96
2	220	50.23
3 and above	170	38.81
Number of households aged 65 and above		
0	386	88.13
1	37	8.45
2 and above	15	3.42
Chronic disease		
Yes	68	15.53
No	370	84.47
Attending to school		
Yes	172	39.27
No	266	60.73
Perception of having any COVID-19 symptoms		
Yes	103	23.52
No	335	76.48
Having any COVID-19 PCR test		
Yes, I had a positive test result	2	0.46
Yes, I had a negative test result	38	8.68
No, I haven't had any test before	398	90.86
Losing a relative/acquaintance due to COVID-19		
Yes	63	14.38
No	375	85.62
Working type during COVID-19		
Working full time every weekday	96	21.92
Working a couple of days in a week	51	11.64
Working a couple of days in a month	15	3.43
Working from home	100	22.83
Not working	176	40.18
Adoption to social distancing measures during COVID-19		
Adoption to staying home		

(Continued)

TABLE 1 (Continued)

Characteristics	<i>n</i>	%
Never	5	1.14
Rarely	18	4.11
Sometimes	45	10.27
Most of the time	181	41.33
All the time	189	43.15
Adoption to not seeing friends and relatives		
Never	4	0.91
Rarely	26	5.94
Sometimes	43	9.82
Most of the time	152	34.70
All the time	213	48.63
Adoption to keep social distancing		
Rarely	11	2.51
Sometimes	24	5.48
Most of the time	161	36.76
All the time	242	55.25
Perceived spousal support during COVID-19		
Emotional support		
Single	220	50.23
Less	27	6.16
Moderate	106	24.20
More	85	19.41
Social support		
Single	220	50.23
Less	21	4.80
Moderate	113	25.79
More	84	19.18
Financial support		
Single	220	50.23
Less	29	6.62
Moderate	106	24.20
More	83	18.95

undergraduate education or above from the BM ($F = 5.09$, $P = 0.007$) and emotional burnout subscale ($H = 11.84$, $P = 0.003$) were significantly higher than those with primary school education. In addition, while there was a statistically significant difference in the mean scores of mental burnout ($H = 9.39$, $P = 0.009$) and physical burnout ($H = 6.89$, $P = 0.032$) of women with undergraduate or higher education level, no statistically significant difference was found between the groups in post hoc analyses ($P > 0.05$). The mean scores of women with part-time jobs from the BM ($F = 5.39$, $P = 0.005$) and emotional ($H = 10.30$, $P = 0.006$), mental ($H = 8.43$, $P = 0.015$), and physical burnout ($H = 11.15$, $P = 0.004$) subscales were significantly higher than those of women with full-time jobs. While the mean emotional ($H = 8.92$, $P = 0.030$) and mental burnout ($H = 10.08$, $P = 0.018$) subscale scores of women with three or more children were

TABLE 2 Time devoted to personal and family care before and during the COVID-19 pandemic

	Before COVID-19		During COVID-19	
	<i>n</i>	%	<i>n</i>	%
Housework				
0–2 hours	221	50.46	155	35.39
3–6 hours	190	43.38	229	52.28
7 hours and above	22	5.02	44	10.05
Not applicable	5	1.14	10	2.28
Personal care				
0–2 hours	349	79.68	334	76.25
3–6 hours	77	17.58	89	20.33
7 hours and above	12	2.747	10	2.28
Not applicable	–	–	5	1.14
Exercise				
0–2 hours	379	86.53	369	84.25
3–6 hours	22	5.02	31	7.07
7 hours and above	2	0.46	2	0.46
Not applicable	35	7.99	36	8.22
Childcare				
0–2 hours	163	37.22	154	35.15
3–6 hours	80	18.26	72	16.45
7 hours and above	65	14.84	84	19.18
Not applicable	130	29.68	128	29.22

significantly lower than those who did not have any children or had one or two, no statistically significant difference was found between the mean scores obtained from the BM ($F = 2.28$, $P = 0.078$) and physical burnout ($H = 6.08$, $P = 0.108$) subscale. While the mean scores of women who were already attending a school from the BM ($t = 2.68$, $P = 0.008$) and emotional ($z = -2.82$, $P = 0.005$) and mental burnout ($z = -2.62$, $P = 0.009$) subscales were significantly higher, no statistically significant difference was found between the mean physical burnout subscale scores ($z = -1.83$, $P = 0.068$). No statistically significant difference was found between marital status, family type, number of individuals living at home, number of individuals aged over 65 living at home, and the presence of chronic disease and the mean scores obtained from the BM and all its subscales ($P > 0.05$; Table 3).

The relationship between women's sociodemographic characteristics and mental well-being

The mean mental well-being scale score of the participants in this study was 47.86 ± 10.04 . The mean WEMWBS scores of women aged over 30 ($z = -3.11$, $P = 0.002$) and those who worked full-time ($H = 11.96$,

TABLE 3 Factors affecting women's burnout and mental well-being

Variables	n	Burnout measure		Emotional burnout		Mental burnout		Physical burnout		Warwick mental well-being scale	
		M ± SD	t/F Pvalue	M ± SD	U/KW Pvalue	M ± SD	U/KW Pvalue	M ± SD	U/KW Pvalue	M ± SD	U/KW Pvalue
Mean scores	438	3.86 ± 1.16		4.02 ± 1.38		3.54 ± 1.14		4.02 ± 1.13		47.86 ± 10.04	
Age											
30 years and below	200	3.99 ± 1.20	2.14	4.21 ± 1.45	-2.46	3.68 ± 1.15	-2.30	4.08 ± 1.19	-0.70	46.19 ± 10.38	-3.11
30 years and above	238	3.75 ± 1.11	0.03	3.86 ± 1.31	0.014	3.43 ± 1.11	0.022	3.97 ± 1.08	0.484	49.28 ± 9.55	0.002
Marital status											
Married	218	3.81 ± 1.06	-0.84	3.96 ± 1.27	-0.99	3.44 ± 1.07	-1.71	4.04 ± 1.02	-0.53	48.49 ± 9.23	-0.94
Single	220	3.91 ± 1.25	0.40	4.08 ± 1.49	0.321	3.64 ± 1.19	0.088	3.99 ± 1.23	0.594	47.25 ± 10.78	0.346
Educational level											
Primary School ^a	13	3.08 ± 0.87	5.09	2.89 ± 1.09	11.84	2.91 ± 1.07	9.39	3.46 ± 0.97	6.89	50.69 ± 13.30	5.24
High School ^b	56	3.59 ± 1.15	0.007†	3.74 ± 1.39	0.003‡	3.25 ± 1.13	0.009‡	3.79 ± 1.15	0.032	49.66 ± 10.41	0.073
University or higher education ^c	369	3.93 ± 1.15	a < c	4.10 ± 1.37	a < c	3.61 ± 1.13		4.07 ± 1.12		47.49 ± 9.85	
Employment status											
Unemployed/Housewife ^a	143	3.95 ± 1.11	5.39	4.14 ± 1.39	10.30	3.62 ± 1.11	8.43	4.09 ± 1.06	11.15	46.97 ± 10.25	11.96
Full-time employed ^b	250	3.73 ± 1.18	0.005†	3.86 ± 1.39	0.006‡	3.43 ± 1.14	0.015‡	3.89 ± 1.16	0.004‡	49.06 ± 9.67	0.003‡
Part-time employed ^c	45	4.30 ± 1.04	b < c	4.50 ± 1.18	b < c	3.93 ± 1.10	b < c	4.46 ± 1.03	b < c	44.06 ± 10.38	c < b
Family type											
Extended family ^a	40	3.96 ± 1.19	2.67	4.14 ± 1.43	5.19	3.73 ± 1.16	3.89	4.02 ± 1.14	4.50	48.77 ± 10.63	9.26
Nuclear family ^b	344	3.90 ± 1.12	0.070	4.07 ± 1.35	0.075	3.56 ± 1.12	0.143	4.07 ± 1.08	0.105	47.29 ± 9.81	0.010
Other ^c	54	3.52 ± 1.32		3.60 ± 1.51		3.29 ± 1.21		3.67 ± 1.35		50.87 ± 10.68	b < c‡
Number of children											
0 ^a	254	3.89 ± 1.24	2.28	4.06 ± 1.48	8.92	3.61 ± 1.18	10.08	3.98 ± 1.22	6.08	47.41 ± 10.78	6.96
1 ^b	99	3.84 ± 1.04	0.078	3.96 ± 1.24	0.030‡	3.47 ± 1.09	0.018‡	4.08 ± 0.95	0.108	48.29 ± 8.38	0.073
2 ^c	74	3.93 ± 1.00		4.11 ± 1.20	d < a, d < b, d < c	3.54 ± 0.97	d < a, d < b, d < c	4.15 ± 1.02		47.90 ± 8.44	
3 and above ^d	11	2.98 ± 0.99		2.88 ± 1.20		2.62 ± 1.13	d < c	3.44 ± 0.81		54.27 ± 14.45	
Number of households											
1	48	3.64 ± 1.43	1.09	3.73 ± 1.67	2.58	3.46 ± 1.30	0.70	3.72 ± 1.40	3.33	50.60 ± 11.11	5.88
2	220	3.86 ± 1.07	0.337	4.00 ± 1.31	0.275	3.51 ± 1.05	0.704	4.08 ± 1.06	0.190	47.83 ± 9.34	0.053
3 and above	170	3.92 ± 1.18		4.13 ± 1.39		3.61 ± 1.20		4.02 ± 1.12		47.14 ± 10.53	
Number of households aged 65 and above											
0	386	3.84 ± 1.15	0.88	4.00 ± 1.38	1.78	3.50 ± 1.12	4.06	4.02 ± 1.13	0.05	47.95 ± 9.84	0.27
1	37	4.10 ± 1.29	0.416	4.35 ± 1.52	0.411	3.93 ± 1.27	0.131	4.03 ± 1.21	0.978	46.59 ± 13.09	0.873
2 and above	15	3.79 ± 1.03		3.83 ± 1.23		3.62 ± 0.95		3.92 ± 1.05		48.80 ± 6.53	
Chronic disease											
Yes	68	3.77 ± 1.24	-0.72	3.84 ± 1.42	-0.91	3.49 ± 1.23	-0.29	3.97 ± 1.21	-0.10	48.85 ± 8.87	-0.47
No	370	3.88 ± 1.14	0.471	4.05 ± 1.38	0.364	3.55 ± 1.12	0.774	4.03 ± 1.11	0.922	47.68 ± 10.25	0.640
Attending to school											
Yes	172	4.04 ± 1.13	2.68	4.26 ± 1.39	-2.82	3.73 ± 1.10	-2.62	4.15 ± 1.10	-1.83	46.64 ± 10.49	-2.09
No	266	3.74 ± 1.16	0.008	3.87 ± 1.36	0.005	3.43 ± 1.14	0.009	3.93 ± 1.14	0.068	48.66 ± 9.68	0.036

Abbreviations: F: One-way ANOVA (when an overall significance was observed, pairwise post hoc tests were performed using Hochberg's GT2[†]); KW: Kruskal-Wallis H (when an overall significance was observed, pairwise post hoc tests were performed using Mann-Whitney U [‡]); M, mean; P value of less than 0.05 was considered to show a statistically significant result; SD, standard deviation; t: Student's t-test; U: Mann-Whitney U.

The Significance of bold values indicates statistically significant results at P > 0.05.

$P = 0.003$) were significantly higher compared to those who were aged 30 and younger and who had a part-time job. The mean WEMWBS scores of women who had a nuclear family ($H = 9.26$, $P = 0.010$) and who were attending a school currently ($z = -2.09$, $P = 0.036$) were significantly lower than those of the women who had other family types and who were not receiving education. No statistically significant difference was found between marital status, educational status, number of children, number of individuals living at home, number of individuals aged over 65 living at home, and the presence of chronic disease and the mean WEMWBS scores ($P > 0.05$; Table 3).

The relationship between women's COVID-19-related characteristics and burnout

In the COVID-19 period, of women who thought they had symptoms from COVID-19, had significantly higher scores at BM ($t = 6.01$, $P < 0.001$) and the emotional ($z = -5.76$, $P < 0.001$), the mental ($z = -4.86$, $P < 0.001$), and physical burnout ($z = -5.21$, $P < 0.001$) subscales. The mean BM scores of women who went to work for a few days a week were significantly lower than those who went to work every day, once a month, and those who did not work ($F = 2.90$, $P = 0.022$). Although there was a statistically significant ($P < 0.05$) difference between the employment type of women during the COVID-19 period and the emotional ($H = 11.95$, $P = 0.018$) and physical ($H = 11.97$, $P = 0.018$) subscales of the Burnout Scale, no statistically significant difference was found between the groups in post hoc analyses ($P > 0.05$). No statistically significant difference was found between getting a COVID-19 PCR test, the loss of a relative or acquaintance due to COVID-19, not going out, not meeting with friends or relatives, or maintaining social distance during the COVID-19 and the mean scores obtained from the BM and all its subscales ($P > 0.05$; Table 4).

In the COVID-19 process, the mean BM ($F = 3.47$, $P = 0.016$) and mental ($H = 12.29$, $P = 0.006$) and physical ($H = 11.77$, $P = 0.008$) subscale scores of women who perceived less emotional support from their spouses were significantly higher compared to those who perceived it more. Also, the emotional subscale scores were significantly higher compared to those of women who perceived the support at a moderate level ($H = 11.00$, $P = 0.012$), and the mental burnout scores of those who were single were significantly higher than those who perceived it more ($H = 12.29$, $P = 0.006$). The mental burnout subscale scores of

women who perceived spousal support socially more were significantly lower than those of the single women ($H = 10.82$, $P = 0.013$). In addition, although there was a statistical difference between social spousal support and physical burnout sub-dimension ($H = 7.99$, $P = 0.046$), no statistically significant difference was found between the groups in post hoc analyses ($P > 0.05$). No statistically significant difference was found between the perceived financial support and the mean scores of women from the BM and all its subscales ($P > 0.05$; Table 4).

The relationship between women's COVID-19-related characteristics and mental well-being

In the COVID-19 period, the WEMWBS mean scores of women who thought they had no symptoms caused by COVID-19 were significantly higher ($z = -2.70$, $P = 0.007$). Although there was a significant difference between the employment type during the pandemic of women and their mean scores from the WEMWBS ($H = 10.01$, $P = 0.040$), there was no difference between the groups in the post hoc analysis ($P > 0.05$).

Within the scope of the COVID-19 measures, no statistically significant difference was found between not going out, not meeting with friends or relatives, or maintaining social distance and the mean WEMWBS scores ($P > 0.05$; Table 4).

In the COVID-19 process, women who perceived spousal support emotionally ($H = 13.23$, $P = 0.004$) or socially ($H = 13.11$, $P = 0.004$) more had significantly higher mean WEMWBS scores than those who were single or perceived spousal support at a low or moderate level. No statistically significant difference was found between the perceived financial spousal support and the mean WEMWBS scores ($H = 2.15$, $P = 0.524$; Table 4).

Lastly, this study found a strong negative relationship between BM and WEMWBS ($r = -0.68$, $P < 0.001$).

Predictors of women's burnout

Linear regression analysis was performed to investigate whether age, education level, number of children, and perceiving COVID-19 symptoms predict burnout levels. Although there was a significant relationship between working type and perceived spousal emotional support and burnout, these factors were not included in the regression model because they were not normally distributed. As a result of linear regression

TABLE 4 The relationship between women's compliance with social distancing measures and their burnout and mental well-being during the COVID-19 pandemic

Variables	n	Burnout measure		Emotional burnout		Mental burnout		Physical burnout		Warwick mental well-being scale	
		M ± SD	t/F Pvalue	M ± SD	U/KW Pvalue	M ± SD	U/KW Pvalue	M ± SD	U/KW Pvalue	M ± SD	U/KW Pvalue
Perception of having any COVID-19 symptoms											
Yes	103	4.44 ± 1.08	6.01	4.73 ± 1.30	-5.77	4.03 ± 1.07	-4.86	4.56 ± 1.05	-5.21	45.16 ± 10.65	-2.70
No	335	3.68 ± 1.12	<0.001	3.80 ± 1.34	<0.001	3.40 ± 1.12	<0.001	3.85 ± 1.10	<0.001	48.70 ± 9.72	0.007
Having any COVID-19 PCR test											
Yes, I had a positive test result	398	3.84 ± 1.13	1.56	4.01 ± 1.36	1.59	3.52 ± 1.11	3.09	4.00 ± 1.10	2.18	47.96 ± 9.83	0.05
Yes, I had a negative test result	2	3.04 ± 0.33	0.316	3.07 ± 0.50	0.452	2.78 ± 0.10	0.214	3.28 ± 0.40	0.336	49.50 ± 2.12	0.975
No, I haven't had any test before	38	4.07 ± 1.43		4.20 ± 1.67		3.82 ± 1.35		4.19 ± 1.44		46.78 ± 12.42	
Losing a relative/acquaintance due to COVID-19											
Yes	63	3.84 ± 1.18	-0.17	4.02 ± 1.44	-0.18	3.53 ± 1.18	-0.36	3.96 ± 1.08	-0.67	48.00 ± 8.30	-0.10
No	375	3.86 ± 1.15	0.868	4.02 ± 1.38	0.862	3.55 ± 1.13	0.719	4.02 ± 1.14	0.501	47.84 ± 10.32	0.917
Working type during COVID-19											
Working full time every weekday ^a	96	3.99 ± 1.21	2.90 [¶]	4.17 ± 1.41	11.95	3.64 ± 1.14	6.87	4.16 ± 1.22	11.97	48.61 ± 9.39	10.01
Working a couple of days in a week ^b	51	3.49 ± 1.17	0.022	3.54 ± 1.36	0.018 [‡]	3.25 ± 1.19	0.143	3.68 ± 1.13	0.018 [‡]	50.82 ± 8.82	0.040 [‡]
Working a couple of days in a month ^c	15	4.17 ± 0.91		4.37 ± 1.24		3.80 ± 0.85		4.35 ± 0.80		43.53 ± 9.38	
Working from home ^d	100	3.68 ± 1.06	b < a, b < c, b < e,	3.82 ± 1.24		3.44 ± 1.06		3.79 ± 1.04		48.33 ± 9.66	
Not working ^e	176	3.97 ± 1.17	d < e	4.16 ± 1.43		3.61 ± 1.17		4.14 ± 1.12		46.71 ± 10.77	
Adoption to staying home											
Never	5	4.19 ± 1.68	0.40	4.28 ± 1.96	1.50	4.17 ± 1.68	1.64	4.11 ± 1.44	1.97	47.00 ± 12.26	4.62
Rarely	18	3.74 ± 1.00	0.811	3.81 ± 1.20	0.827	3.57 ± 1.04	0.801	3.84 ± 1.00	0.742	47.27 ± 11.20	0.328
Sometimes	45	3.99 ± 1.09		4.17 ± 1.34		3.67 ± 1.09		4.12 ± 1.04		45.88 ± 9.67	
Most of the time	181	3.81 ± 1.11		3.97 ± 1.32		3.51 ± 1.08		3.94 ± 1.08		47.66 ± 9.38	
All the time	189	3.88 ± 1.23		4.05 ± 1.46		3.53 ± 1.19		4.08 ± 1.20		48.61 ± 10.59	
Adoption to not seeing friends and relatives											
Never	4	3.58 ± 2.21	1.64	3.71 ± 2.64	6.57	3.50 ± 2.22	8.17	3.53 ± 1.83	5.88	50.75 ± 15.50	0.97
Rarely	26	3.43 ± 1.12	0.163	3.55 ± 1.36	0.160	3.09 ± 1.03	0.086	3.66 ± 1.13	0.208	48.30 ± 9.78	0.914
Sometimes	43	4.09 ± 1.18		4.26 ± 1.47		3.79 ± 1.16		4.22 ± 1.08		47.55 ± 10.52	
Most of the time	152	3.79 ± 1.07		3.93 ± 1.28		3.48 ± 1.06		3.96 ± 1.05		47.28 ± 9.93	
All the time	213	3.92 ± 1.19		4.09 ± 1.41		3.60 ± 1.16		4.06 ± 1.17		48.24 ± 10.02	
Adoption to keep social distancing											
Never	11	3.79 ± 1.63	0.36	3.79 ± 1.93	1.14	3.70 ± 1.56	0.55	3.88 ± 1.52	2.11	43.72 ± 13.90	4.94
Rarely	24	4.06 ± 0.96	0.782	4.23 ± 1.14	0.767	3.66 ± 0.94	0.907	4.29 ± 1.00	0.549	44.08 ± 12.33	0.177
Sometimes	161	3.81 ± 1.03		3.96 ± 1.26		3.49 ± 1.06		3.98 ± 0.99		47.68 ± 9.28	
Most of the time	242	3.88 ± 1.23		4.05 ± 1.46		3.56 ± 1.18		4.02 ± 1.21		48.55 ± 10.03	
All the time										47.86 ± 10.04	
Perceived spousal emotional support											
Single ^a	220	3.91 ± 1.25	3.47	4.08 ± 1.49	11.00	3.64 ± 1.19	12.29	3.99 ± 1.23	11.77	47.25 ± 10.78	13.23
Less ^b	27	4.31 ± 1.12	0.016 [§]	4.52 ± 1.33	0.012 [‡]	3.90 ± 1.17	0.006 [‡]	4.50 ± 0.97	0.008 [‡]	44.74 ± 11.31	0.004 [‡]
Moderate ^c	106	3.89 ± 0.99	d < b	4.04 ± 1.19	c < b	3.51 ± 1.05	d < b, d < a	4.13 ± 0.94	d < b	47.59 ± 7.80	b < d, c < d, a < d
More ^d	85	3.56 ± 1.07		3.68 ± 1.29		3.21 ± 1.01		3.78 ± 1.07		50.80 ± 9.66	
Perceived spousal social support											

(Continued)

TABLE 4 (Continued)

Variables	n	Burnout measure		Emotional burnout		Mental burnout		Physical burnout		Warwick mental well-being scale	
		M ± SD	t/F	M ± SD	U/KW	M ± SD	Pvalue	M ± SD	Pvalue	M ± SD	U/KW
Single ^a	220	3.91 ± 1.25	2.43	4.08 ± 1.49	7.13	3.64 ± 1.19	10.82	3.99 ± 1.23	7.99	47.25 ± 10.78	13.11
Less ^b	21	4.25 ± 1.25	0.065	4.44 ± 1.47	0.068	3.92 ± 1.26	0.013 ‡	4.40 ± 1.14	0.046 ‡	43.38 ± 11.96	0.004 ‡
Moderate ^c	113	3.89 ± 1.00		4.03 ± 1.19		3.51 ± 1.05	d < a	4.13 ± 0.96		47.61 ± 8.31	b < d, c < d,
More ^d	84	3.59 ± 1.06		3.73 ± 1.29		3.22 ± 1.01		3.82 ± 1.03		50.94 ± 9.01	a < d
Perceived spousal financial support											
Single ^a	220	3.91 ± 1.25	0.31	4.08 ± 1.49	1.28	3.64 ± 1.19	3.26	3.99 ± 1.23	0.45	47.25 ± 10.78	
Less ^b	29	3.76 ± 1.15	0.817	3.95 ± 1.40	0.733	3.35 ± 1.14	0.353	3.96 ± 1.11	0.931	47.10 ± 12.18	2.15
Moderate ^c	106	3.85 ± 1.00		4.00 ± 1.18		3.49 ± 1.06		4.06 ± 0.97		48.19 ± 8.22	0.524
More ^d	83	3.78 ± 1.12		3.90 ± 1.34		3.41 ± 1.07		4.04 ± 1.06		49.34 ± 9.30	

F: One-way ANOVA (when an overall significance was observed, pairwise post hoc tests were performed using † Hochberg’s GT2, ¶ *LSD*, § *Tamhane’s T2*); KW: Kruskal–Wallis H (when an overall significance was observed, pairwise post hoc tests were performed using ‡ Mann–Whitney *U* with Bonferroni correction); M, mean; P value of less than 0.05 was considered to show a statistically significant result; SD, standard deviation; t: Student’s *t*-test; U: Mann–Whitney *U*.

The Significance of bold values indicates statistically significant results at $P > 0.05$.

analysis, it was seen that the model established was statistically significant ($F = 11.16$; $P < 0.001$): In addition, R^2 , which shows the power of the variables in the model to explain the burnout level of individuals, was calculated as 10.4% ($R^2 = 0.10$). When the individual significance of the variables in the established model was examined, the age of the woman ($\beta = -0.03$, $P = 0.001$), having two or more children ($\beta = 0.42$, $P = 0.015$), not having COVID-19 symptoms ($\beta = -0.73$, $P < 0.001$) were the significant variables associated with burnout (Table 5).

DISCUSSION

Women are more victimized during the pandemic period due to Turkey’s preference for a policy of limitation

based on social isolation and distance in the fight against Covid-19 and having a masculine policy area and a patriarchal social structure (Sumbas 2021). Of course, it is not possible to say that every woman is equally affected by this process. While some feel the existing inequalities are more, the lives of others do not change much. Therefore, the experiences of women in this process vary depending on many factors such as their age, education level, having children, working status, receiving emotional or social support, chronic diseases. This study examined the effects of social distancing measures on women’s mental well-being and burnout levels in the COVID-19 pandemic. In the present sample of Turkey under social distancing conditions owing to COVID-19, participants had a signal of risk for burnout and medium mental well-being. In

TABLE 5 Linear regression analysis of the factors affecting the level of burnout

	β	t	P	VIF	Fvalue	Model P	R^2
Constant	4.87	16.90	0.000		11.16	0.000	0.10
Age (years)	-0.03	-3.47	0.001	1.68			
Education level = High school and below							
University and above	0.28	1.87	0.063	1.09			
Number of children reference category=none							
Number of children = 1	0.30	2.03	0.043	1.37			
Number of children = 2 and more	0.42	2.43	0.015	1.65			
Perceiving COVID-19 symptoms = Yes							
Perceiving COVID-19 symptoms = No	-0.73	-5.82	0.000	1.03			

DW:2.061.

addition, there was a negative relationship between burnout and mental well-being levels.

The effect of women's sociodemographic characteristics on burnout and well-being

This study revealed that women who attend school compared to those who do not attend and younger women compared to older women had higher emotional and mental burnout and lower mental well-being. In the interpretation of this finding, it should be taken into account that nearly half of the women in this study were women still attending university. With the social distancing and isolation policies, many universities started distance education for an indefinite period, and many female university students had to return to their families' home. Young women returning home had to undertake different responsibilities such as helping with housework in addition to their lessons (Yildirim-Sahin 2021). Universities are not only a place for young women to attend lectures but also a living space that can provide them with the knowledge that will strengthen their socio-economic and socio-cultural bases in the future. However, with the pandemic, these living spaces were taken from them. In addition, young women's social and cultural reference points, in which they make sense of their lives, are under threat, in addition to the shrinkage of the labour market they already have, the increase in unemployment and the future anxiety caused by the upcoming economic crisis (Oz-Ceviz *et al.* 2020; Yildirim-Sahin 2021). Additionally, younger women generally make up the part of the population that works or receives education, and the time that this group spends outside has decreased with the implementation of protective measures against COVID-19. However, for older women who spend most of their time at home, compliance with the measures may feel like a continuation of the usual living order. In addition, older women are thought to be more resistant to adverse life events. Therefore, it is predicted that younger women experience high emotional and mental burnout and low mental well-being due to restricted mobilization.

In this study, it was determined that women with a university or higher education had higher levels of burnout. According to the results of a review by Schaufeli and Enzmann (1998) examining the sociodemographic factors associated with burnout, high education level is associated with burnout, which is consistent with our research findings (Schaufeli & Enzmann, 1998). Considering that women with a high level of

education are more involved in business life, their working lives may be more affected due to the measures taken to prevent the spread of the pandemic. Working from home or sometimes going to work may have increased their burden due to both continuing working life and increased responsibilities for daily housework.

Gender inequality based on unpaid female labour during the COVID-19 pandemic is increasing even more. Distance education, which is an important result of the social distancing policy in the fight against the pandemic, or the fact that children cannot go to school, causes an increase in the burden of care for women with children and makes the pandemic process even more challenging for women (Memis & Ilkkaracan 2020; Sumbas 2021). As the number of children increases, the lives of women can become more tiring both physically and mentally. This study revealed that women who had more than three children were more emotionally and mentally exhausted. Having children is a positive experience; it is associated with more life satisfaction especially among married couples, as opposed to never-married or separated couples (Angeles 2010). However, having children and particularly having many children can cause increased stress levels. Taking care of each child's health and education separately also increases the stress and burnout experienced by families (Griffith 2020). In order to reduce women's burnout and improve their mental well-being, it is of great importance to give women different leave policies due to their care burden or to arrange parental leaves within the framework of a common care understanding.

The social distancing and isolation policy in the COVID-19 process brings opportunities such as rotating, flexible, remote work, unpaid leave or part-time work in working life. However, some women might experience the disadvantages of these working conditions. For many women who work remotely from home, the burden of paid/professional work has also been carried home. For women, this means working 24/7 and while increasing the conflict between family and work, it leaves no time for social life (Çoban 2022). This study revealed that women working in part-time jobs had higher burnout levels compared to women working full-time. While job-related responsibilities of those who work full-time are high, women who do not work have more household responsibilities. Indeed, women who work part-time jobs try to fulfil both their home and work responsibilities. Therefore, trying to balance the increasing responsibilities at home

and work life, especially during the COVID-19 period, further increases the current burden of women (Hjálmsdóttir & Bjarnadóttir 2021). The result obtained from this study suggests that these increased responsibilities may have affected women's burnout and mental well-being. In addition, our research findings showed that women who went to work for a few days a week during the COVID-19 period experienced less burnout compared to those who went to work every day, who went to work once a month, or who did not go to work at all. This finding suggests that moving away from home to work for a few days a week reduces the emotional and physical difficulties and fatigue caused by staying at home constantly or going to work every day, thereby reducing burnout and increasing mental well-being.

The effect of COVID-19-related characteristics on burnout and well-being

The psychosocial impact of epidemics and health emergencies are higher during social distancing and quarantine measures (Brooks *et al.* 2020). Quarantine has been associated with high stress level, depression, and anxiety (Rossi *et al.* 2020). Additionally, even any simple flu-like symptom increases anxiety and panic in public (Chatterjee *et al.* 2020). When the perception of having COVID-19 symptoms is combined with the quarantine conditions, the distress and anxiety of the public may increase even more. In this study, it was found that women who thought they had COVID-19 symptoms had higher burnout and lower mental well-being. Several reasons could explain this including their fear of spreading the disease to their family or people around them, having contracted a new and highly infectious disease, apprehension that they might have unknowingly transmitted the virus, excessive cleaning to prevent the spread of the disease or taking more precautionary actions. Therefore, further research is needed to understand why women who thought they had COVID-19 symptoms have higher burnout and lower mental well-being.

This study revealed that women highly complied with social distancing measures, such as not going out, not meeting with friends and relatives, and maintaining social distance to control the first wave of the COVID-19 pandemic. Similarly, it was reported in studies evaluating compliance with social distancing rules in Japan, Italy, and Arabia that the majority of society obeyed the measures (Bazaid *et al.* 2020; Machida *et al.* 2020; Rotondi *et al.* 2020). Although women's compliance

with social distancing measures is a satisfactory finding in terms of preventing the pandemic and decreasing COVID-19 transmission, it is remarkable in that it may also cause mental problems. Reduced social and physical contact with others can cause stress, which can be tiring and exhausting (Holmes *et al.* 2020). Similarly, some studies have revealed that anxiety, depression, and psychological distress have increased during the COVID-19 period (Brooks *et al.* 2020; Choi *et al.* 2020; Holmes *et al.* 2020). Therefore, it is of great importance not to neglect the assessment of the mental state of women and give them psychosocial support.

In this study, it was determined that women, who are culturally and socially regarded as primary caregivers in the household, spent more time on housework and childcare as well as self-care compared to pre-COVID-19 time. Similarly, in studies conducted in Spain (Farre *et al.* 2020), England (Sevilla & Smith 2020), and Italy (Del Boca *et al.* 2020), social distancing measures taken to prevent the spread of the virus, such as working from home and closing schools, imposed an extra burden on particularly women. The results of this study similarly revealed that the daily burden of women increased. COVID-19 is not only a health crisis but also a social and economic crisis. This result in our study revealed the need for supporting women socially and economically in such crisis conditions. It is claimed that social and economic support given to women can provide an effect on protecting their mental health and reducing their burnout.

In this study, it was found that women who stated that the emotional support they received from their spouse was high during the COVID-19 period experienced less burnout. It was determined that single women experienced more burnout than those who were married and perceived more spousal support socially. In addition, it was found that the mental well-being levels of women who perceived high levels of spousal support socially were higher than those of the others. In the study conducted by Tanaka and Lowry (2013), it was determined that there was a positive relationship between the perceived mental health of mothers with preschool children and unmet spousal support. A supportive partner can provide coping resources, such as parenting help, encouragement, and advice when they see that their partner is sad or tired. Spousal support can contribute positively to the mental state of the woman as well as affecting the quality of parenting (Tanaka & Lowry, 2013). In addition, social support, such as childcare and sharing household chores, can lead to increased communication and

shared experiences in a way that encourages emotional support (Meadows 2011). Some studies conducted in European countries suggest that along with social distancing measures, especially men who work from home spend more time on housework and childcare, providing more support to their working spouses (DelBoca *et al.* 2020; Farré *et al.* 2020). These findings in the literature are promising for the reconstruction of gender roles all over the world. However, in contrast to these studies, Sevilla and Smith (2020) argued that regardless of the employment status of women, they were held responsible for childcare and housework and that the unbalanced division of labour at home continued during the COVID-19 period as well as it was before the pandemic. There is no study conducted on this topic in Turkey. There is a need for studies comprehensively investigating women in the COVID-19 period, the dynamics of male and female responsibilities for housework, and how they interact with each other.

This study revealed that age, number of children, and perception of having COVID-19 symptoms were the predictors of burnout. Young women compared to the older women, women with two or more children compared to those without children, and women who thought they had COVID-19 symptoms were more vulnerable for experiencing higher burnout. Since women are considered as a vulnerable group, it is recommended to conduct evaluations of women's mental health from time to time and to develop intervention approaches by identifying women who are at risk for burnout and especially those who have the predictive factors determined in this study. In addition, it can be emphasized that it is critical to create the content of the mental health protection and development programmes to be designed for women by taking these predictors into account. Improving women's mental health is valuable for individuals to lead a healthier life, and it is emphasized that such programmes are important not only for women's health but also for family and public health.

Limitations

In our study, it is thought that the majority of the sample included women with a high level of education due to the use of online questionnaires as a data collection tool. Accordingly, the representativeness of women with low levels of education is limited in this study. Therefore, it is recommended to repeat the study with larger samples. In this study, the pre-existing psychological problems of the participants were not

questioned. Therefore, the effect of this confounding factor was not investigated. Also, recall bias may exist in self-reporting measurements.

Relevance for clinical practice

The COVID-19 pandemic and social distancing measures exacerbated gender-linked mental health challenges. It is predicted that as the duration of staying at home and social isolation increases, the mental problems experienced by women will continue. Therefore, epidemiological monitoring and creating mental and social support opportunities for all women, particularly for those who are at risk for burnout, who are already experiencing burnout, and who have reduced/poor mental well-being are critical. Alleviating the mental health effects requires a concerted effort from health-care professionals, mainly the mental health nurses, policy makers, and public.

For the community mental health nurses, proactive outreach to the women in local communities could lead to prevention, early detection, and prompt intervention. Communication of all health needs is essential when women are isolated or feel isolated. Mental health nurses could contact women to share information about the symptoms of burnout, depression, and anxiety and help them to identify the signs of psychological distress. They could offer cognitive and/or relaxation skills to cope with minor symptoms and empower women to seek more support as needed without fear of stereotype. However, outreaching to women and providing face-to-face mental health interventions has been a challenge for public mental health nurses because of the quarantine and lockdown measures. Therefore, emphasis should be placed on delivering community-based mental health programmes through technology. Psychological and social support can be enhanced via online contact or simple communication methods such as e-mail and text messaging. Although, the nursing interventions target women's mental well-being lacks in literature, several research demonstrate that telehealth represent an effective mode of mental health service delivery to youth and adult mental health service users (Frank *et al.* 2021; Nicholas *et al.* 2021; Reay *et al.* 2020).

Parenting is a stressful factor during the pandemic. Research shows that distress, violence, and vulnerability increase for women and children during periods of school closures associated with health emergencies (Rothe *et al.* 2015). The current study and the evidence show that women with children have higher

burnout and poor mental well-being. Thus, community mental health nurses can offer specific parenting tips from guidelines provided by UNICEF, World Health Organization, the US Centers for Disease Control and Prevention (CDC) (Cluver *et al.* 2020). So that, women can utilize effective strategies to strengthen families to respond, care, and manage parenting stress.

Employers can develop action plans for women employees to reduce burnout caused by the increasing burden on them and to increase their mental well-being. Creating peer support programmes at the workplace, promoting active listening, providing resources, and transparency in management can promote mental health of working women (Wilson *et al.* 2022). Additionally, when schools and kindergartens are closed, it is of great importance to support working women who are responsible for childcare and live with an elderly person at home. Employers can offer women with childcare responsibilities more flexible working hours. More, meetings scheduled during the hours when children's care needs are intense can create even more stress for women. Therefore, the meeting hours can be rearranged according to the needs of the employees.

Programmes and policies for men should be developed in order to change the attitude that accepts 'invisible' work such as unpaid care and housework as the responsibility of women and promote men's equal share of housework. As it was determined in this study, perceived support from husbands has an effect on women's burnout and mental well-being. In addition, increasing women's self-confidence and improving their self-esteem can play an important role in changing the perception of the women as the primary caregiver in the family due to gender roles. The strategies like community-based education programmes, social and behaviour change communication, and awareness raising through the mass media or other means of information sharing can be utilized to achieve that (Sarker, 2021).

Lastly, more comprehensive systematic studies should be conducted to reveal the reasons for the increased responsibilities of women due to gender inequality in the COVID-19 period and their impact on their mental health. Determining the antecedents, attributes, and consequences of COVID-19 on women's mental health is the first step of establishing mental health and social policies. More, although the present study contributes to the growing body of the literature by demonstrating the impact of COVID-19

on women's burnout and mental well-being, the results of the study reveal the short-term effect of social distancing. We recommend that studies evaluating the long-term psychological effects of staying at home and social distancing should be conducted.

Conclusion

The findings of this study provide key information about women's burnout levels and mental well-being as a result of social distancing measures taken with the first wave of the pandemic before the new normal. Isolation arising from the current global pandemic is affecting women's burnout and low mental well-being. Having new or increased responsibilities with the pandemic, which women already have due to gender inequalities and lack of familial or social support for women cause them to feel stressed and mentally exhausted. It is of great importance to be noticed and intervened in the early period, as all this experienced stress, feelings of burnout, poor mental well-being associated with worrying more, having low mood, feeling depressed can lead to more serious mental problems over time. Nurse leaders and community mental health nurses are key professionals to provide psychosocial support to women during stressful times. Thus, from the first day of the problems, women should be reached, the problems that affect women the most during the pandemic should be determined, initiatives and programmes that will strengthen women psychologically should be implemented immediately by the nurses and health care professionals.

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ETHICAL CONSIDERATIONS

This study was conducted according to the guidelines of the Declaration of Helsinki, and all procedures involving human subjects were approved by the Koc University Institutional Review Board (IRB number: 2020.263.IRB3.104). Written permission was obtained from the Turkish Ministry of Health (Issue number: 2020-06-16T09_48_20). Participants gave consent to participate in this study before completing the online survey. Permissions were obtained from the authors to use the Turkish translated and culturally adapted versions of the WEMWBS and BM in this study.

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AUTHOR CONTRIBUTIONS

KTK and AB designed the study. KTK, SA, GB, and AB drafted the survey. SO developed the online version of the surveys. All authors contributed to data collection. GB and KTK did the statistical analysis. KTK, SA, and AB prepared the first draft. All authors reviewed the article and provided comments. All authors accepted the final version after revisions.

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