Journal of **S**ports for **A**ll and **R**ecreation
Herkes için Spor ve Rekreasyon Dergisi

2024, 6(1)
Araştırma Makalesi / Research Article

e-ISSN: 2687-6027

Examination of the Relationship Between Physical Activity, Perceived Stress and Sleep Quality of Nursing Students: A Cross-Sectional and Correlational Study

Hemşirelik Öğrencilerinde Fiziksel Aktivite, Algılanan Stres ve Uyku Kalitesi Arasındaki İlişkinin İncelenmesi: Kesitsel ve Korelasyonel Bir Çalışma

***Dursun Alper Yılmaz[1], Güzel Nur Yıldız[2], Bahar Çiftçi[3], Özgür Yıldız[4]**

[1] Ağrı İbrahim Çeçen Üniversitesi, Sağlık Bilimleri Fakültesi, alper96@outlook.com, 0000-0001-8096-5504
[2] Muş Alparslan Üniversitesi, Sağlık Hizmetleri Meslek Yüksekokulu, guzelnur.aras@gmail.com, 0000-0003-1626-4089
[3] Atatürk Üniversitesi, Hemşirelik Fakültesi, bahar.ciftci@atauni.edu.tr, 0000-0001-6221-3042
[4] Muş Alparslan Üniversitesi, Hemşirelik Fakültesi, ozgr.yldz.49@gmail.com, 0000-0002-1131-801X

ABSTRACT

Nursing students often experience challenges related to sleep quality, which can have implications for their overall well-being and academic performance. The aim of this study is to examine the relationships between physical activity, perceived stress, and sleep quality among senior nursing students. This study employed a cross-sectional and correlational design. The study was conducted between September and Ocober 2021, involving senior nursing students who were undergoing practical training in a state hospital. Data were collected through face-to-face interviews using the "Introductory Information Form," "International Physical Activity Questionnaire (Short)/IPAQ" "Perceived Stress Scale/PSS" and "Pittsburgh Sleep Quality Index/PSQI". Out of 42 students, 40 students participated in the study. Data analysis involved descriptive statistics such as frequency, percentage, minimum and maximum scores, mean scores, standard deviation, and Pearson correlation test. The mean score for physical activity assessed using the IPAQ was 1051.38±890.17 MET (metabolic equivalent), the average score on the PSS was 27.88±8.72, and the average score on the PSQI was 14.10±2.38. The correlation analysis revealed a significant positive correlation between sleep quality and physical activity levels ($p \leq 0.05$). Furthermore, a positive and moderate relationship was observed between sleep quality and perceived stress levels ($p \leq 0.05$). The findings indicate that nursing students have moderate levels of physical activity and perceived stress, and their sleep quality is considerably low.

Keywords: Perceived Stress, Physical Activity, Sleep Quality.

ÖZET

Hemşirelik öğrencileri genellikle uyku kalitesiyle ilgili zorluklar yaşar ve bu da genel refahları ve akademik performansları üzerinde etkili olabilir. Bu çalışmanın amacı, hemşirelik son sınıf öğrencileri arasında fiziksel aktivite, algılanan stres ve uyku kalitesi arasındaki ilişkileri incelemektir. Çalışmada kesitsel ve korelasyonel bir tasarım kullanılmıştır. Çalışma, Eylül- Ekim 2021 tarihleri arasında, bir devlet hastanesinde uygulamalı eğitim gören son sınıf hemşirelik öğrencileri ile yürütülmüştür. Veriler, "Tanıtıcı Bilgi Formu", "Uluslararası Fiziksel Aktivite Anketi (Kısa)/(IPAQ)", "Algılanan Stres Ölçeği/(PSS)" ve "Pittsburgh Uyku Kalitesi İndeksi/(PSQI)" kullanılarak yüz yüze görüşme yoluyla toplanmıştır. 42 öğrenciden 40'ı çalışmaya katılmıştır. Verilerin analizinde frekans, yüzde, minimum ve maksimum puanlar, ortalama puanlar, standart sapma gibi tanımlayıcı istatistikler ve Pearson korelasyon testi kullanılmıştır. IPAQ kullanılarak değerlendirilen fiziksel aktivite puan ortalaması 1051,38±890,17 MET (metabolik eşdeğer), PSS puan ortalaması 27,88±8,72 ve PSQI puan ortalaması 14,10±2,38'dir. Korelasyon analizi, uyku kalitesi ile fiziksel aktivite düzeyleri arasında anlamlı bir pozitif korelasyon olduğunu ortaya koymuştur ($p \leq 0.05$). Ayrıca, uyku kalitesi ile algılanan stres düzeyi arasında pozitif ve orta düzeyde bir ilişki gözlenmiştir ($p \leq 0.05$). Bulgular, hemşirelik öğrencilerinin orta düzeyde fiziksel aktivite ve algılanan stres düzeyine sahip olduklarını ve uyku kalitelerinin oldukça düşük olduğunu göstermektedir.

Anahtar Kelimeler: Algılanan Stres, Fiziksel Aktivite, Uyku Kalitesi.

Citation: *Yılmaz, D.A., Yıldız, G.N., Çiftçi, B. & Yıldız, Ö. (2024). Examination of the Relationship Between Physical Activity, Perceived Stress and Sleep Quality of Nursıng Students: A Cross-Sectional and Correlational Study. Herkes için Spor ve Rekreasyon Dergisi , 6 (1), 1-8.*

Gönderme Tarihi/Received Date: 26.12.2023

Kabul Tarihi/Accepted Date: 10.02.2024

Yayımlanma Tarihi/Published Online: 30.03.2024

https://doi.org/10.56639/jsar.1410108

** Corresponding author: alper96@outlook.com*

INTRODUCTION

Physical activity refers to any bodily movement produced by skeletal muscles that requires energy expenditure. It encompasses a range of activities such as exercise, sports, and daily activities like walking and running (Yilmaz, 2022). Physical activity is essential for nurses to maintain their physical fitness and overall health (Yilmaz, 2021). The nursing profession often involves long shifts, demanding physical tasks, and prolonged periods of standing or walking. Regular physical activity helps improve cardiovascular fitness, muscular strength, and endurance, enabling nurses to meet the physical demands of their work effectively (Chong & Shorey, 2022). It also promotes a healthy body weight, reduces the risk of chronic diseases, and enhances immune function, which is vital for maintaining optimal health in a high-stress environment. Engaging in physical activity can also serve as a coping mechanism for work-related stress and contribute to improved mental well-being (Priano et al.,2018).

Perceived stress refers to an individual's subjective perception and evaluation of the demands and pressures they experience in their daily life (Chiang et al., 2022). It involves the individual's appraisal of the extent to which these demands exceed their ability to cope effectively. Perceived stress can arise from various sources such as work, relationships, financial pressures, academic responsibilities, and personal challenges. The nursing profession is inherently stressful due to various factors such as high workload, time pressure, emotional demands, and exposure to critical situations (Alhawatmeh et al., 2022). Perceived stress levels among nurses can negatively impact their physical and mental health, job satisfaction, and overall performance. Recognizing and managing perceived stress is crucial in preventing burnout and maintaining job satisfaction (Ma et al., 2022).

Sleep quality refers to the subjective assessment of the overall satisfaction and restorative value of an individual's sleep experience (Sejbuk et al., 2022). It encompasses several dimensions, including sleep duration, sleep continuity, sleep efficiency, sleep latency (time

taken to fall asleep), sleep depth, and the presence of disturbances during sleep. Good sleep quality is characterized by an adequate duration of sleep, minimal awakenings during the night, efficient transitions between sleep stages, and a feeling of refreshment upon waking up (Nelson et al., 2022). Sleep quality is a vital aspect of the nursing profession as it directly impacts cognitive function, decision-making abilities, and patient safety. Nurses often work irregular hours, including night shifts, which can disrupt their natural sleep-wake cycles. Poor sleep quality, inadequate sleep duration, and sleep disturbances can lead to fatigue, decreased concentration, impaired memory, and increased risk of errors or accidents (Cox et al., 2022).

Nursing students undergo rigorous academic and clinical training, which can be physically and mentally demanding (Cornine, 2020). Assessing their physical activity levels may helps identify if they are engaging in sufficient exercise to maintain their health and well-being. Also nursing education can be highly stressful due to the academic workload, clinical placements, and the responsibility of caring for patients. Assessing perceived stress levels in nursing students helps identify those who may be experiencing high levels of stress and are at risk of burnout (Yildirim-Hamurcu & Terzioglu, 2022). Sleep quality has a significant impact on cognitive function, memory consolidation, and academic performance (Bayrakdar et al., 2022). Nursing students need to have sufficient and quality sleep to optimize their learning and retention of information. Assessing sleep quality in nursing students helps identify potential sleep disturbances, such as insomnia or disrupted sleep patterns, that may affect their ability to concentrate, retain information, and perform well academically.

Physical activity, perceived stress levels, and sleep quality all may contribute to the overall well-being, mental alertness, and performance of nursing students. Nursing education aims to produce competent professionals who can provide safe and effective care to patients (Conoglu et al., 2022). Determining the levels of physical activity, perceived stress, and sleep quality helps ensure that nursing students are adequately equipped to handle the demands of the profession. The purpose of this study is to examine the relationships between physical activity, perceived stress, and sleep quality of senior nursing students.

METHODS

Type of research: The research was conducted as a cross-sectional correlational study.

Place and date of the research: The research was conducted between September and October 2021 with senior nursing students who were conducting clinical practice during the pandemic at the Faculty of Health Sciences of a state university in Ağrı province of Turkey.

The population and sample of the research: The research population comprised nursing students actively engaged in clinical practice at the specified school during the Covid-19 pandemic. The sample was selected through a simple random sampling method, focusing on 42 senior nursing students actively participating in clinical practice during the specified timeframe due to the Covid-19 pandemic measures. The decision to opt for a smaller sample size is consistent with practices observed in similar studies during pandemic conditions. For instance, Jijun et al. (2020) conducted an investigation on the sleep quality of front-line nurses combating novel coronavirus pneumonia in Sichuan, China, with a sample size of 106 participants. In their study, the authors faced challenges in recruiting a larger sample due to the demanding and stressful nature of front-line healthcare work during the pandemic. Similarly, Faraj (2022), in his study on nursing students during the Covid-19 pandemic, examined stress levels and included 60 participants as a sample. Considering that our study focused exclusively on last-year undergraduate students during pandemic conditions, efforts were made to reach the entire population within this specific group.

Data collection: Data were collected using the face-to-face interview method. It took approximately 15-20 minutes for each student to complete the forms. The data collection tools utilized in this study included the "Introductory Information Form," the "International Physical Activity Questionnaire," the "Perceived Stress Scale," and the "Pittsburgh Sleep Quality Index" questionnaires. The "Introductory Information Form" was created in line with the literature and consists of questions based on the characteristics of the students, such as age, gender, marital status, etc. The International Physical Activity Questionnaire (IPAQ) was developed by Craig et al. (2003) to assess the physical activity levels of participants aged 15-65. In 2010, Saglam et al. adapted the IPAQ into Turkish as both a long form and a short form, and they conducted validity and reliability testing (Craig et al., 2003; Saglam et al., 2010). Physical activity was evaluated by multiplying the MET value in minutes by the number of days, resulting in a score of "met-minutes/week." The evaluation was based on the weekly MET value obtained. An MET value below 600 min/week was classified as inactive, between 600-3000 min/week as minimally active, and over 3000 min/week as very active. An increase in the MET value indicates an improvement in the individual's activity level. In the study by Sağlam et al., (2003) the reliability coefficient of the IPAQ was found to be rs = 0.64. In this study, the obtained reliability coefficient is rs = 0.68. The Perceived Stress Scale (PSS) was developed in 1983 by Cohen, Kamarck, and Mermelstein to assess the level of perceived stress that can potentially impact human health (Cohen et al., 1983). The validity and reliability of the Perceived Stress Scale (PSS) in Turkish were demonstrated in 2013 (Eskin et al., 2013). The Perceived Stress Scale (PSS-14) consists of two factors, namely self-efficacy and stress perception. It is a 5-point Likert scale with 14 items. Participants rate each item on a scale ranging from "Never (0)" to "Very often (4)". Seven of the items with positive expressions are reverse-scored. Higher scores on the scale indicate higher levels of perceived stress. The PSS-14 scores range from 0 to 56, with a range of 0-35 points indicating a normal stress level and a range of 35-56 points indicating that the individual is experiencing stress. In the study by Eskin et al., (2013) the Cronbach's Alpha coefficient of the PSS-14 was determined to be 0.84. The Cronbach's Alpha value obtained in this study is 0.92.

The Pittsburgh Sleep Quality Index (PSQI), created by Buysse et al. (1989), was developed to assess the sleep quality of individuals over the past month. It consists of a total of 24 questions, with 19 of them being self-report questions. The remaining 18 questions examine various aspects of sleep quality and sleep latency during the past month. These 18 questions are further grouped into 7 components. Each item is scored on a scale of 0-3 points. Some components are represented by a single item, while others are derived from multiple items. The sum of the scores across the 7 components provides the Total PSQI score, which ranges from 0 to 21. A score of 5 or less indicates good sleep quality, while a score above 5 suggests poor sleep quality. The validity and reliability studies of this scale were conducted by Ağargün et al. in 1996, and they reported a Cronbach's alpha reliability coefficient of 0.80 for the scalw (Ağargün et al., 1996; Buysse et al., 1989). The Cronbach Alpha value obtained in this study is 0.78.

Evaluation of the data: The data analysis was performed utilizing the SPSS 20 Package Program. Descriptive statistics including frequency, percentage, minimum and maximum scores, mean scores, and standard deviation scores were calculated to summarize the data. The Pearson correlation test was employed to investigate the relationships between variables. The normality assumption of the data was assessed by conducting the Shapiro-Wilk test, examining the Kurtosis and Skewness values, and analyzing histogram graphs. The significance level was set at 0.05 to determine statistical significance. Importantly, no missing data were observed in the research, ensuring the completeness of the dataset.

Limitations and generalizability of the study: A notable limitation of this study is the relatively small sample size, comprising only 42 students who were available for clinical practice during the specified dates. As a consequence, the findings should be interpreted with caution, and generalizability beyond the scope of the study population may be limited. It is important to acknowledge that the characteristics, experiences, and context of the students included in this research may differ from those of nursing students in other settings or time period.

Ethical principles of the study: The study was submitted to the Scientific Research Ethics Committee of Ağrı İbrahim Çeçen University, and ethical approval was obtained (E-95531838-050.99-12786). Prior to conducting the research, the purpose, significance, and potential benefits of the study were explained to the participating students. Verbal consent was obtained from each student, and any queries or concerns they had regarding the research were addressed accordingly.

RESULTS

It was determined that 55% of the students were male, 47.5% reported having lower income than their expenses, and 40% resided in the province. Furthermore, 62.5% of the students had no contact with individuals suspected or diagnosed with Covid-19, while 52.5% did not have any family members or relatives diagnosed with Covid-19. Moreover, 55% of the students reported having five or more siblings, 85% expressed a positive affinity for nursing, 62.5% belonged to a nuclear family, and 55% of the participants were 23 years old or older (Table 1).

Table 1. Distribution of Nursing Students by Their Sociodemographic Characteristics

Characteristics	Variables	N	%
Sex	Woman	18	45
	Man	22	55
Perception of Economic Conditions	Income equal to expenses	18	45
	Income less than expenses	19	47.5
	Income more than expenses	3	7.5
Place of Residence	Province	16	40
	District	11	27.5
	Village	13	32.5
Do they have contact with a person or persons who are suspected or diagnosed with Covid-19?	Yes	15	37.5
	No	25	62.5
Do they have any family members or relatives diagnosed with Covid-19?	Yes	19	47.5
	No	21	52.5
Number of siblings	3-4	18	45
	5 and more	11	55
Do they like the job?	Yes	34	85
	No	6	15
Family type	Nuclear	25	62.5
	Extended	15	37.5
Age	21-22	18	45
	23 and over	22	55

The analysis revealed that 47.5% of the students were categorized as inactive, 47.5% as moderately active, and 5% as very active based on their IPAQ scores. The average IPAQ total score of the students was 1051.38±890.17, indicating a moderate level of physical activity among the participants (Table 2).

The findings indicated that 85% of the students exhibited normal stress levels, as evidenced by an average score of 25.32±6.61 points on PSS. Conversely, 15% of the students experienced a high level of stress, as reflected by an average score of 42.33±4.76 points. Furthermore, the overall mean score for the students' PSS total was 27.88±8.72 points, indicating a generally normal level of perceived stress among the participants (Table 2).

The PSQI scores indicated that the lowest score obtained by nursing students was 9, suggesting that all students had poor sleep quality. The mean score of 14.10±2.38 on the PSQI further demonstrates that the students' sleep quality was very poor (Table 2).

Table 2. Nursing Students' Mean Scores in Perceived Stress Scale, Pittsburgh Sleep Quality Index, and International Perceived Stress Scale

		N	%	$\bar{X}$±SD	MIN	MAX
IPAQ	<600	19	47.5	337.37±162.6	0	533
	600-3000	19	47.5	1529.95±589.02	612	2622
	>3000	2	5	3288.00±376.18	3022	3554
	Total IPAQ	40	100	1051.38±890.17	0	3554
PSS	0-35	34	85	25.32±6.61	1	35
	36-56	6	15	42.33±4.76	36	48
	Total PSS	40	100	27.88±8.72	1	48
PSQI	0-5	0	0	-	-	-
	6 and above	40	100	14.10±2.38	9	20

Upon analyzing the results of the correlation analysis, it was observed that there existed a significant negative correlation between the average total score of the PSQI and the total MET values obtained from the IPAQ. This finding suggests that as the level of physical activity increases, the sleep quality of the students also improves, indicating an inverse relationship between physical activity and sleep quality (Table 3).

The analysis revealed a positive and moderate relationship between the average score of the PSQI and the average score of the PSS. As the PSQI score, indicating poorer sleep quality, increased, the PSS score, indicating higher perceived stress, also increased. These findings indicate that there is a relationship between increased perceived stress and decreased sleep quality, suggesting that higher levels of perceived stress are associated with poorer sleep quality (Table 3).

No significant relationship was found between the average total score of the PSS and the total MET values obtained from the IPAQ (Table 3).

Table 3. Correlation Analysis Results of Nursing Students' Perceived Stress Scale, Pittsburgh Sleep Quality Index, and International Perceived Stress Scale Total Scores

		Total IPAQ MET	Total PSS
Total PSS	R	-.308	1
	P	.054	
Total PSQI	R	**-.842**	**.362**
	P	**.000**	**.022**

DISCUSSION AND CONCLUSION

In this study, the mean IPAQ score of the nursing students was determined to be minimally active/moderate, with a value of 1051.38±890.17 MET. Among the students, 47.5% were found to be inactive, 47.5% were classified as moderately active, and 5% were categorized as very active. In a study conducted by Perera et al. (2021), it was reported that 24% of nursing students participate in vigorous physical activities, while 30% engage in moderate physical activities (Perera et al., 2021).

In a study conducted by Baj-Korpak et al. (2020), it was reported that nursing students had a weekly MET value of 3443.9 MET-min/week (Baj-Korpak et al., 2020). In the study conducted by Stanton et al. (2021), the results revealed that more than half of the nursing students had normal physical activity levels (Stanton et al., 2021). When examining previous studies, Kadıoğlu et al. (2015) found that among nursing students, 20.1% had a low physical activity level, while 57.4% had a moderate level (Kadıoğlu Ulaş et al., 2015). The low physical activity levels observed in our study among the students may be attributed to the limited duration of their clinical practice, which lasted for only 4 weeks. This limitation can be attributed to the social distancing restrictions implemented in Turkey during the pandemic.

The results of the study revealed that the average PSS score among the students was 27.88±8.72, indicating normal stress levels. This finding aligns with the expectation that perceived stress would be moderate among university students who are in the adult age range, have developed a sense of identity, and have achieved educational milestones (Kalaitzaki et al., 2021). However, it has been reported that prolonged periods of social isolation, such as those experienced during the pandemic, can have negative effects on mental health (Pancani et al., 2021). In a study conducted by Sheroun et al. (2020), it was reported that 13.5% of nursing students had a high perception of stress, while 82.67% had a moderate perception of stress (Sheroun et al., 2020). In the study conducted by Onieva Zafra et al. (2020), nursing students were found to perceive moderate stress with 22.78±8.53 points (Onieva-Zafra et al., 2020). In a study conducted by Ersin and Kartal (2020), it was found that the perceived stress level of nursing students is 30.82 ± 7.16 (Ersin & Kartal, 2020). The findings of this study are consistent with the existing literature. Previous research has indicated that nursing students commonly experience stress related to clinical practice, including challenges related to professional knowledge and skills, communication with patients, and interactions with clinical staff. Additionally, academic stressors such as clinical exams and communication with teachers have also been identified as significant stress factors for nursing students (Aloufi et al., 2021). In clinical practice, it has been reported that students may experience anxiety and challenges in applying their theoretical knowledge, as well as difficulties in adapting to the hospital environment (Anuar et al., 2021).

The moderate level of perceived stress among nursing students during the pandemic can be attributed to various factors. Firstly, the pandemic posed a threat to individuals across all age groups, including nursing students, who faced the risk of contracting COVID-19 while being exposed to the hospital environment, which inherently carries a higher risk of disease transmission and mortality. Furthermore, nursing students, being part of the healthcare system, possessed knowledge and awareness about the health system and disease management, which could have influenced their perception of stress. Moreover, the experience of social isolation, being physically separated from their families during the pandemic, may have limited their access to familial social support systems, potentially impacting their stress levels. Additionally, the students' engagement in limited family interactions during the social isolation process could have contributed to their perceived stress.

In our study, the mean PSQI score of nursing students was found to be 14.10±2.38, with the lowest score obtained being 9. Upon examining the mean scores and the lowest score of the students, it became evident that the sleep quality of the students was poor, with none of them exhibiting good sleep quality. These findings align with a study conducted by Ghosh et al. (2021), which reported that only 19.78% of nursing students had good sleep quality, indicated by a score of 5 or less on the PSQI (Ghosh et al., 2021). In a study conducted in Brazil, it was reported that only 23.9% of nursing students had good sleep quality (Amaral et al., 2021). In the study conducted by Weon et al. (2021), the mean PSQI score of nurses was presented as 5.65±2.65 (Weon et al., 2021). In a study conducted in Turkey, it was reported that the mean PSQI score of nursing students was 6.36±2.54 (Ekenler & Altınel, 2021).

In some studies conducted prior to the pandemic, it was observed that the mean PSQI score of the students was above 5, ranging from 6.15±1.90 to 6.39±2.85 (Cates et al., 2015; Chen et al., 2015). In this study, it is consistent with the existing literature to find that nursing students exhibit poor sleep quality. Moreover, a significant difference is observed between the mean PSQI score obtained from the nursing students in this study and the mean score reported in previous literature among nursing students. Numerous research studies have consistently highlighted sleep as a prominent area of concern for nursing students, both pre-pandemic and during the pandemic. However, it is noteworthy that the sleep quality problem has become even more pronounced during the pandemic. The absence of any student with a good sleep quality index in this study underscores the severity of the situation. The decline in sleep quality can be attributed to several factors, including the prolonged periods spent at home due to social restrictions imposed during the pandemic, leading to disruptions in sleep patterns. Additionally, the requirement of early-morning clinical practice for students who have already adjusted to the pandemic-related routines may further compromise their sleep quality.

In this study, it was noticed that as the level of physical activity increases, the level of sleep quality also increases. However, in a study conducted on university students, no relationship was found between sleep quality and physical activity (Saat et al., 2020). Also, in studies on sleep quality, there are different results showing that physical activity improves sleep quality (Chastin et al., 2015), reduces sleep quality (Mothes et al., 2014), and does not affect sleep quality at all (Morris et al., 2016). Factors such as the timing, duration, intensity of physical activity, and regularity are thought to have an effect on this relationship. Additionally, the fact that the students exercised at a time distant from their sleeping hours and did not engage in excessive or prolonged exercise may have influenced these findings. Consistent participation in recreational physical activity is likely to have a positive impact on sleep quality.

In this study, it was noticed that as the perceived stress level of the students increases, their sleep quality deteriorates. There are also studies showing that perceived stress reduces sleep quality (Knowlden et al., 2018) as well as studies suggesting that perceived stress does not affect sleep qualit (Zhang et al., 2017). The numerous restrictions imposed by authorities due to the COVID-19 pandemic have resulted in unexpectedly stressful conditions for many individuals. This emerging stress underscores the fact that it can not only impact individuals' moods but also lead to sleep disorders (Chidiebere Okechukwu et al., 2020). Given that the study was conducted during this period, it is plausible that prolonged stress-induced rumination contributed to students' challenges in falling asleep, maintaining sleep, and attaining restful sleep.

In this study, no relationship was detected between physical activity and stress. However, in another study, it was reported that physical activity has positive effects on stress (Clarke & Hober, 2020). In another study, it was revealed that there is no relationship between physical activity and stress (Blake et al., 2017). This may be attributed to the fact that the students did not engage in regular and intentional physical activities, and the negative effects of the pandemic, unlike during normal times, persisted.

The study conducted among nursing students revealed that their perceived stress levels in clinical practice were found to be moderate, accompanied by notably low sleep quality and insufficient levels of physical activity. Furthermore, the findings indicated a positive correlation between improved sleep quality and reduced perceived stress levels among these students. To enhance the educational experience and overall quality of life for nursing students, it is imperative to prioritize the provision of adequate physical activity opportunities within the field and develop targeted interventions aimed at mitigating their stress levels. Such measures hold the potential to yield favorable outcomes in terms of stress reduction, thereby positively impacting the educational journey and well-being of student nurses.

In conclusion, the study sheds light on the critical importance of addressing the perceived stress, sleep quality, and physical activity levels of nursing students, particularly during challenging periods such as the ongoing pandemic. The findings emphasize the necessity for targeted interventions aimed at enhancing sleep quality and promoting regular physical activity among nursing students in clinical practice.

The observed correlation between increased physical activity and improved sleep quality suggests the potential benefits of incorporating physical activity into the daily routines of nursing students. However, the study did not find a significant relationship between physical activity and stress levels, highlighting the complex interplay of these factors in the context of nursing education during a pandemic.

This study underscores the unique challenges faced by nursing students, such as limited clinical practice duration and social distancing restrictions, contributing to lower physical activity levels and heightened stress. The results align with existing literature, emphasizing the enduring issues of poor sleep quality and moderate stress levels among nursing students. Moving forward, it is crucial for nursing education programs to prioritize interventions that holistically address the well-being of their students. Creating an environment that supports both physical and psychological health can contribute not only to the academic success but also to the resilience of nursing students. By fostering a culture that values and promotes well-being, educational institutions and healthcare organizations can play a pivotal role in preparing the next generation of nurses to navigate the challenges of their profession with resilience and success.

Acknowledgement: We would like to express our gratitude to the nursing students who willingly participated in this study.

Funding information: The authors received no financial support for conducting, authoring, or publishing this article.

Conflict of interests: The authors declare no potential conflicts of interest regarding the research, authorship, and publication of this article.

Authorship statement: All listed authors meet the criteria for authorship, and they are in agreement with the content presented in this manuscript.

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