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Healthy Lifestyle Behaviors and Quality of Life of Women in the Pandemic

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ABSTRACT

Purpose: This paper investigated the correlation between healthy lifestyle behaviors and quality of life in married women during the COVID-19 pandemic.
Method: This descriptive study was conducted between May and August 2021. The sample consists of 279 married women. Data were collected online using a demographic characteristics questionnaire, the Healthy Lifestyle Behaviors Scale-II (HLBS-II), and the World Health Organization Quality of Life Scale Brief Version (WHOQOL-BREF-TR). Analysis; It was done with Mann-Whitney U, Kruskal-Wallis, Dunn and Spearman Correlation tests.
Results: Participants; median age was 40 (Dec: 18-60), 61.3% had a bachelor's degree, 53% had a job, 28.7% had a chronic illness, and 28% had a diagnosis of COVID 19. Participants had a median HLBS-II score of 124 (range: 70-208). They had a median WHOQOL-BREF-TR "physical health," "psychological health," "social relationships," and "environment" subscale score of 13, 14, 15 and 14, respectively. There is a significant relationship between healthy lifestyle behaviors and quality of life with the variables "education," "employment," "income," "spousal support," "chronic disease," "testing positive for COVID-19," and "spending time with family members" during the COVID-19 pandemic. There was a positive correlation between healthy lifestyle behaviors and quality of life ($p<0.05$).
Conclusion and Suggestions: Healthy lifestyle behaviors have a positive impact on women's quality of life during the COVID-19 pandemic. Nurses should take physical, psychological, social, and environmental factors into account and evaluate women holistically. Disadvantaged women (low income/ education level) should be given priority in health care during crises, such as the pandemic.

Pandemide Kadınların Sağlıklı Yaşam Biçimi Davranışları ve Yaşam Kalitesi

Makale Bilgileri

Makale Geçmişi
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Anahtar Kelimeler:
COVID- 19,
Pandemi,
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Yaşam kalitesi.

ÖZ

Amaç: Bu makale, COVID-19 pandemisi sırasında evli kadınlarda sağlıklı yaşam biçimi davranışları ile yaşam kalitesi arasındaki ilişkiyi araştırmıştır.
Yöntem: Tanımlayıcı tipteki bu çalışma Mayıs-Ağustos 2021 tarihleri arasında 279 evli kadın ile tamamlanmıştır. Veriler, Sosyodemografik Form, Sağlıklı Yaşam Tarzı Davranışları Ölçeği-II (SYBD-II) ve Dünya Sağlık Örgütü Yaşam Kalitesi Ölçeği Kısa Versiyonu (WHOQOL-BREF-TR) kullanılarak çevrimiçi olarak toplanmıştır. Analizler; Mann-Whitney U, Kruskal-Wallis, Dunn ve Spearman Korelasyon testleri ile yapıldı.
Bulgular: Katılımcıların; medyan yaşı 40 (Aralık: 18-60), %61.3 lisans derecesine sahip, %53'ü bir işte çalışan, %28.7'si kronik bir hastalığa sahip ve %28'i COVID 19 tanısı vardı. Katılımcıların medyan SYBD-II puanı 124 (aralık: 70-208) idi. WHOQOL-BREF-TR "fiziksel sağlık", "psikolojik sağlık", "sosyal ilişkiler" ve "çevre" alt ölçek puanları sırasıyla 13, 14, 15 ve 14'tür. "Eğitim", "istihdam", "gelir", "eş desteği", "kronik hastalık", "COVID-19 testi pozitifliği" ve "harcama" değişkenleri ile sağlıklı yaşam biçimi davranışları ile yaşam kalitesi arasında anlamlı bir ilişki saptandı. Sağlıklı yaşam biçimi davranışları ile yaşam kalitesi arasında pozitif bir ilişki bulundu($p<0.05$).
Sonuç ve Öneriler: Sağlıklı yaşam tarzı davranışları, COVID-19 pandemisi sırasında kadınların yaşam kalitesi üzerinde olumlu etkiye sahiptir. Hemşireler fiziksel, psikolojik, sosyal ve çevresel faktörleri dikkate almalı ve kadını bütüncül olarak değerlendirmelidir. Dezavantajlı kadınlara (gelir düzeyi düşük/eğitim düzeyi düşük) pandemi gibi kriz dönemlerinde sağlık hizmetlerinde öncelik verilmelidir.

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INTRODUCTION

The novel coronavirus disease (Covid-19) broke out in 2019 and has taken hold of the whole world since then. The World Health Organization declared the outbreak a pandemic in March, 2020 (World Health Organization [WHO], 2020). The pandemic has taken a toll on every aspect of life, including health, economy, work-life, and daily life (Kavas & Develi, 2020). Countries have taken numerous preventive measures against the pandemic (curfews, quarantine, school closures, flexible working hours, working from home, distance learning, etc.) (Zeybekoğulu Akbaş, 2020). These measures have ushered in a new normal. However, the new normal has put more demands on women, such as being more involved in their children's education and planning educational games and activities at home (Ünal et al., 2020; Yağmur, 2020). Since the pandemic, family members have ended up spending more time together at home, increasing women's responsibility for the bulk of work to keep households going (i.e., chores, cooking, and doing shopping) (Ünal et al., 2020). They have also had to take up the responsibility of cleaning the house (Ünal et al., 2020) because the coronavirus lives on surfaces for a duration of anywhere from hours to days (Yuen et al., 2020). In other words, women have had to shoulder more responsibilities since the pandemic (Işık, 2020; McMunn et al., 2019), adversely affecting their lifestyles and quality of life (Park et al., 2021).

A healthy lifestyle is a way of living in which one can control one's behaviors that affect one's health and make the right choices for one's well-being. Health promotion has been more critical than ever since the pandemic (Van den Broucke, 2020). Healthy lifestyle choices and behaviors are associated with good health (Dashti et al., 2016). Although good health is generally viewed as "well-being," it is affected by sociological, psychological, economic, and cultural factors. Therefore, health promotion and improvement require healthy lifestyle behaviors (Akyüz et al., 2017; Bahar et al., 2008).

People with healthy lifestyle behaviors are likely to have a better quality of life (Kılıç & Ata, 2018). Since the pandemic, people have become less physically active, resulting in reduced quality of life (Park et al., 2021). By Erçetin et al. (2020) argue that women, in general, and married women, in particular, have been more adversely affected by the pandemic (Erçetin et al., 2020). Therefore, lifestyle guides recommend a healthy diet (Zhang & Liu, 2020) and exercise to stay healthy during the pandemic (Lippi et al., 2020)

Quality of life of individuals; It is a situation in which he is happy by meeting his own needs without being dependent on anyone within the scope of his physical adequacy, social and economic situation. According to the World Health Organization, there are different sub-areas of quality of life (Physical health, psychological health, social relations, environment) (WHO, 2021). These areas can be affected by the periods when individuals are confined to their homes, such as the Covid-19 process. The mobility in the life of the individual and the happiness that comes with it constitute the quality of life (Burak Aktuğ et al., 2021). In this period, it has been observed that the workload of all women, whether working or doing housework, has increased and they have become a disadvantaged social group. Therefore, nurses should help women adopt healthy lifestyle behaviors to reduce health-related risks (Kartal, 2017; Orhan & Yağmur, 2020). However, they should recognize the gravity of the situation to be able to make that contribution (Yaman, 2017). So, this study aimed to investigate whether married women with healthy lifestyle behaviors had a better quality of life during the pandemic. The research questions are as follows:

1. What are the healthy lifestyle behaviors of married women during the pandemic?
2. How is the quality of life of married women during the pandemic?
3. Is there a relationship between healthy lifestyle behaviors and quality of life in married women during the Covid-19 pandemic?

METHOD

Research Design

This was a descriptive correlational study that was conducted between 1 May to 30 August 2021.

Study Group

The study population consisted of all married women in Turkey (%66) (Türkiye Nüfus ve Sağlık Araştırmaları [TNSA], 2019). A power analysis was performed using Gpower 3.1.9.4 (Faul et al., 2009). The results showed that a sample size of 277 would be large enough to detect significant differences 95% confidence interval (1-α), 85% test power (1-β), d = 0.179 effect size (Devran Enginoğlu et al., 2021). The inclusion criteria were (1) being married, (2) speaking and understanding Turkish, and (3) having an internet connection. The sample consisted of 279 participants.

Research Instruments and Processes

The data were collected using a demographic characteristics questionnaire, the Healthy Lifestyle Behaviors Scale-II (HLBS-II), and the World Health Organization Quality of Life Scale Brief Version (WHOQOL-BREF-TR). An online survey was developed (Google Forms), and a link was shared on social media. The data were collected between May and August 2021. We placed a check in the "Limit to 1 Response" box to ensure that each participant filled out the survey only once. It took 8-10 minutes to fill out the questionnaire.

Demographic Characteristics Questionnaire: The questionnaire developed by the researchers consisted of 14 items on sociodemographic characteristics and the situation at home during COVID-19 (Erçetin et al., 2020; Park et al., 2021; Zeybekoğulu Akbaş, 2020).

Healthy Lifestyle Behaviors Scale-II (HLBS-II): The Healthy Lifestyle Behaviors Scale-II (HLBS-II) was developed by Walker et al. (1987) and adapted to Turkish by Bahar et al. (2008). The instrument consists of 52 items scored on a four-point Likert-type scale ("1 = Never," "2 = Sometimes," "3 = Frequently," and "4 = Regularly." The instrument has six subscales: health care responsibility, physical activity, nutrition, spiritual development, interpersonal relationships, and stress management. The total score ranges from 52 to 208. The scale has a Cronbach's alpha (α) of 0.92, whereas the subscales have a Cronbach's alpha of 0.64 to 0.80. Each subscale score can be used independently. No items are reverse scored. There is no cut-off point. Higher scores indicate more healthy lifestyle behaviors (Bahar et al., 2008). The scale had a Cronbach's alpha of 0.94 in the present study.

World Health Organization Quality of Life Scale Brief Version (WHOQOL-BREF-TR): The World Health Organization Quality of Life Scale Brief Version (WHOQOL-BREF-TR) was developed by the World Health Organization (TheWHOQOLGroup, 1998) and adapted to Turkish by Eser et al. (1999) (Eser et al., 1999). It consists of 26 items scored on a five-point Likert-type scale (low score of 1 to high score of 5). The scale has four domains: physical health, psychological health, social relationships, and environment. Two other items measure overall quality of life and general health. Each domain has a mean score of 4 to 20. Higher scores indicate a higher quality of life. The scale has no cut-off point. The Turkish version of the scale has a Cronbach's alpha of 0.51 to 0.81 (Eser et al., 1999), which was 0.64 to 0.87 in the present study.

Data Analysis

The data were analyzed using the Statistical Package for Social Science (SPSS, v. 21.0) at a significance level of $p<0.05$. Number, ratio, median, minimum, maximum, mean, and standard deviation were used for descriptive statistics. The Kolmogorov-Smirnov test was used for normality testing. The data were analyzed using the Mann Whitney U and Kruskal Wallis tests. The Dunn test

was used to compare more than two groups. Spearman's correlation test was used to determine the relationship between scale scores.

Ethic

The study was approved by the Scientific Research Platform of the Ministry of Health (2021-04-27T17_32_49) and an ethics committee (2021/34). Informed consent was obtained from participants. The study was conducted in accordance with STROBE guidelines (Karaçam, 2018).

RESULTS

The sociodemographic characteristics of women and their characteristics regarding the COVID-19 pandemic of the participants are given in Table 1.

Table 1. *Sociodemographic Characteristics of Women and Their Characteristics Regarding the COVID-19 Pandemic (n=279)*

Variables			
Age*		39.53±8.41	40(18-60)
		n	**%**
Education level	High school or lower	108	38.7
	Bachelor's or higher	171	61.3
Chronic illness	Yes	80	28.7
	No	199	71.3
Types of chronic illness (n=80)	Hypertension	27	9.7
	Diabetes	25	9.0
	Heart disease	10	3.6
	Cancer	2	0.7
	Respiratory diseases	16	5.7
	Other	37	13.3
Working status	Yes	148	53.0
	No	131	47.0
Working from home during the pandemic (n=148)	Yes	60	21.5
	No	88	31.5
Income status	Negative income (income < expense)	67	24.0
	Neutral income (income = expense)	156	55.9
	Positive income (income > expense)	56	20.1
Number of people living in the house	2	19	6.8
	3	74	26.5
	4	113	40.5
	5 and more	73	26.2
Number of children	0	17	6.1
	1	60	21.5
	2	127	45.5
	3 and above	75	26.9
Having tested positive for COVID-19	Yes	78	28.0
	No	201	72.0
Spouse helping with housework before the pandemic	Yes	160	57.3
	No	119	42.7
Spouse helping with housework during the pandemic	Yes	170	60.9
	No	109	39.1
Workload at home during the pandemic	Increased	190	68.1
	Hasn't changed	83	29.7
	Decreased	6	2.2
Spending more time with family members	Yes	220	78.9
	No	59	21.1
Enhanced communication between family members during the pandemic	Yes	194	69.5
	No	85	30.5
Total		279	100.0

* Mean ± Standard Deviation, Median (Minimum-Maximum)

Participants had a median HLBS-II score of 124 (min: 70; max: 208). They had a mean HLBS-II "responsibility," "physical activity," "nutrition," "spiritual development," "interpersonal relationships," and "stress management" subscale score of 21 (11-36), 15 (8-32), 20 (11-36), 25 (11-36), 25 (9-36), and 18 (9-32), respectively. Participants had a mean WHOQOL-BREF-TR "physical health," "psychological health," "social relationships," and "environment" subscale score of 13 (4-17), 14 (4-19), 15 (4-20), and 14 (4-20), respectively.

Distribution of HLBS-II subscale scores by independent variables is given in table 2 (Table 2). The median total score of the HLBS-II is statistically significant with the variables of education, income status, working from home during the pandemic, helping the spouse with housework before and during the pandemic, and spending more time with the family members.

Table 2. *Distribution of HLBS-II Subscale Scores by Independent Variables (n=279)*

Variables		Health responsibility	Physical activity	Nutrition	Spiritual development	Interpersonal relations	Stress management	HLBS-II total score
Education level	High school or lower	19 (11-34)	14.5 (8-30)	19 (11-32)	25 (12-36)	24 (10-36)	17 (9-31)	120 (70-191)
	Bachelor's or higher	22 (11-36)	16 (8-32)	21 (12-36)	26 (14-36)	25 (9-36)	18 (10-32)	127 (86-208)
	Test Statistics	10.546	10.727	10.853	10.065	9.893	10.386	10.773
	p[1]	**0.045**	**0.023**	**0.013**	0.205	0.134	0.078	**0.019**
Working from home during the pandemic	Yes	22 (15-36)	16 (9-27)	21 (14-29)	26 (18-36) 83.67	26 (18-34)	19 (14-31)	133 (95-175)
	No	20 (11-36)	15 (8-32)	20 (11-36)	26 (14-36) 68.25	24 (10-36)	17 (10-32)	120.5 (86-208)
	Test Statistics	2.121	2.148	2.209	2.090	1.792	1.740	1.811
	p[1]	**0.042**	0.054	0.091	**0.031**	**0.001**	**<0.001**	**0.001**
Income	Negative income (income <expense	19 (12-36)[b]	14 (8-32)	19 (13-36)	24 (12-36)	23 (11-36)[ab]	17 (11-32)	117 (75-208)[ab]
	Neutral income (income =expens)	21 (11-33)[b]	15 (8-32)	20 (11-31)	25 (13-36)	25 (9-36)[b]	18 (9-31)	125 (70-177)[b]
	Positive income (income >expens)	21.5 (11-31)[a]	16 (8-31)	21 (12-32)	26 (14-36)	25.5 (16-35)[a]	18,5 (11-28)	131 (86-173)[a]
	Test Statistics	8.983	4.887	4.860	5.306	9.405	4.202	10.016
	p[2]	**0.011**	0.087	0.088	0.070	**0.009**	0.122	**0.007**
Having tested positive for COVID-19	Yes	21.5 (12-34)	15 (8-32)	20 (12-32)	26 (13-35)	25 (9-35)	18 (9-31)	127.5 (70-191)
	No	20 (11-36)	15 (8-32)	20 (11-36)	25 (12-36)	24 (10-36)	17 (10-32)	122 (75-208)
	Test Statistics	6.517	7.468	7.714	7.028	7.258	7.487	7.053
	p[1]	**0.028**	0.539	0.836	0.179	0.336	0.559	0.194
Spouse helping with housework before the pandemic	Yes	21 (11-36)	16 (8-32)	21 (11-36)	26 (12-36)	25 (11-36)	18 (11-32)	128.5 (75-208)
	No	20 (11-34)	15 (8-32)	20 (12-32)	24 (13-36)	23 (9-36)	17 (9-31)	119 (70-191)
	Test Statistics	8.131	8.451	7.841	7.697	7.842	7.872	7.542
	p[1]	**0.037**	0.108	**0.012**	**0.006**	**0.012**	**0.013**	**0.003**
Spouse helping with housework during the pandemic	Yes	21 (11-36)	16 (8-32)	21 (11-36)	26 (12-36)	25 (11-36)	18 (9-32)	129 (70-208)
	No	20 (11-34)	15 (8-32)	20 (12-32)	24 (14-36)	23 (9-36)	17 (10-31)	119 (88-191)
	Test Statistics	7.690	8.002	7.673	7.063	7.350	7.632	7.002
	p[1]	**0.016**	0.054	**0.015**	**0.001**	**0.004**	**0.013**	**0.001**
Spending more time with family members	Yes	21 (11-36)	15 (8-32)	20 (11-36)	25 (12-36)	25(10-36) 142.04	18 (9-32)	124.5 (70-208)
	No	20 (11-28)	14 (8-32)	20 (12-28)	24 (13-34)	25 (9-34) 132.38	17 (10-26)	120 (86-161)
	Test Statistics	7.690	8.002	7.673	7.063	7.350	7.632	7.002
	p[1]	**0.016**	0.054	0.015	**0.001**	**0.004**	**0.013**	**0.001**

Enhanced communication between family members during the pandemic	Yes	21 (11-36)	15.5 (8-32)	20.5 (11-36)	26 (12-36)	25 (10-36)	18 (9-32)	126.5 (70-208)
	No	20 (11-28)	14 (8-32)	19 (12-28)	23 (13-34)	24 (9-35)	17 (10-26)	118 (82-152)
	Test Statistics	5.974	5.574	6.154	5.222	6.040	5.507	5.604
	p[1]	0.347	0.095	0.540	**0.021**	0.413	0.073	0.107

[1]Mann Whitney U testt, median (min-max)/mean rank; [2]: Kruskal Wallis
[a-b]: No significant difference between groups with the same letter (Dunn test)

Distribution of WHOQOL-BREF-TR scores by independent variables is given in Table 3.

Table 3. *Distribution of WHOQOL-BREF-TR Scores by Independent Variables (n=279)*

Variables		Physical health	Psychological health	Social relationships	Environment-Tr
Chronic disease	Yes	13 (6 - 17)	14 (8 - 17)	15 (5 - 20)	14 (8 - 20)
	No	13 (4 - 17)	15 (4 - 19)	15 (4 - 20)	14 (4 - 20)
	Test Statistics	7.877	9.194	7.892	8.532
	p	0.890	**0.040**	0.910	0.344
Employment	Yes	13 (7 - 16)	15 (7 - 19)	15 (5 - 20)	14,5 (7 - 20)
	No	13 (4 - 17)	14 (4 - 19)	15 (4 - 20)	14 (4 - 20)
	Test Statistics	8.692	8.376	8.591	8.292
	p	0.131	**0.047**	0.096	**0.036**
Working from home during the pandemic	Yes	13,5 (10 - 17)	15 (11 - 19)	16 (9 - 20)	15 (9 - 20)
	No	13 (7 - 16)	14 (7 - 19)	14 (5 - 20)	14 (7 - 20)
	Test Statistics	2.241	2.029	1.814	1.708
	p	0.113	**0.015**	**0.001**	**<0.001**
Income	Negative income (income < expense)	12 (6 - 17)[a]	13 (7 - 18)[a]	12 (4 - 17)[b]	12 (7 - 18)[a]
	Neutral income (income = expense)	13 (4 - 17)[b]	14 (4 - 19)[b]	15 (4 - 20)[a]	14 (4 - 20)[b]
	Positive income (income > expense)	14 (7 - 17)[c]	15 (7 - 19)[c]	15 (5 - 20)[a]	16 (8 - 20)[c]
	Test Statistics	25.769	24.014	22.996	69.967
	p	**<0.001**	**<0.001**	**<0.001**	**<0.001**
Having tested positive for COVID-19	Yes	13 (4 - 16)/122.91	14 (4 - 19)	15 (4 - 20)	14 (4 - 20)
	No	13 (6 - 17)/146.63	14 (7 - 19)	15 (4 - 20)	14 (7 - 20)
	Test Statistics	9.172	8.023	8.637	8.659
	p	**0.025**	0.757	0.181	0.172
Spouse helping with housework before the pandemic	Yes	13 (6 - 17)	15 (7 - 19)	15 (4 - 20)	15 (7 - 20)
	No	13 (4 - 17)	14 (4 - 19)	15 (4 - 19)	14 (4 - 20)
	Test Statistics	9.112	7.673	8.267	7.650
	p	0.535	**0.005**	0.057	**0.005**
Spouse helping with housework during the pandemic	Yes	13 (6 - 17)	15 (7 - 19)	15 (4 - 20)	15 (7 - 20)
	No	13 (4 - 17)	14 (4 - 19)	15 (4 - 19)	14 (4 - 20)
	Test Statistics	8.625	7.810	8.080	7.491
	p	0.323	**0.001**	0.068	**0.007**
Spending more time with family members	Yes	13 (6 - 17)	15 (7 - 19)	15 (5 - 20)	15 (7 - 20)
	No	13 (4 - 15)	14 (4 - 19)	13 (4 - 20)	13 (4 - 18)
	Test Statistics	6.166	5.385	5.431	4.491
	p	0.550	**0.042**	0.051	**<0.001**
Enhanced communication between family members during the pandemic	Yes	13 (6 - 17)	15 (8 - 19)	15 (5 - 20)	15 (7 - 20)
	No	13 (4 - 16)	13 (4 - 19)	13 (4 - 20)	13 (4 - 19)
	Test Statistics	7.440	6.147	5.888	6.105
	p	0.188	**0.001**	**<0.001**	**0.001**

[1]Mann Whitney U test, median (min-max)/mean rank; [2]: Kruskal Wallis
[a-c]: No significant difference between groups with the same letter (Dunn test)

The total HLBS-II score was positively correlated with the total WHOQOL-BREF-TR score. HLBS-II "physical activity," "nutrition," "spiritual development," "interpersonal relationships," and "stress management" subscale scores were positively correlated with WHOQOL-BREF-TR "psychological health," "social relationships," and "environment" subscale scores ($p<0.01$). Physical health, psychological health, and social relationships were positively affected by spiritual development and interpersonal relationships and negatively affected by health responsibility (Table 4).

Table 4. *Correlations between HLBS-II And WHOQOL-BREF-TR Scores*

	Physical Health		Psychological Health		Social Relationships		Environment-Tr	
HLBS-II Subscales	r_1	r_2	r_1	r_2	r_1	r_2	r_1	r_2
Health responsibility	0.076*	-0.295***	0.162**	-0.271***	0.233***	-0.219***	0.173**	0.020**
Physical activity	0.159**	0.070*	0.181**	0.041*	0.192**	-0.029*	0.184**	0.057*
Nutrition	0.158**	0.012*	0.217***	0.015*	0.228***	0.003*	0.196**	0.012*
Spiritual development	0.287***	0.196**	0.435***	0.296***	0.371***	0.157**	0.376***	0.212***
Interpersonal relationships	0.270***	0.214***	0.395***	0.202**	0.443***	0.281***	0.391***	0.227***
Stress management	0.256***	0.013*	0.314***	-0.028*	0.336***	0.060*	0.253***	0.045*

r_1: Simple correlation (Spearman's rho), r_2: Partial correlation; (HLBS-II): Healthy Lifestyle Behaviours Scale-II; (WHOQOL-BREF-TR): World Health Organization Quality of Life Scale Brief Version-Turkish; *p>0.05 **p<0.01, ***p<0.001

DISCUSSION

It has been observed that the pandemic affects healthy lifestyle behaviors in women. A relationship was found between healthy lifestyle behaviors and quality of life. The results were discussed in the light of the literature.

Participants had an average median HLBS-II score, which has been reported by earlier studies (Devran Enginoğlu et al., 2021; Uysal & Argin, 2021). Uysal and Argin (2021) reported higher "health responsibility," "spiritual development," and "nutrition" scores in women during the pandemic (Uysal & Argin, 2021). Our participants had the highest score on "spiritual development" and the lowest on "physical activity." A sedentary lifestyle leads to chronic disorders, such as obesity, diabetes, cardiovascular diseases, and hypertension (WHO, 2013). Women who score low on HLBS-II "physical activity" subscale are at a greater risk of developing chronic diseases for two reasons. First, it does not seem like the pandemic is ending anytime soon. Second, those women are not aware of the danger of limited physical activity. On the other hand, the high score on spiritual development means that women have been more spiritual since the pandemic. If so, it would be appropriate for nurses to inform women.

Participants with a bachelor's or a higher degree had a higher HLBS-II score than those with a high school or a lower degree. Participants working from home during the pandemic had a higher HLBS-II score than those who were not. Participants with a positive income had a higher HLBS-II score than those with a negative income. HLBS-II scores are affected by socioeconomic disparities (Koçoğlu & Akın, 2009). Uysal and Argin (2021) argue that people with a bachelor's or a higher degree and those with a positive income are more likely to have healthy lifestyles (Uysal & Argin, 2021). On the other hand, women and unemployed people have low HLBS-II scores (Zhang et al., 2021). People with a steady job and those who can work from home face fewer financial problems during the pandemic (Suryavanshi et al., 2020). The pandemic has likely taken a greater toll on women because they have had to deal with more financial problems as they needed more money for their children's distance education. It is important for nurses to be aware of this situation. Programs can be prepared to support unemployed, financially disadvantaged and low-educated women.

Participants who tested positive for COVID-19 had a higher "health responsibility" score than those who had not. This result shows that people who have tested positive for COVID-19 learn to take more responsibility for their health because they become more aware of the danger of the virus and take better care of themselves (Hebcan Örs & Tümer, 2020). By Zhang et al. (2021) argue that the pandemic has positively impacted women's lives (Zhang et al., 2021). However, Eraydın, Kardaş, and Toparlak (2021) found that people with family members or friends who tested positive for COVID-19 had lower HLBS total and "physical activity," "health responsibility," "spiritual development," "nutrition," and "stress management" subscale scores (Eraydın et al., 2021).

Participants who received help from their spouses before and during the pandemic had a significantly higher total HLBS-II score than those who did not. Participants who spent more time

with family members during the pandemic had a significantly higher total HLBS-II score than those who did not. Married people have low (Uysal & Argin, 2021) or high (Hebcan Örs & Tümer, 2020) HLBS-II scores. Although there is no change in health-related behaviors in single people, research shows that married people have developed unhealthy behaviors, such as smoking, since the onset of the pandemic (Zhang et al., 2021). Single people were reported to have higher HLBS-II physical activity scores, but there was no difference in HLBS-II total and interpersonal relations and stress management scores between married and single people (Allan et al., 2018; Uysal & Argin, 2021). Although the pandemic has led to an increased workload at home, it has also allowed people to spend more quality time together, resulting in domestic harmony (Shek, 2021). We can argue that women who receive support from their husbands and families are likely to have higher HLBS-II scores.

Participants had a mean WHOQOL-BREF-TR "physical health," "psychological health," "social relationships," and "environment" subscale score of 12.72±2.18, 13.94±2.4, 13.96±3.15, and 14.18±2.71, respectively. Research reported low WHOQOL-BREF scores in women before the pandemic (Devran Enginoğlu et al., 2021; Durmuş et al., 2018). Other studies also show that the pandemic has adversely affected women's quality of life (Aksoy et al., 2021; Hung et al., 2021; Park et al., 2021). We can argue that the pandemic and the preventive measures have increased women's workload at home, thereby reducing their quality of life.

Participants with no chronic disease had a higher WHOQOL-BREF-TR "psychological health" subscale score than those with a chronic disease. Ferreira et al. (2021) found that people with chronic diseases had lower quality of life during the pandemic (Ferreira et al., 2021). According to Yavuz and Set. (2020), the pandemic has taken a toll on Turkish people with chronic diseases because they had to stay home for long periods of time, could not visit their doctors, and had difficulty accessing their medications during the pandemic (Yavuz, 2020). We can state that people had difficulty accessing medical services and medications in the early days of the pandemic, but Turkey has implemented several regulations and policies to overcome those problems.

Employed participants had a higher "psychological health" and "environment" score than unemployed participants. Participants working from home during the pandemic had a higher "psychological health," "social relationships," and "environment" score than those who were not. Participants with a positive income had higher "physical health" "psychological health," "social relationships," and "environment" scores than those with a negative income. Married women have a lower quality of life than singles (Suryavanshi et al., 2020). Women who cannot work from home have a lower quality of life than those who can (Askin Ceran et al., 2021). Women with a negative income have a lower quality of life than those with a positive income (Aksoy et al., 2021). Therefore, our results are consistent with the literature. Women who have a steady job, work from home, and do not have financial problems are likely to have a higher quality of life.

Participants who had tested positive for COVID-19 before had a lower WHOQOL-BREF-TR "physical health" score than those who had not, which has also been reported by Aksoy et al. (2021) (Aksoy et al., 2021). To have a better quality of life, people need to follow the COVID-19 measures, socialize in accordance with preventive measures, give positive feedback to others about the pandemic, and be hopeful and mentally resilient (Shek, 2021). People diagnosed with COVID-19 also experience fatigue (WHO, 2020). Our participants diagnosed with COVID-19 before had lower physical health" scores probably because they suffered from side effects and exerted extra effort to follow preventive measures.

Healthy lifestyle behaviors are considered to predict a high quality of life (Devran Enginoğlu et al., 2021). Our results pointed to a positive correlation between healthy lifestyle behaviors and quality of life. With all other variables held constant, HLBS-II interpersonal relationships and spiritual

development positively affected all WHOQOL-BREF-TR subscales. Earlier studies have also reported a positive correlation between healthy lifestyle behaviors and quality of life (Devran Enginoğlu et al., 2021; Koçoğlu & Akın, 2009). Devran Enginoğlu et al. (2021) determined that HLBS-II spiritual development predicted quality of life the most significantly (Devran Enginoğlu et al., 2021). Çınar & Eti Aslan (2017) argues that devoted patients with a spiritual conviction are healthier (Çınar & Eti Aslan, 2017). There is always a close relationship between spirituality and physical, emotional, and social well-being (Devran Enginoğlu et al., 2021).

Health responsibility refers to the sense of active responsibility for protecting physical, mental, and social health (Kılıç & Ata, 2018). To stay healthy, people should adopt healthy lifestyle behaviors, visit their doctors regularly, and follow healthcare professionals' instructions (Bahar et al., 2008). Our results showed that HLBS-II "health responsibility" negatively affected WHOQOL-BREF-TR "physical health," "psychological health," and "social relationships." This finding can be justified as women with high awareness cannot visit their doctors due to the preventive measures during the pandemic, and therefore, they have a low quality of life.

CONCLUSION AND SUGGESTIONS

As a result, in our study, it was observed that the quality of life increased as the healthy lifestyle behaviors increased. Healthy lifestyle behaviors and quality of life in women during the pandemic period; Women's education level, having a job, being able to continue their business from home and having sufficient income affect positively. Having a chronic disease affects healthy lifestyle behaviors positively and negatively affects quality of life. Women's quality of life is worse for those who have had a covid-19 infection. A relationship was found between quality of life and healthy lifestyle behaviors.

While evaluating their patients, nurses may give priority to disadvantaged groups (low education level, insufficient income, no chance to work from home, no regular job, chronic illness, Covid-19 infection). It may be appropriate to establish support groups, training programs and national programs to improve the quality of life of the group with chronic disease. Nurses can be involved in these plans and support the practices.

LIMITATIONS

This study had two limitations. First, the data were collected online because of the pandemic. Second, the results are sample-specific because the sample consisted of educated women with an Internet connection.

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Conflict of Interest

No conflict of interest.

Author Contributions

Design: S.K., R.B., Data collection or processing: S.K., R.B., Analysis or interpretation: S.K., Literature search: R.B., Writing: S.K., R.B.

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