

# Assessment of the Relationship Between Nurses' Healthy Lifestyle Behaviors and Quality of Working Life\*

## Hemşirelerin Sağlıklı Yaşam Biçimi Davranışlarının İş-Yaşam Kalitesi ile İlişkisinin Değerlendirilmesi

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### Abstract

**Aim:** Physical, mental, and social health complaints in nurses due to unsafe and unhealthy work environments may cause decreased work efficiency, economic losses to the institution, increase in accidents, and problems related to patient care. The study was carried out to evaluate the relationship between healthy lifestyle behaviors and the quality of work-life among nurses.

**Method:** This descriptive cross-sectional study was conducted with 137 nurses in a university hospital between November and December 2019. Data were collected using a Nurse Information Form, the Healthy Lifestyle Behavior Scale-II, and the Quality of Nursing Work-Life Scale.

**Results:** The nurses' total mean score on the survey was 126.72 (SD=25.50) for the Healthy Lifestyle Behavior Scale-II and 110.17 (SD=21.82) for the Quality of Nursing Work-Life Scale. Further, they obtained the lowest scores on the nutrition subscale of the Healthy Lifestyle Behavior Scale-II (Mean=17.44, SD=5.52) and the work conditions subscale of the Quality of Nursing Work-Life Scale (Mean=21.85, SD=4.86). The study found a statistically significant correlation between total scores of the Healthy Lifestyle Behavior Scale-II and the Quality of Nursing Work-Life Scale ( $r=.49, p<0.001$ ).

**Conclusion:** Nurses' healthy lifestyle behaviors and work-life quality mean scores were low. There was a moderate positive relationship between healthy lifestyle behaviors and quality of work-life among nurses. Healthy lifestyle behaviors of nurses can contribute to the improvement of the working environment and increase the quality of work-life.

**Keywords:** Health behavior, job satisfaction, nurses, quality of life.

### Öz

**Amaç:** Hemşirelerde güvenli olmayan ve sağlıksız çalışma ortamları nedeniyle oluşan fiziksel, ruhsal ve sosyal sağlık şikâyetleri, iş veriminin düşmesine, kurumda ekonomik kayıplara, kazaların artmasına ve hasta bakımı ile ilgili sorunlara neden olabilmektedir. Bu araştırma, hemşirelerde sağlıklı yaşam biçimi davranışları ile iş yaşam kaliteleri arasındaki ilişkiyi belirlemek amacıyla yapıldı.

**Yöntem:** Tanımlayıcı-kesitsel tipte olan bu çalışma, Kasım-Aralık 2019 tarihleri arasında bir üniversite hastanesinde 137 hemşire ile yapıldı. Veriler, Hemşire Bilgi Formu, Sağlıklı Yaşam Biçimi Davranışları Ölçeği-II ve Hemşirelerde İş Yaşam Kalitesi Ölçeği kullanılarak toplandı.

**Bulgular:** Hemşirelerin ölçek toplam puan ortalaması Sağlıklı Yaşam Tarzı Davranış Ölçeği-II için 126,72 (SS=25,50) ve Hemşirelik İş-Yaşam Kalitesi Ölçeği için 110,17 (SS=21,82) olarak belirlendi. Ayrıca, Sağlıklı Yaşam Biçimi Davranışları Ölçeği-II'nin beslenme alt boyutundan (Ort=17,44, SS=5,52) ve Hemşirelerde İş Yaşam Kalitesi Ölçeği'nin çalışma koşulları alt boyutundan (Ort=21,85, SS=4,86) en düşük puanı aldıkları belirlendi. Çalışmada, Sağlıklı Yaşam Biçimi Davranışları Ölçeği-II ve Hemşirelerde İş Yaşam Kalitesi Ölçeği toplam puanları arasında istatistiksel olarak anlamlı bir ilişki bulundu ( $r=.49, p<0,001$ ).

**Sonuç:** Hemşirelerin sağlıklı yaşam biçimi davranışları ve iş-yaşam kalitesi puan ortalamaları düşüktü. Hemşireler arasında sağlıklı yaşam biçimi davranışları ile iş yaşam kaliteleri arasında orta düzeyde pozitif bir ilişki vardı. Hemşirelerin sağlıklı yaşam biçimi davranışlarına sahip olması, çalışma ortamının iyileşmesine ve iş-yaşam kalitelerinin yükselmesine katkı sağlayabilir.

**Anahtar Sözcükler:** Sağlık davranışı, iş memnuniyeti, hemşireler, yaşam kalitesi.

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## Introduction

The quality of work-life (QWL), defined as improvements in working conditions that meet the physical, mental, psychological, and social needs of employees, focuses on the business aspects of an organization and offers strategies to improve the overall well-being of employees. Improving the QWL is necessary to increase employee loyalty (Alan & Yıldırım, 2016; Moradi et al., 2014). Strategies that improve the QWL by improving working conditions increase work efficiency and corporate success (Alreshidi & Alsharari, 2021; Memiş et al., 2015). High QWL can contribute to qualified, dedicated, and inspired employees. Among different specialties in healthcare settings, nurses have a significant share among other healthcare providers. Higher QWL helps provide high quality holistic care to those in need (Kelbiso et al., 2017; Nazari et al., 2019). Poor QWL may result in adverse outcomes in the personal lives of nurses and may predispose them to provide inadequate nursing care, and it may threaten patient safety (Alreshidi & Alsharari, 2021). Quality of nursing work-life affects the relationships with decision-making, management style, leadership, and colleagues. Demographic characteristics, shifts, workload, benefits, and salary may influence the quality of nursing work life (Viselita et al., 2019).

The QWL improves the performance of nurses, decreases the rates of job absenteeism, workplace accidents, and turnover, and increases job satisfaction and overall life satisfaction (Işık & Başar, 2019; Nazari et al., 2019). Physical, social, and mental health complaints due to an unsafe and unhealthy work environment decrease the work efficiency of nurses, cause economic losses, increase accidents, and put healthcare professionals at risk. Dissatisfaction with work may result in occupational stress, depression, burnout and injuries, and high turnover rates (Moradi et al., 2014). The QWL of nurses is associated with the organization and the personal life of nurses. While analyzing the quality work-life of nurses physical, psychological, and social needs should be considered (Nanjundeswaraswamy, 2021). Meeting the physical and emotional needs of nurses contributes to the success, efficiency, and productivity of the institution (Brooks & Anderson, 2005).

Working long hours, heavy workloads, and shift work can contribute to health consequences such as obesity and sleep disorders (Ross et al., 2017). Obesity among nurses increases the risk of musculoskeletal and mental health problems. These problems are among the leading causes of diseases (Kelly & Wills, 2018; Kyle et al., 2017). Nurses are well aware of the importance of health-promoting activities such as healthy eating, physical activity, sleep hygiene, maintaining healthy relationships, and stress management. However, this knowledge may not translate into nurses' self-care (Ross et al., 2017).

Interventions targeting diet, physical activity, body composition, or stress can have positive outcomes for nurses' health or well-being. However, interventions based solely on educational approaches may not be very effective (Stanulewicz et al., 2019). Therefore, it might be useful to change the work environment to increase healthy lifestyle behaviors (HLBs). Thus, it can contribute to maintaining a healthy lifestyle for the nurses and affecting workplace efficiency and physical and psychological health. This study aimed to examine the relationship between nurses' HLBs and QWL.

## Method

**Study Aim and Design:** This descriptive cross-sectional study aimed to evaluate the relationship between healthy lifestyle behaviors and the QWL among nurses.

### Research questions

- What is the mean score of nurses on the Nursing Work Life Quality Scale?
- What is the mean score of nurses on the Healthy Lifestyle Behavior Scale?
- Is there a significant relationship between the mean scores of the Healthy Lifestyle Behavior Scale and the Nursing Work Life Quality Scale?

**Study Setting and Sample:** This study was conducted in a foundation university hospital between November and December 2019. The target population included 150 nurses working as clinical nurses or administrative nurses in outpatient units and inpatient clinics. The required sample size was calculated with a 95% confidence interval and 5% sampling error for this nonhomogeneous population. According to this, the minimum sample size required was 109 nurses. The sample comprised 137 nurses who agreed to participate in the study.

## Data Collection Tools:

**Nurse information survey:** A total of 14 questions assessed the sociodemographic and professional characteristics of the nurses. This survey was developed based on a review of the literature (Akter et al., 2018; Alan & Yıldırım, 2016; Ardiç & Taşkın, 2018; Tanrıverdi & Işık, 2014).

**Healthy Lifestyle Behavior Scale-II (HLBS-II):** This tool assesses the determinants of health-promoting lifestyles, underlying patterns, and effects of interventions on lifestyle. This scale was developed by Walker et al. (1987) and revised in 1996 to create the HLBS-II (Walker & Hill-Polerecky, 1996). The validity and reliability of the Turkish version were performed by Bahar et al. (2008). The scale consists of 52 items and six subscales: (1) "health responsibility", (2) "physical activity", (3) "nutrition", (4) "spiritual growth", (5) "interpersonal relations", and (6) "stress management". The lowest and highest scores were 52 and 208, respectively. The overall scale score indicates the level of engagement in HLBs. The tool is a four-point scale. It includes the following response options: "never=1 point", "sometimes=2 points", "often=3 points", and "routinely=4 points". Higher scores on the HLBS-II indicate greater engagement in HLBs. The Cronbach's alpha value of the Turkish version of this scale was 0.92 in Bahar et al.'s study. In the present study, the Cronbach's alpha coefficient of the HLBS-II was 0.96.

**Quality of Nursing Work-Life Scale (QNWL):** The QNWL was developed by Brooks (2001) to assess the quality of nurses' work-life. The validity and reliability of the Turkish version of the QNWL were established by Şirin and Sökmen (2015). The QNWL consists of 35 items and five subscales: (1) "work environment", (2) "relationship with managers", (3) "work conditions", (4) "job perception", and (5) "support services". The scale was a five-point Likert scale. The scale scoring ranges from 1 to 5, with "1=strongly disagree", "2=disagree", "3=neutral", "4=agree", and "5=strongly agree". Four scale items were reverse-coded. Total scores ranged from 35 to 175. High total scale scores indicate a high QWL and low total scores indicate a low QWL. The Cronbach's alpha value of the Turkish version of this scale was 0.89 in Şirin and Sökmen's study and 0.94 in this study.

**Data Collection:** Data were collected through self-administered questionnaires. After the nurses were informed about the purpose of the study and the confidentiality of the data, they were asked to fill out the forms. It was explained that it would take only 15-20 minutes to complete them. After obtaining written consent, the forms were distributed to nurses who agreed to participate in the study. The completed questionnaires were collected by the researcher. Those who refused to participate reported that they did not have the time or were not interested in participating.

**Data Analysis:** Descriptive statistics (percentage, frequency, mean, and standard deviation) were used to examine the personal and professional characteristics of the nurses and their scale scores. Next, the internal consistency coefficient was computed to evaluate the reliability of the scales. The distribution of the variables was determined by using the Shapiro-Wilk test, histogram graph, and measures of Skewness and Kurtosis. Finally, Pearson's correlation analysis was used to examine the intercorrelations among the scores.

**Ethical Considerations:** Ethical approval was given by the University Non-Interventional Research Ethics Committee on Nov 07, 2019 (Decision No: 2019/34-09). The researcher obtained written permission from the authors of the Turkish adaptations of the scales with the approval of the hospital administration. The nurses gave written informed consent. They were assured of the confidentiality of the data collected from them.

## Results

The nurses' mean age was 26.19 (SD=5.56) years. Most nurses were female (68.6%) and single (73.7%). More than half of them had graduated from a health vocational high school (54%). The mean length of professional experience was 6.41 (SD=5.29) years, and the mean duration of their employment in the unit was 2.00 (SD=1.16) years. Of the participants, 37.1% were intensive care unit nurses. Most of them worked day and night shifts (59.1%) with six or more shifts per month (59.1%), and the weekly working hours were 46 hours or more (89.8%) (Table 1).

**Table 1. Socio-demographic and professional characteristics of nurses (N:137)**

Variables		n	%
Mean age (SD), years	26.19 (5.56)		
Sex	Female	94	68.6
	Male	43	31.4
Marital status	Married	36	26.3
	Single	101	73.7
Education level	Vocational high school	74	54.0
	Associate degree	42	30.7
	Bachelor degree	18	13.1
	Postgraduate	3	2.2
Income level perception	Income is equivalent to expenses	53	38.7
	Income less than expenses	69	50.4
	Income more than expenses	15	10.9
A chronic health problem	Yes	17	12.4
	No	120	87.6
Smoking status	Smoker	72	52.6
	Non-smoker	65	47.4
Mean professional experience (SD), years	6.41 (5.29)		
Mean working time in the unit (SD), years	2.00 (1.16)		
Unit	Inpatient service	46	7.8
	Emergency	11	13.8
	Operation room	10	8.6
	Intensive care unit	53	37.9
	Outpatient clinic	7	8.6
	Others (angiography lab, gynecology clinic, management)	10	11.2
Position	Nurse	121	88.3
	Responsible nurse	11	8.0
	Executive nurse	5	3.6
Working shift	Only night shift	35	25.5
	Only day time	21	15.3
	Night and day in shifts	81	59.1
Number of shifts	No shifts	35	25.5
	1-5 shifts	21	15.3
	6 or more shifts	81	59.1
Weekly working time (hour)	45 hours and less	14	10.2
	46 hours and more	123	89.8

The nurses obtained a mean score of 126.72 (SD=25.50) on the HLBS-II and 110.17 (SD=21.82) on the QNWL. The HLBS-II obtained the lowest and highest scores on nutrition (Mean=17.44, SD=5.52) and interpersonal relations subscales (Mean=25.28, SD=4.33), respectively. On the QNWL, they obtained the lowest and highest scores on the work conditions (Mean=21.85, SD=4.86) and relations with managers subscales (Mean=21.85, SD=4.86), respectively (Table 2).

**Table 2. The mean scale and subscale scores of the participants (N:137)**

Scales and Subscales	Minimum - Maximum	Mean (SD)
<b>Healthy Lifestyle Behaviors Scale-II</b>	77 - 204	126.72 (25.50)
Health Responsibility	11 - 32	21.42 (4.65)
Physical Activity	9 - 36	22.20 (5.10)
Nutrition	8 - 32	17.44 (5.52)
Spiritual Growth	11 - 36	21.68 (4.94)
Interpersonal Relations	14 - 36	25.28 (4.339)
Stress Management	8 - 32	18.72 (4.80)
<b>Quality of Nursing Work-Life Scale</b>	32 - 160	110.17 (21.82)
Work Environment	9 - 45	29.85 (7.91)
Relations with Managers	5 - 25	18.13 (4.28)
Work Conditions	7 - 35	21.85 (4.86)
Job Perception	7 - 35	25.73 (5.83)
Support Services	4 - 20	14.61 (3.37)

SD: Standard deviation

Pearson's correlation analysis was used to examine the correlations between the two-scale scores. There were statistically significant positive correlations between HLBS-II and QNWL scores ( $r=.49$ ,  $p<0.001$ ). The weakest statistically significant positive correlation was found between the nutrition and relationship with managers subscales ( $r=.22$ ,  $p<0.01$ ). A statistically significant positive correlation was found between the interpersonal relations and support services subscales ( $r=.54$ ,  $p<0.001$ ) at a medium power level (Table 3).

**Table 3. Comparison of Nursing Work Life Quality Scale and Healthy Lifestyle Behaviors Scale-II scores (N:137)**

Healthy Lifestyle Behaviors Scale -II Subscales	Quality of Nursing Work-Life Scale Subscales						
		Work Environment	Relations with Managers	Work Conditions	Job Perception	Support Services	Quality of Nursing Work-Life
Spiritual Growth	<i>r</i>	.47	.36	.28	.39	.45	.47
	<i>p</i>	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Health Responsibility	<i>r</i>	.45	.34	.35	.37	.36	.45
	<i>p</i>	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Physical Activity	<i>r</i>	.39	.32	.36	.25	.32	.39
	<i>p</i>	<0.001	<0.001	<0.001	0.003*	<0.001	<0.001
Nutrition	<i>r</i>	.36	.22	.36	.24	.31	.36
	<i>p</i>	<0.001	0.008*	<0.001	0.006*	<0.001	<0.001
Interpersonal Relations	<i>r</i>	.53	.52	.31	.50	.54	.53
	<i>p</i>	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Stress Management	<i>r</i>	.39	.27	.38	.24	.30	.39
	<i>p</i>	<0.001	<0.001	<0.001	0.006*	<0.001	<0.001
Healthy Lifestyle Behaviors	<i>r</i>	.49	.39	.39	.38	.43	.49
	<i>p</i>	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Note: Pearson correlation test was used to evaluate the data; \* $p < 0.01$

## Discussion

The QWL is a comprehensive concept closely related to a healthy working environment. It increases satisfaction, improves physical and psychological well-being, and yields beneficial patient and employee outcomes. This concept aims to create better working conditions and improve the quality of life for nurses by making changes to their current work environment.

Healthy lifestyle behaviors: Promoting health and preventing diseases requires the adoption of HLBs (Ardıç & Taşkın, 2018). They contribute to preventing chronic diseases, increasing the quality of life, and helping individuals lead more effective and productive lives (Özveren & Yılmaz, 2018). In this study, the mean HLBS-II scores of the nurses were low. The level of nurses' engagement in HLBs was moderate in some studies (Bostan & Beşer, 2017; Khaghanyrad & Ozlu, 2020) and low in others (Altay et al., 2015; Güner & Demir, 2006). In a study conducted among healthcare professionals (Yanık & Noğay, 2017), the level of engagement in HLBs was low. These results showed that nurses' HLBs were insufficient, and they need to be supported to adopt HLBs. Unfortunately, although nurses know the importance of healthy behaviors, this knowledge may not always translate into self-care. Nurse leaders can support the health of nurses by encouraging their efforts to eat healthy, exercise, improve interpersonal relationships, reduce stress, and serve as role models for healthy lifestyles. In addition, nurse leaders can be supposed to act as advocates of systems change by identifying and eliminating workplace barriers that deter or prevent exhibiting healthy behaviors.

In this study, the lowest HLBs subscale score was found for nutrition, indicating that nurses preferred carbohydrate-based foods, not healthy foods such as vegetables, fruits, and legumes. Thus, nurses need to pay attention to weight gain and improve their healthy eating habits. This could be accomplished by considering various healthy strategies such as performing regular physical activity, eating breakfast and meals regularly, and avoiding fast food. In our study, there was also a significant relationship between nutrition and QNWL scores. Therefore, it is important to improve and develop nurses' work environment, working conditions, and relations with managers. In this study, the highest subscale score obtained from HLBs was interpersonal relations which was to be slightly above the mean score. Accordingly, the communication skills of nurses were not poor, but may need improvement. Differently, several studies reported the lowest and highest scores obtained for the physical activity and spiritual development subscales of the HLBS-II, respectively (Altay et al., 2015; Bostan & Beşer, 2017; Khaghanyrad & Ozlu, 2020). In this study, the mean physical activity score of the nurses was also low. Concordantly, similar results were obtained in some studies conducted among healthcare professionals (Aydın & Kamuk, 2021; Kılınç & Tosun, 2020; Yanık & Noğay, 2017). These results may vary depending on the specific cultural beliefs, values, and social habits. Moreover, the importance of exercise has gradually decreased due to technological developments over the past few years.

Nurses are a professional group that works in shifts for extended periods. In this study, more than half of the nurses worked in shifts, more than a quarter of them worked night shifts, and the vast majority worked for 46 hours or more. Such practices may also negatively affect the health behaviors of nurses. Long working hours can contribute to obesity by limiting time devoted to physical activity or increasing time spent sedentary at work; therefore, managers should avoid long working hours (Bor, 2020). Studies have shown that the prevalence of obesity is statistically significantly higher in nurses than among other healthcare professionals (Kunyahamu et al., 2021; Kyle et al., 2017). In addition, Chang and Yang (2020) found nurses working in shifts experienced more significant irregularity in their sleep-wake cycles were at greater risk for increased BMI. In Almalki et al.'s (2012) study, more than 80% of the nurses stated that they were not satisfied with their working hours because they could not adapt to their daily lives. Moreover, 70.5% of them reportedly had no energy after work, and more than half of them stated that they could not maintain a healthy work-life balance. The result of another study (Almajwal, 2015) showed that nurses working night shifts had significantly higher BMIs than nurses working day shifts. Nurses who rarely ate breakfast and meals and frequently consumed fast food were more likely to be obese or overweight. Therefore, it was stated nurses working the night shift could be encouraged to prepare healthy snacks that can be easily packed on the way to work. Additionally, in the same study, nurses reported that not having free time due to family and work duties was a major obstacle to their participation in daily physical activities. Similarly, according to Saridi et al. (2019), most staff nurses had low levels of physical exercise due to a lack of interest in participating in physical activity, long working hours, and a lack of free time. These results revealed that hospitals should provide a work environment that promotes healthy lifestyles as a way to improve nurses' well-being. This can have a positive impact on job performance, such as a more productive workforce and less absenteeism.

Quality of work-life: High QWL increases employee satisfaction, retention, and quality of patient care. It is also essential for corporations to profit and achieve positive outcomes by ensuring high performance (Akter et al., 2018). In this study, the mean QNWL score obtained by the nurses indicates they had a low QWL. Moreover, the working condition sub-dimension obtained the lowest score in this study. Thus, the working conditions and environments of the nurses should be improved.

Specifically, the number of working nurses should be sufficient, and the nurses should equally share the workload. Nurses' opinions regarding changes in working hours should be considered, their salary should be fair, their participation in the decision-making process related to issues that concern them should be supported, opportunities for professional advancement should be provided, and importance should be given to effective motivational mechanisms and issues related to employee safety. In this regard, identifying the problems faced by nurses and developing appropriate solutions will serve to inform managers working in such institutions. Also, in this study, the relations with managers sub-dimension was to be the highest. According to this result, there was good communication between nurses and managers, managers cared about nurses' opinions, nurses were appreciated by managers, and managers provided feedback to nurses about their performance. Similarly, Suleiman et al. (2019) also revealed that approximately half of the nurses were able to receive feedback from their managers regarding their performance, communicate with nurse managers, work in a team and belong to the workplace.

Contrary to the present findings, some studies have found that nurses have a moderate level of QWL (Akter et al., 2018; Viselita et al., 2019; Wang et al., 2020). In a few other studies, it was found low QWL, similar to the present study (Biresawa et al., 2020; Nazari et al., 2019; Şen et al., 2017). More than half of the nurses reported high workloads and intentions to leave their current position. Nurses who reported higher workload perception were more likely to leave their current jobs (Phillips, 2020). Similarly, Almalki et al. (2012) found that the number of nurses was insufficient, and their workloads were heavy. Further, most of the nurses were not satisfied with their management practices. Likewise, a significant proportion of the nurses were dissatisfied with their work-life quality. Therefore, nurses' perception of the quality of their work-life could be modified if healthcare managers consider the critical issues related to their work-life quality (Kelbiso et al., 2017). In a different study, working in an intensive care unit, low education, lack of rest, lack of safe drinking water, and poor community image were associated with low QNWL (Biresawa et al., 2020). Another study found that more than half of the nurses reported they needed support in caring for elderly parents and there was an imbalance between work-life and family needs. The majority of nurses stated that the workload was heavy and there were insufficient number of nurses in the working environment. Furthermore, nurses did not provide good quality patient care and they were not satisfied with their job (Suleiman et al., 2019).

Relationship between healthy lifestyle behaviors and quality of work-life among nurses: Healthcare workers' personal and professional lives are integrated, and positive or negative changes in their personal and professional lives affect each other (Tanrıverdi & Işık, 2014). Problems experienced in the work environment have psychological and physical effects and can lower the QWL (Memiş et al., 2015). Negative emotions experienced in the workplace may affect the time they spent with their family and disrupt their work-life balance. Moreover, a conflict between employees and their work can lead to health problems (Akar & Üstüner, 2017).

In this study, there was a moderate positive significant relationship between the HLBs of the nurses and their work-life quality. Similarly, a previous study found that the HLBs of healthcare professionals positively affect their work-life quality (Tanrıverdi & Işık, 2014). Inadequate nutrition and an unbalanced diet can also lead to health problems, absenteeism, increased risk of work accidents, and decreased employee productivity (Bor, 2020). A study conducted by Chung et al. (2020) supported our study results. The study reported a positive relationship between nurses' well-being, healthy lifestyle, and satisfaction with the work environment. Nurses with high levels of well-being had higher levels of work environment satisfaction. Likewise, in the study evaluating the relationship between healthy lifestyle behaviors of health professionals and their quality of professional life, an increase in healthy lifestyle behaviors positively affected the quality of professional life. Therefore, it was emphasized that healthcare workers should be encouraged to eat healthy and exercise, provided with the necessary facilities within the institution, and organize training programs to cope with stress (Ezer & Üstün, 2022). In another study, there was a significant positive correlation between nurses' job performance and their physical activity and health behaviors. It was concluded that hospital managers should organize in-service training programs on healthy behaviors and physical activity to improve the health of nurses and increase their performance levels (Mohamed & Ghalab, 2022).

In one of the studies on health promotion programs, elderly care and home care nurses preferred strength training. This was due to the increasing number of inactive people in need of care. However, nurses did not want to waste time by participating in additional activities. Therefore, health promotion programs, especially for nurses and intern nurses working in elderly care, should be carried out during working hours. Additionally, it was suggested to focus on stress management strategies to deal with time pressure issues (Otto et al., 2019). To enhance the efficiency and productivity of institutions, it is vital to promote HLBs among nurses and make the necessary workplace arrangements to increase their QWL. Healthy lifestyle behaviors of individuals affect their efficiency in the workplace, as well as their physical and psychological health. Thus, maintaining the QWL and healthy life behaviors of the nurses is essential for the job satisfaction, success, quality of care, efficiency, and productivity of the institution.

**Limitations:** The present results cannot be generalized to the entire population. Moreover, these findings were derived from employee self-report, and not all employees were included. Self-report instruments may have decreased the reliability of the responses due to the participants' misinterpretation of some of the items. In addition, there were very few study findings with which to compare the present results. Nevertheless, the present results equip managers with critical insights that can increase the efficiency and productivity of institutions. Conducting similar studies using more larger and more diverse samples is necessary to verify the present findings.

## Conclusion and Recommendations

Nurses' level of engagement in HLBs and work-life quality was low. There was a moderate positive relationship between HLBs and the QWL among nurses. Furthermore, poor eating habits were among their worst health behaviors. Moreover, their stress management and physical activity levels were inadequate. Their spiritual development, interpersonal relationships, and health responsibility should also be improved. They often encountered negative situations related to their working conditions and environment.

Healthy lifestyle behaviors contribute to the prevention of chronic diseases as well as increasing the quality of life and maintaining a more effective and productive work life. In addition to this, the QWL is an important factor in ensuring a quality and productive life and affects overall life satisfaction and physical and mental health. Maintaining a healthy work-life balance is essential for the well-being, job satisfaction, and sustenance of a healthy workforce. Thus, health promotion programs should be established in health institutions to assess nurses' work-life expectations and make necessary arrangements accordingly.

In this regard, activity programs can be organized in health institutions to raise awareness about the acquisition of health-promoting behaviors (physical activity, healthy diet, sleep patterns, quitting bad habits, stress management) as in-service training and other in-house educational activities such as workshops and symposia can be planned. Moreover, peer-to-peer activities can be organized, and motivational support programs can be created to improve health behaviors. In addition, nurse managers need to respect nurses' views, give importance to nurses' demands, and improve nurses' working environment. Nurse managers can contribute to a positive working environment by employing sufficient numbers and qualifications of nurses, enabling the professional development of nurses, supporting team communication and cooperation among nurses, and ensuring nurses participate in decisions on matters that concern them.

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