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Presenteeism and missed nursing care: a descriptive, correlational and observational study

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Abstract

Background Missed nursing care poses a significant challenge for healthcare staff in terms of patient safety and care quality.

Objective To evaluate presenteeism and missed care attitudes of nurses and to determine the correlation between presenteeism and missed care.

Methods This descriptive, correlational, and observational study was conducted between February and August 2023. The Stanford Presenteeism Scale-Short Form and the MISSCARE Survey were used to collect the data among nurses at two public hospitals in a city in Turkey. The study was completed with 229 nurses representing 27.4% of the total number of nurses who met the inclusion criteria. The data was analyzed using a comprehensive analytical approach, including Cronbach's alpha analysis, frequency and percentage distribution, the Shapiro–Wilk test of normality, correlation coefficient analysis, Pearson correlation coefficient, and the Bonferroni test.

Results The participants' mean age was 30.22 ± 7.14 years, and 74.2% of them were female. 53.3% of the participants reported difficulty providing patient care due to material shortages, and 62.9% experienced challenges delivering care due to the intensity of paperwork in the clinic. Nurses who felt that paperwork intensity affected patient care and were not confident in their care provision had higher levels of presenteeism ($p = 0.041$) and a significantly higher frequency of missed care instances ($p < 0.001$).

Conclusions Material shortages and high paperwork intensity are contributing factors to the difficulties experienced by nurses in their practice. These difficulties may lead to an increase in presenteeism and instances of missed nursing care. It is important to address these challenges to ensure adequate care provision and reduce the likelihood of presenteeism among nurses. The correlation between presenteeism and instances of missed nursing care highlights the impact of presenteeism behaviors on the quality of patient care.

Keywords Nursing care, Missed nursing care, Presenteeism, Survey

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Introduction

Nursing is a fundamental element of healthcare organizations and has a pivotal impact on patient care quality. The health and motivation of nurses at work are essential for ensuring that patients receive safe and effective care [1, 2]. The improvement of patient safety and the enhancement of patient outcomes represent a priority for healthcare practitioners, organizations, and governments across the globe. Despite their potential to enhance patient and cost outcomes, nurses may unwittingly impede care due to the prevalence of fatigue, burnout, and disillusionment [3].

The phenomenon of missed nursing care (MNC) represents a significant global health concern. It is typically defined as a form of malpractice, characterized as inadequate nursing practice that can occur at any stage of care due to inadequate provision of nursing care [4, 5]. Factors such as extended work hours [6], increased workload, and limited nursing experience [7, 8] have been identified as factors contributing to an elevated nurse-to-patient ratio [9, 10]. The lack of adequate materials and equipment, along with nursing staff shortages, presents a significant challenge for nurses in determining the priority of patient care tasks and the ability to defer certain responsibilities. This, in turn, contributes to the problem of missed nursing care, as evidenced in the literature [10–14].

The phenomenon of presenteeism can be defined as the state in which employees feel compelled to attend work despite the presence of unsafe working conditions, fear of job loss, or an excessive workload. This can result in extended periods of work or the appearance of productivity despite the absence of actual productivity [15, 16]. The concept of presenteeism is reflected in the healthcare service, with notable implications for the nursing profession. For instance, Shan et al. reported a prevalence of 94.25% among Chinese nurses [17].

Nursing is a profession that often involves substantial workloads, extended work hours, and challenging working conditions. Additionally, healthcare professionals may feel compelled to report to work despite being physically or mentally unwell [18]. Nurses may be reluctant to request leave because they are aware that their duties will be assumed by another colleague in their absence. In order to retain their duties and prevent the transfer of responsibilities to a substitute in their absence, some nurses refrain from requesting leave, even in instances where it is not strictly necessary for them to be at work. Furthermore, colleagues may be reluctant to approve frequent leave requests. Additionally, nurses who are paid hourly may be hesitant to request overtime due to concerns about potential salary deductions [19, 20]. In some instances, nurse managers may unexpectedly require nurses to work additional shifts or terminate their shifts with minimal advance notice. This can have adverse effects on the affected nurses, such as missed nursing care, reduced job satisfaction, and a potential decline in the quality of care [21, 22].

Presenteeism in nursing is a critical issue as it can reduce nurses' ability to provide high-quality healthcare, which can put patients at risk [20]. Addressing presenteeism and its multiple antecedents may positively affect patient care and provider health and well-being [3]. However, to our knowledge, presenteeism and missed nursing care have not previously been examined together in the literature. This study aims to determine the correlation between presenteeism and missed nursing care among nurses in Turkey.

The study aimed to explore the correlation between presenteeism and missed nursing care among nurses in Turkey, shedding light on the impact of nurses working under suboptimal conditions on the quality of care provided in healthcare settings. Specifically, the study sought to answer the following questions:

- To what extent does presenteeism among nurses correlate with an increase in missed nursing care in healthcare settings?
- Which factors contribute most significantly to presenteeism and missed nursing care, particularly focusing on the roles of paperwork intensity and material shortages?

What strategic systemic changes can be implemented within healthcare environments to mitigate the effects of presenteeism on missed nursing care, aiming to improve both patient care quality and workplace satisfaction for nurses?

Methods

Study desing

This descriptive, correlational and observational research was conducted between February and August 2023 in two public hospitals located in the Southeastern Anatolia Region of Turkey. STROBE checklist were followed for reporting in the study.

Study sample

The study population comprised of 945 nurses who were employed in two public hospitals located in different cities in the Southeastern Anatolia Region of Turkey. Sample size calculation was performed using the G*Power software package. A sample size of 293 was determined as appropriate, considering 50% heterogeneity, a 5% margin of error, and a 95% confidence level. Since no previous study has investigated presenteeism and missed nursing care together, an inverse relationship between the mean scores of the scales was expected to be found through Pearson Correlation (r > -0.2, weak), with α=0.05 and

(1-β)=0.80 power in the 95% confidence interval. Therefore, a minimum of 208 nurses were required for the study.

The study's inclusion criteria required that participants be nurses currently employed at the selected hospitals with a minimum of one year of experience. At the time of data collection, a total of 945 nurses were employed at these hospitals, with 836 having been in their roles for over a year. The researchers were not affiliated with the nursing staff at the hospitals in question. The objectives of the study, the data collection forms, and the methodology were presented to the nursing directors of the hospitals in person. The researchers requested the email addresses of those nurses who expressed interest in participating in the study and met the established inclusion criteria. By providing their email addresses, the participants thereby consented to receive the data collection forms. Digital forms were distributed online to 836 nurses employed at two public hospitals that had been authorized to participate in the data collection. All responses were anonymized and treated confidentially in accordance with national policies; access to the data was restricted to the research team and not shared with other groups. A total of 229 nurses completed the forms, representing 27.4% of the eligible nurse population. This participation rate met the requirements of the sample size calculation. Post hoc power analysis indicated an effect size of 0.380 and a statistical power of 92% for the study.

Data collection

Online digital instruments were distributed to a cohort of 836 nurses employed in two public hospitals, selected through a simple random sampling method. The study utilized three distinct online instruments for data collection. Before collecting the data, we conducted a pilot study with 20 nurses to test the comprehensibility of the data collection forms and we did not include these results in the study data.

Data collection tools

The descriptive characteristics form consisting of 1 In post hoc power analyses, the impact size was found to be 0.380, and the theoretical power of the study was determined to be 95%. 5 items was created based on insights from the literature review [5, 7, 9, 14, 16]. The form was used to collect descriptive information and details regarding the working conditions of the study participants.

Stanford Presenteeism Scale-Short Form (SP-6) The Turkish validity and reliability study of the SP-6, developed by Koopman et al. (2002) to determine participants' presenteeism tendencies, was conducted by Teoman and Seren (2022) [23, 24]. The scale's original 6-item structure was revised to form the Stanford Presenteeism Scale-Short (SPS-Turkish short form), comprising 4 items. The SPS-Turkish short form reflects the experiences of individuals in the work environment over the past month. The scale comprises one dimension and four items, utilizing a 5-point Likert-type scale with responses ranging from 'Strongly Disagree' to 'Strongly Agree'. Responses are coded from 1 to 5, progressing from 'Strongly Disagree' to 'Strongly Agree'. As the score obtained from the scale increases, the level of presenteeism also increases.

Missed Nursing Care Survey (MISSCARE): The scale, developed by Kalisch and Williams (2009) [25], was adapted into Turkish by Sönmez et al. (2012) [26]. The MISSCARE scale is comprised of two parts. Part A (MISSCARE-A) assesses the quantity of missed care needs using a five-point Likert scale ranging from 'Rarely not given' (1) to 'Not applicable' (5). Part B (MISSCARE-B) evaluates the reasons for missed care needs using a four-point Likert scale ranging from 'Significant reason' (1) to 'Not a reason for care not being given' (4). Part B of the scale consists of three dimensions: workforce resources (1, 2, 3, 4), material resources (7, 10, 11), and communication (5, 6, 8, 12, 13, 14, 15, 16, 17). The scale does not include any reverse-coded items. Higher scores in Part A indicate an increase in the quantity of missed nursing care needs, while higher scores in Part B indicate the reasons for missed nursing care needs.

Data analysis

Statistical analysis was performed using IBM SPSS for Windows 22.0 version. Descriptive statistics were presented in numbers, percentages, and Mean±SD. The normality of the distribution was assessed using the Shapiro-Wilk test. Student's t-test and one-way ANOVA were used to compare the means of the scale scores. The Kruskal-Wallis test was used for non-parametric comparisons between group. Bonferroni correction was used to identify the source of observed differences between the groups. Pearson correlation analysis was used to examine the relationships between the scales. A significance level of $p<0.05$ was considered statistically significant for all statistical decisions.

Results

Descriptive characteristics of the nurses

All of the participants, 74.2% were female, 43.2% were married, and 81.2% held a bachelor's degree. A majority of the nurses (62.4%) reported inadequate staffing levels in their units. Furthermore, almost half (48.5%) considered leaving the profession, while over four-fifths (81.7%) expressed dissatisfaction with their working conditions (refer to Table 1 for more information). (Table 1)

Table 1 Descriptive characteristics of the nurses ($n=229$)

Descriptive Characteristics	*n*	%	Stanford Presenteeism Scale Total Score	Test *p* value	MISSCARE-A	Test *p* value	MISSCARE-B	Test *p* value
Gender				t=3.387		t=2.894		t=0.628
Female	170	74.2	13.70±3.39	$p<0.001$**	47.60±20.88	$p=0.004$*	22.65±7.61	$p=0.031$*
Male	59	25.8	11.83±4.35		45.64±20.08		26.18±9.29	
Age (Mean±SD: 30.22±7,14), (Min:21, Max:49)				t=1.406 $p=0.161$		t=0.117 $p=0.907$		t=0.098 $p=0.922$
<30	128	55.9	12.91±3.76		47.24±20.96		22.88±7.98	
>30	101	44.1	13.61±3.70		46.92±20.35		22.77±9.07	
Education Level				F=0.221				F=1.625
Associate degree in nursing	12	5.2	13.33±3.14	$p=0.802$	54.41±30.16	F=1.389	24.41±12.07	$p=0.199$
Bachelor of science in nursing	186	81.2	13.28±3.59		47.31±19.80	$p=0.252$	22.35±7.67	
Postgraduate degree in nursing	31	13.5	12.80±4.80		42.96±21.18		25.09±10.95	
Ward								F=3.131
Internal medicine wards [a]	94	41.0	11.66±3.51	F=3.897	48.80±23.42	F=0.376	22.35±8.54	$p=0.026$*
Surgical wards[b]	45	19.7	11.73±3.71	$p<0.001$**	46.24±16.32	$p=0.771$	21.27±6.43	c>b,a, d
Intensive care [c]	55	24.0	13.75±3.88	c>b,a, d	45.40±19.85		25.75±10.39	
Emergency [d]	35	15.3	11.71±3.75		46.31±19.39		21.57±6.05	
The adequacy of the number of nurses in the unit				t=2.548				t=3.247
Yes	86	37.6	12.42±3.84	$p<0.001$**	49.10±23.87	t=1.140	21.13±11.04	$p<0.001$
No	143	62.4	13.71±3.62		45.90±18.43	$p=0.256$	24.45±6.08	
Consideration of leaving the profession				t=2.107				t=0.477
Yes	111	48.5	13.76±3.56	$p=0.036$*	47.37±18.21	t=0.191	22.56±7.57	$p=0.634$
No	118	51.5	12.72±3.86		46.85±22.79	$p=0.849$	23.09±9.25	
Satisfaction with working conditions				t=3.176				t=2.890
Yes	42	18.3	11.60±4.13	$p=0.002$*	50.29±25.04	t=1.107	26.19±12.94	$p=0.004$
No	187	81.7	13.59±3.57		46.39±19.54	$p=0.270$	22.08±6.91	
Income status				X^2=3.143		X^2=5.709		X^2
Income less than expenses[a]	132	57.6	148.80	$P=0.208$	150.45	$P=0.058$	145.97	=2.082
Income equal to expenses[b]	84	36.7	134.19		133.02		139.90	$P=0.353$
Income greater than expenses[c]	13	5.7	117.79		103.29		112.88	
Have you ever been unable to provide care to your patients or delayed care due to a shortage of materials?								
Yes[a]	122	53.3	14.00±3.73	F=9.610	46.40±19.88	F=1.243	21.83±6.63	F=3.496
No [b]	38	16.6	11.07±4.01	$p<0.001$**	51.86±24.83	$P=0.290$	25.94±13.35	$p=0.032$
Sometimes[c]	69	30.1	13.02±3.12	a>b	45.69±19.36		22.88±7.59	a>b
Have you ever been unable to provide care to your patients or delayed care due to the workload in your clinic?								
Yes[a]	144	62.9	151.08	X^2=9,760	150.30	X^2 =7.019	146.87	X^2
No [b]	26	11.4	101.35	$p=0.008$*	110.07	$p=0.030$*	115.28	=3.753
Sometimes [c]	59	25.8	133.44	a-b	132.08	a-b	140.60	$p=0.153$

X^2: Kruskal-Wallis test, F: ANOVA test, "*" means $p<0.05$ and "**" means $p<0.001$ statistically difference

Comparison of scale scores based on descriptive characteristics

Significant differences were found in the total scores of the Stanford Presenteeism Scale based on participants' gender (t=3.387, $p=0.001$). Female nurses experienced more intense presenteeism compared to male nurses. Nurses who perceived a shortage of colleagues in their units (t=2.548, $p=0.01$), contemplated leaving the profession (t=2.107, $p=0.036$), and were dissatisfied with their working conditions (t=3.176, $p=0.002$) scored higher on the presenteeism scale than their counterparts. For income status, no statistically significant difference was found in the Stanford Presenteeism Scale scores (X^2=3.143, $p=0.208$) or in the MISSCARE survey scores (X^2=5.709, $p=0.058$). Additionally, nurses who experienced difficulties in providing care due to material shortages had higher average scores in both presenteeism (F=9.610, $p<0.001$, a-b) and missed nursing care (F=3.496, $p=0.032$, a-b). Furthermore, nurses who were unable to provide care or delayed care due to workload in their clinics showed significant differences in both presenteeism (X^2=9.760, $p=0.008$) and missed nursing care (X^2=7.019, $p=0.030$). A significant difference was found between the wards where the nurses participating in the

Table 2 Scale score averages

Variables	Minimum	Maximum	Mean ± SD
SP-6	4.00	20.00	13.33 ± 3.82
MISSCARE A	15.00	96.00	67.05 ± 17.93
MISSCARE B	17.00	40.00	30.82 ± 7.30

Table 3 Relationship between presenteeism and missed nursing care

Variables	SP-6	Missed Nursing Care Needs Quantity	Reasons for Missed Nursing Care Needs
SP-6	1		
Missed Nursing Care Needs Quantity	0.542**	1	
Reasons for Missed Nursing Care Needs	0.444**	0.739**	1

Pearson correlation analysis, ** Relationship is significant at 0.01 level (2-tailed)

study the total scores and they obtained from both scales. As a result of "Bonferroni" correction, it was determined that nurses working in intensive care units received higher scores than their colleagues working in other services.

Nurses participating in the study had mean scores of 13.33±3.82 on the Stanford Presenteeism Scale, 67.05±17.93 on missed care quantity (MISSCARE A), and 30.82±7.30 on reasons for missed care (MISSCARE B) (Table 2).

Relationship between presenteeism and MNC scale score

A statistically significant and positively moderate relationship was found between the total score of the Stanford Presenteeism Scale and the Missed Nursing Care Needs Quantity (r=0.542) and the Reasons for Missed Nursing Care Needs (r=0.444; p<0.001) (Table 3). Furthermore, a statistically significant and strong positive correlation was found between the quantity of missed nursing care needs and the reasons.

Discussion

Presenteeism is a multidimensional phenomenon and is highly prevalent among healthcare workers [27]. It is important to know these levels since presenteeism, which affects the motivation, effectiveness and efficiency of nurses, and missing nursing care have important consequences, especially risking patient safety.

In this study, it was found that nurses experienced moderate levels of presenteeism. Other studies on the subject have shown that the total scores of the presenteeism scale are similar to our results [28–30]. A review of the literature reveals that healthcare workers, especially nurses, have high rates of presenteeism. A high rate of presenteeism decreases job satisfaction and triggers an increase in absenteeism and turnover. In addition, it is reported that presenteeism negatively affects work efficiency in nurses, which reduces the quality of care [31, 32]. The study found that the nurses exhibited less than levels of MNC compared to the average. In studies conducted in different countries and other regions of Turkey, the results were found to be varied. [26, 33–35]. One of the reasons for differences in MNC is how society perceives the nursing role [36]. In Turkey, relatives or paid caregivers usually accompany the patient during hospitalization, help with basic care practices and facilitate communication between the patient and the nurse. As a result, it is expected that in places with a predominantly traditional culture, such as Turkey and the Southeastern Anatolia Region of Turkey, the rates of MNC would be lower than in countries with less traditional cultures, such as European countries.

In the present research, it was found that female nurses had higher SP-6 and MISSCARE Survey scores than male nurses. In a study conducted by Çelmeçe and Menekay with 240 health care workers, it was stated that female nurses had higher stress levels than male nurses because female nurses had more responsibilities outside the workplace and therefore work stress increased even more [37]. Similarly, there are studies reporting that female nurses are more affected by presenteeism [38–40]. The higher rate of missed nursing care and presenteeism among female nurses may be due to more stress outside of work.

The study shows that most nurses perceived the number of nurses in their units as inadequate and delayed or neglected care due to lack of supplies or workload. In addition, those who perceived nurse staffing as inadequate and those who neglected or delayed care due to lack of supplies or workload were found to have higher mean scores on both the SPS-6 and MISSCARE Survey. Related studies have reported that nursing care is skipped more frequently when the nurse-patient ratio is low and the relevant personnel are insufficient [8, 35, 41]. It is thought that the unexpected increase in the number of patients cared for or patient needs, the inability to obtain the necessary materials or the inoperability of the devices may further negatively affect the intensive workload of nurses and increase the unmet nursing care.

In our research results, it was determined that nurses over the age of 30 had higher SP-6 total scores, even though no statistical significance was found between age

and presenteeism. In similar studies evaluating the presenteeism among nurses, it was found that the susceptibility to presenteeism increased as the average year of work/age increased [17, 29]. As a result of the reviewed literature, it is seen that working in the field of nursing for a long time increases the susceptibility to presenteeism.

Nurses' satisfaction with their working conditions and overall job satisfaction have a significant impact on the quality of nursing care and the occurrence and extent of nursing care lapses [12, 13]. This study found that over half of the nurses were dissatisfied with their working conditions, and almost half expressed a desire to leave the profession. High rates of presenteeism are known to reduce job satisfaction, leading to increased absenteeism and turnover [42], which is consistent with this study findings. It is considered that the health policies implemented by the countries, the density of health institutions and the differences between the working-leave processes of the nurses affect the presenteeism of the nurses and the results of the study vary accordingly.

Assessments of MNC and presenteeism based on descriptive characteristics revealed that nurses working in intensive care units had higher averages than those in other units. Intensive care units, which deal with complex and high-acuity patients, inherently face an increased workload for nurses. It is estimated that the increased incidence of unmet care in ICUs is likely due to a combination of increased workload and inadequate staffing in these critical care settings [14, 43].

The most important outcome of this study was that nurses' presenteeism was significantly positively associated with MNC. In another study investigating nurses' care behaviors and presenteeism, it was found that presenteeism status was significantly associated with self-reported quality of care score [29]. Work productivity, absenteeism and job satisfaction decrease in nurses with presenteeism. All these cause a decrease in the quality of care required for the nursing profession and put patients at risk.

Limitations

The study's generalizability is limited due to its focus on nurses employed in only two specific public hospitals located within designated city centers. In addition, slightly more than a quarter of the nurses who met the inclusion criteria responded. Within the framework of the methodology applied, the data was collected only through an online questionnaire. This approach may not have captured the views of respondents who did not prefer to participate in online surveys or had internet access restrictions, which may limit the overall validity of the study. Furthermore, the use of self-report data from nurses, along with the research's limited timeframe, further restricts the broader applicability of the findings. Additionally, nurses may be hesitant to openly discuss the concepts of presenteeism and missed care. There is a potential for concealing these phenomena and portraying missed care as 'unmissed', with participants responding to scale questions while concealing this circumstance.

Conclusion

The study shows that nurses who face challenges related to heavy paperwork and inadequate care provision are more likely to engage in presenteeism. The correlation between presenteeism and instances of missed care highlights the impact of presenteeism behaviors on the quality of patient care. Factors such as material shortages and high paperwork intensity contribute to the difficulties faced by nurses, potentially leading to an increase in both presenteeism and instances of missed care. To address overlooked nursing tasks, it is recommended to maintain reasonable patient-to-nurse ratios, establish appropriate nursing care delivery approaches tailored to institutional and patient characteristics, rectify deficiencies in patient care equipment, ensure equitable utilization of available resources, provide essential training for nurses in using new devices and tools, and encourage the development of innovative tools, instruments, and care methods. Expanding research in this area is advised by employing diverse research methodologies, including quantitative, qualitative, and mixed methods, and by incorporating more extensive and diverse participant groups.

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Author contributions

Author Contributions: Conceptualization (ED, SB, AŞ) ; data collection (ED, SB, AŞ); formal analysis (BT, ED); methodology (BT, ED, SB) ; roles/writing - original draft (ED, BT, SB, AŞ,JL); writing - review & editing (ED, BT, SB, AŞ,JL); Supervision (ED, BT, JL)Conflict Interest Statement: Authors declared no conflict interest.

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Data availability

The author confirms that all data generated or analyzed during this study are included in this published article. Additionally, primary and secondary sources and data supporting the findings of this study can be provided by the authors, ensuring the protection of students' personal data, upon request by the editor.

Declarations

Ethical aspects and conflict of interest

The study was started after receiving the required permissions from the Harran University Non-Interventional Research Ethics Committee (Decision No: HRÜ/23.01.20), Faculty of Health Sciences, Harran University. We conducted according to the ethics guidelines set out in the Declaration of Helsinki. All the participant participating in the study were informed about the study, their written/verbal consents were taken, and they were also informed that they could leave the study at any time. The authors declare that they have no competing interests.

Consent for publication

Not applicable.

Competing interests
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