

# Factors Affecting Nurses' Time Management\*

## Hemşirelerde Zaman Yönetimini Etkileyen Faktörler

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### Abstract

**Aim:** Efficient use of time enables nurses to succeed in clinical environments and increase the quality and efficiency of their services. This study was conducted to determine nurses' attitudes towards time management and the ways they get caught in time traps.

**Method:** This was a descriptive and correlational study. The sample comprised 550 nurses in two private hospitals, one public and one university hospital in Istanbul, and "Time Management Questionnaire (TMQ)" and demographic information form were used for data collection. Data were analyzed using descriptive and comparative statistics, correlation analysis, and multiple regression analysis (backward).

**Results:** It was determined that nurses used their time in a moderately efficient way (49.3%). Of them, 91.1% were not trained in time management and emphasized getting caught in time traps due to problems with telephone calls and unplanned work. Education level ( $p<0.001$ ), time management training status ( $p<0.001$ ), and professional experience ( $p<0.01$ ) were found to affect nurses' time management skills.

**Conclusion:** The study found that nurses were moderately proficient in time management, got caught in time traps, and needed to receive training to address these problems.

**Keywords:** Time, time management, nursing management, nursing.

### Öz

**Amaç:** Zamanı verimli kullanmak hemşirelerin klinik ortamlarda başarılı olmalarını ve verdikleri hizmetin kalitesini ve verimliliğini artırmalarını sağlar. Araştırma, hemşirelerin zaman yönetimine ilişkin tutumlarını ve zaman tuzaklarına yakalanma durumlarını belirlemek amacıyla gerçekleştirildi.

**Yöntem:** Araştırma tanımlayıcı ve ilişki arayıcı bir çalışma olarak gerçekleştirildi. Araştırmanın örneklemini İstanbul'da bir devlet, bir üniversite ve iki özel hastanede çalışan 550 hemşire oluşturdu. Araştırma verileri "Zaman Yönetimi Ölçeği" ve demografik bilgi formu kullanılarak elde edildi. Veriler, tanımlayıcı ve karşılaştırmalı istatistikler, korelasyon analizi ve çoklu regresyon analizi (backward) kullanılarak analiz edildi.

**Bulgular:** Hemşirelerin %49,3'nün zamanını orta düzeyde etkili kullandıkları; zaman yönetimiyle ilgili eğitim almadıkları (%91,1); zaman tuzaklarına yakalanma açısından telefon konuşmaları ve plansız çalışma üzerinde durulduğu belirlendi. Zaman yönetimine ilişkin tutumlarını; hemşirelerin eğitim düzeyi ( $p<0,001$ ), zaman yönetimi eğitimi alma durumu ( $p<0,001$ ) ve meslekte çalışma süresinin ( $p<0,01$ ) etkilediği görüldü.

**Sonuç:** Araştırma sonucunda; hemşirelerin zaman yönetimi konusunda orta düzeyde etkili oldukları, zaman tuzaklarına yakalandıkları ve bu konuda eğitim almaları gerektiği saptanmıştır.

**Anahtar Sözcükler:** Zaman, zaman yönetimi, hemşirelik yönetimi, hemşirelik.

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## Introduction

Time is a precious resource shared equally by everyone (Cyril, 2015). For other resources, progress is dependent on the presence and availability of time (Ghiasvand, Naderi, Tafreshi, Ahmadi & Hosseini, 2017). What makes time more important than other resources is its nature of being impossible to obtain, accumulate, accelerate, decelerate, recover and substitute (Bulut Kılıç, 2016; Cyril, 2015; Çelik, İlhan & Esentürk, 2015). The efficient use and proper management of time plays in the success of individuals and organizations leading to the increased value of time management in both individual and organizational contexts in the last 20 years (Bahadori et al., 2015).

Time management is the implementation of management functions like planning, organization and control of one's life in order to reach personal and professional goals as efficiently and productively as possible. People who effectively manage their time can efficiently and productively allocate the required amount of time for their personal and professional goals (Dalli, 2014; Said, 2014). Time management is the key to succeeding in life, improving the quality of life, increasing productivity, reducing stress, accomplishing goals, ensuring professional fulfillment and a well-balanced life (Dalli, 2014; Ghiasvand et al., 2017; Ziapour, Khatony, Jafari & Kianipour, 2015).

In organizations providing health services, time and time management gains more importance compared to other organizations since human life is in question (Gezginerler & Lorcu, 2019). Health policies, shortage of personnel and taking on too many work responsibilities can result in wasted time and insufficient time management in nurses, leading to stress, exhaustion, inefficiency and low performance (Elsabahy, Sleem & El Atroush, 2015; Ziapour et al., 2015). Time management has an especially vital importance for nurses because time wasted by nurses is time not spent caring for patients, which can reduce the quality of care (Ghiasvand et al., 2017). Time is more important in nursing than in other professions. Because in a short time, the work must be done correctly and with high quality. The nursing profession is also a profession that requires the use of time wisely and requires much more time than other professions. While poor time management in other organizations may only result in financial loss, ineffective time management in health services can cause loss of life as well as financial losses (Eroğlu & Özgür, 2016). For this reason, nurses need to change their attitudes and behaviors concerning time, so that they can be more productive and better fulfill their duties and responsibilities. (Said, 2014).

Time management skills are especially important for nurses with management roles to improve their leadership skills and perform their management functions (Goldsby, Goldsby, Neck & Neck, 2020; Ziapour et al., 2015). Nurses who use time efficiently strike a healthier balance between their professional and personal lives, succeed in clinical environments, and take a more influential role in increasing healthcare efficiency and productivity. Time management is among the skills every nurse should have regardless of their position; having vital importance as the determining factor in personal and organizational efficiency (Ebrahimi, Hosseinzadeh, Tafreshi & Hosseinzadeh, 2014).

In general, studies about time management were conducted on executive nurses and student nurses. Ahmed (2012) studied time management challenges among Jordanian executive nurses. Ebrahimi et al.'s (2014) study was conducted to compare the understanding of head nurses and staff nurses of the time management behaviors employed in Social Security Hospitals in Tehran. Also Ashrafi, Moradi, Mashhadi and BashirNejad's (2021) study aimed to evaluate the impact of time management training on female nursing students' academic achievement. Rakhshan, Rostami, Setoodegan and Eslami (2019) conducted a study to investigate the relationship between the dominant leadership style of nursing managers and their use of time management skills. But there are very few studies in all nurses in Turkey. Improving the time management skills of nurses by determining the factors that affect nurses' time management, contributes taking a more influential role in increasing healthcare efficiency and productivity. Within this context, this study aimed to provide hospitals with the data required for improving and advancing time management skills by determining the factors that affect nurses' time management practices, their attitudes towards time management and their approaches to time traps, and to develop suggestions for nurses to recognize the importance of time management. Thus, this study will contribute to the literature on raising awareness of time management in nurses.

### Method

**Aim:** The aim of this study was to examine the nurses' attitudes towards time management and the ways they get caught in time traps.

**Study Design:** This was a descriptive and correlational study.

**Study Questions:** The following were the research questions:

- What are nurses' attitudes about time management?
- What are the factors that affect nurses' attitudes about time management?

**Sample/Participants:** The population included 1500 nurses from randomly selected one public hospital (>500 beds), one university hospital (>1000 beds) and two private hospitals (>200 beds). In order to determine the number of samples, accepting Type 1 error 0.05 and Type 2 error 0.05 (95%) as medium effect size and the required sample size was determined to be 306.

**Setting:** The hospitals were serving in all fields within the province of İstanbul. The key inclusion criteria for the sample were the completion of nursing orientation training (at least two months of experience) and voluntary participation. Nurses' position and the ward or unit where they worked were not considered. A total of 600 nurses from these hospitals participated in the study, but 50 questionnaires were not completed and omitted. Finally, the study sample included 550 nurses. The data were collected between June and October 2015.

**Instruments:** Data were collected through an information form that examined the nurses' personal and professional characteristics and time management behaviors and the Time Management Questionnaire (TMQ).

*Information Form:* The information form had seven questions about the nurses' personal and professional characteristics (age, education, department, years of professional experience and institutional experience, etc.) and had 16 questions about their views on time management and time traps (visitors, phone calls, being unable to say "no", procrastination). The questions were multiple choice ("Yes-Partly-No" and "Good-Moderate-Weak" are the possible answers) and open-ended.

*Time Management Questionnaire:* The time management questionnaire (TMQ) was first developed by Britton and Tesser (1991), and the validity and reliability studies of the Turkish form were performed by Alay and Koçak (2002). Time management attitudes of individuals were determined using a five-point likert scale with 27 items and three subscales, which consisted of "time planning", "time attitudes" and "time wasters". The answers were scored as follows: "Always" (5 points), "Frequently" (4 points), "Sometimes" (3 points), "Rarely" (2 points) and "Never" (1 point). Items numbered 22, 24, 25, 26, and 27 were reverse coded and reversed scored. The "time planning" subscale had 16 items, "time attitudes" subscale had 7 items and the "time wasters" subscale had 4 items. On both the scale and the subscales, scores were directly proportional to time management skills, with higher scores corresponding to better skills and lower scores indicating worse skills. The Cronbach's alpha coefficient of the Turkish version of the scale was found to be 0.87 (Alay & Koçak, 2002). In this study, the Cronbach's alpha coefficient was determined to be 0.81.

**Data Collection:** Research data were collected between June and October 2015. The researchers handed out the data collection tools to the participants by personally visiting the hospitals where they worked and collected them a week later.

**Statistical Analysis:** Data were analyzed using Statistical Package for the Social Sciences (SPSS) version 21.0. Descriptive statistics (numbers, percentages, arithmetic means, standard deviation) and comparative statistics (one-way analysis of variance, one-way ANOVA and Student's t-test) were used. The variables that affected the Time Management Questionnaire (TMQ) and its subscales were determined using regression analysis (backward).

**Ethical Considerations:** This research was ethical approved by a public university ethics committee (number: 181798, date: 15.06.2015). Other required permissions were granted by the participating hospitals and Time Management Questionnaire (TMQ) developers. Oral and written informed consent was obtained from the nurses who agreed to take part in the study. Following the completion of this process, data were collected from the nurses who signed an informed consent form.

**Limitations:** The study was limited to the views of nurses from four hospitals.

## Results

### Characteristics of Nurses

**Table 1. Sociodemographic and institutional characteristics of nurses (N:550)**

Variables	Groups	Individuals	
		n	%
Age (years)	≤25	168	30,5
	26-34	217	39,5
	≥35	165	30
Institution	University hospital	200	36,4
	Public hospital	150	27,3
	Private hospitals	200	36,4
Marital status	Married	238	43,3
	Single	312	56,7
Level of education	Vocational school of health	114	20,7
	Associate degree	81	14,7
	Bachelor's degree	271	49,3
	Master's degree	84	15,3
Position	Staff nurse	450	81,8
	First-level manager	85	15,5
	Middle-level manager	10	1,8
	Education nurse	5	0,9
Professional experience (years)	≤ 5	235	42,7
	6-10	113	20,5
	≥ 11	202	36,7
Institutional experience (years)	≤ 5	306	55,6
	6-10	115	20,9
	≥ 11	129	23,5

The mean age of the nurses was  $30.97 \pm 8.40$  and the nurses were between the ages 26 and 34 (39.5%), single (56.7%), working in university hospital (36.4%) and private hospitals (36.4%), have bachelor's degree (49.3%) and working as staff nurses (81.8%). The mean professional experience was  $9.77 \pm 8.49$  and most of the nurses had less than five years of professional experience (42.7%), the mean institutional experience was  $7.28 \pm 7.61$  and most of the nurses had less than five years of institutional experience (55.6%) (Table 1).

## Nurses' Views about Time Management

**Table 2. The distribution of nurses' views on time management (N:550)**

Variables	Groups	Individuals	
		n	%
Time management performance	Good	239	43.5
	Moderate	271	49.3
	Weak	40	7.2
Reasons for inefficient time management*	Being unable to say "no"	283	51.5
	Phone calls and being unable to manage visitors	237	43.1
	Not arranging duties in order of urgency and priority	190	34.5
	Unplanned work	181	32.9
	Not finishing tasks or postponing them for a day	138	25.1
Suggestions for using time efficiently*	Work efficiently with a plan and perform tasks in order of urgency	392	71.3
	Work methodically	340	61.8
	Define goals	221	40.2
	Prepare long and short term checklists	205	37.3
	Acquire ability to efficiently use technology	183	33.3
Enrolled in a time management course	Yes	49	8.9
	No	501	91.1
Time management training duration (n:49)	One hour	14	0.29
	Two hours	17	0.35
	3 hours or more	13	0.27
	Duration not specified	5	0.10

\*Multiple options are checked

The nurses primarily used time at a moderately efficient level (49.3%), didn't receive any time management training (91.1%) and most of those who did were in training for only two hours (0.35%). Of the reasons for inefficient time management, the main cause of wasting time and getting caught in time traps was "Being unable to say *no*" (51.5%), followed by "Phone calls and being unable to manage visitors" (43.1%) and "Not arranging duties in order of urgency and priority" (34.5%). When asked to give their suggestions for using time efficiently, most checked the "Work efficiently with a plan and perform tasks in order of urgency" (71.3%) option, followed by "Work methodically" (61.8%) and "Define goals" (40.2%) (Table 2).

## Attitudes of Nurses Related to Time Management

**Table 3. The distribution of the nurses' TMQ subscale and total scores (N:550)**

The TMQ subscales	Scale Minimum	Scale Maximum	Nurses Minimum	Nurses Maximum	Mean	Standard deviation
Time planning	16	80	25	80	54.01	10.47
Time attitudes	7	35	15	33	24.09	3.22
Time wasters	4	20	4	20	15.61	3.03
Overall Scale	27	135	62	125	93.70	11.65

When examining the mean scores obtained by the participants from TMQ and its subscales in Table 3, it was found that the time planning subscale mean score was  $54.01 \pm 10.47$ , the time attitudes subscale mean score was  $24.09 \pm 3.22$ , the time wasters subscale mean score was  $15.61 \pm 3.03$ , and the total mean score was  $93.70 \pm 11.65$ .

## Independent Variables' Effects on the TMQ and Its Subscales

**Table 4. The results of the multiple regression analysis of independent variables' effects on the TMQ and its subscales (N:550)**

Dependent Variable	Independent Variables	B.	S.E.	(β)	t	p	95% Confidence Interval	
The Time Management Questionnaire (Total)	(Stable)	85.14	1.24	-	68.611	0.000***	82.70	87.57
	Level of education	3.09	.69	.18	4.484	0.000***	1.73	4.44
	Views on their own management of time	3.30	.78	.17	4.243	0.000***	1.77	4.82
	Time management training status	6.51	1.65	.16	3.941	0.000***	3.26	9.75
	Years of professional experience	2.81	.99	.12	2.845	0.005**	.87	4.75
Adjusted R <sup>2</sup> : .12, F: 19.89, p: 0.000***, Durbin Watson: 1.84								
Time planning	(Stable)	50.45	1.06	-	47.799	0.000***	48.37	52.52
	Time management training status	5.38	1.54	.15	3.482	0.001**	2.34	8.41
	Duties	3.84	1.17	.14	3.287	0.001**	1.54	6.13
	Views on their own management of time	1.75	.72	.10	2.425	0.016*	.33	3.17
Adjusted R <sup>2</sup> : .06, F:13.28, p: 0.000***, Durbin Watson: 1.83								
Time attitudes	(Stable)	22.18	.40	-	55.747	0.000***	21.40	22.96
	Institution	.95	.19	.21	4.917	0.000***	.57	1.33
	Views on their own management of time	.76	.25	.13	3.024	0.003**	.27	1.25
	Time management training status	1.34	.53	.10	2.524	0.012*	.30	2.38
Adjusted R <sup>2</sup> : .08, F:15.97, p: 0.000***, Durbin Watson:1.87								
Time wasters	(Stable)	8.74	.37	-	23.440	0.000***	8.01	9.47
	Level of education	-.43	.17	-.12	2.484	0.013*	-.77	-.09
Adjusted R <sup>2</sup> : .02, F:7.47, p: 0.001***, Durbin Watson:1.81								

\*p<0.05, \*\*p<0.01, \*\*\*p<0.001

A multiple regression analysis was conducted for the concurrent assessment of seven independent variables (level of education, views on their own management of time, time management training status, years of professional experience, marital status, type of institution, type of duties) that affected the nurses' TMQ total scores (age and institutional experience were not included in the model due to autocorrelation). The variables of marital status, types of institutions and duties were then taken out of the regression model ( $p>0.05$ ) due to their lack of sufficient effectiveness. Table 4 shows the regression results for the four remaining variables. These four variables accounted for 12% of the variance in the nurses' time management total scores. According to the t test results regarding the significance of regression coefficients, significantly effective variables ( $p<0.001$  for level of education, views on their own management of time and time management training status and  $p<0.01$  for years of professional experience) and the variables that had significance according to the standardized regression coefficient ( $\beta$ ) were level of education, views on their own management of time, time management training status and years of professional experience, in order of significance. Increases in the independent variable scores were directly proportional to the time management total scores (positive relationship). The nurses' time management total scores were increased by 3.09 points as their levels of education rose from vocational school of health or associate degrees to bachelor's degree and master's degrees, by 3.30 points as their views on their own management of time improved from weak to moderate and good, 6.51 points if they received time management training, and 2.81 points as years of professional experience increased from between 1 and 10 years to 11 or more years.

A multiple regression analysis (with backward elimination) was conducted for the concurrent assessment of six independent variables that affected the nurses' time planning subscale scores. The variables of marital status, level of education and years of professional experience were then taken out of the regression model ( $p>0.05$ ) due to their lack of sufficient effectiveness. Table 4 shows the regression results for the three remaining variables. These three variables (time management training status, type of duties and views on their own management of time) accounted for 6% of the variance in the nurses'

time planning subscale scores. Variables that significantly affected the nurses' time planning subscale scores were type of duties, time management training status ( $p<0.01$ ) and views on their own management of time ( $p<0.05$ ), in order of significance. Increases in the independent variable scores were directly proportional to the time planning subscale scores. The time planning subscale scores were increased by 5.38 points for the nurses who were trained in time management, by 3.84 points for nurse managers, and by 1.75 as their views on their own management of time improved from weak to moderate and good.

A multiple regression analysis (with backward elimination) was conducted for the concurrent assessment of three independent variables that affected the nurses' time attitudes subscale scores and all were found to be effective (Table 4). Variables that significantly affected the nurses' time attitudes subscale scores were type of institution ( $p<0.001$ ), views on their own management of time ( $p<0.01$ ) and time management training status ( $p<0.05$ ), in order of significance. These three variables accounted for 8% of the variance in the nurses' time attitudes subscale scores. Increases in all three of the independent variable scores were directly proportional to the time attitudes subscale scores. The nurses' time attitudes subscale scores were increased by 0.95 points as the type of the institution they worked at progressed from the public hospital (the lowest scores) to university and private hospitals (the highest scores), by 0.76 points as their views on their own management of time improved from weak to moderate and good, and by 1.34 points for the nurses who were trained in time management.

A multiple regression analysis (with backward elimination) was conducted for the concurrent assessment of the effects the nurses' level of education and the type of the institution they worked at had on their time wasters subscale scores. The type of the institution was not effective ( $p>0.05$ ), but the level of education had significant effects ( $p<0.05$ ) (Table 4). The nurses' level of education accounted for 2% of the variance in their time wasters subscale scores. Increases in the independent variable scores were inversely proportional to the time wasters subscale scores (negative relationship). As the nurses' levels of education rose from vocational school of health or associate degrees to bachelor's degree and master's degrees, their time wasters subscale scores declined by 43 points.

## Discussion

This study aimed to determine nurses' attitudes towards time management and the ways they get caught in time traps, and found that 49.3% of the nurses used their time at a moderately efficient level, despite being untrained in time management (91.1%). The participants emphasized getting caught in time traps due to problems with telephone calls, unplanned work, being unable to manage visitors and unable to say "no". Goudarzian, Ranjbar, Babaei Hatkehlouei and Heidari Gorji (2017) also have found that most nurses were moderately efficient in time management. Also Ghiasvand et al. (2017) and Kaya, Kaya, Öztürk Palloş and Küçük (2012) have determined that most of the nursing and midwifery students from their study sample were moderately efficient in time management. Similar to current study Yüksel (2016) has found that most nurses were not trained in time management and had not read any publications on the subject. These findings imply that it is not attached any importance to time management training and that orientation and continuing education programs do not adequately cover time management.

Supporting the current study's results, Kışla (2017) has found that unplanned work, being unable to say "no", phone calls and being unable to manage visitors were among the factors that can lead hospital managers to waste time and get caught in time traps. Similarly Habib et al. (2018) and Eroğlu and Özgür (2016) have designated phone calls as the main factor wasting nurses' time. These findings indicate that nurses undertake additional tasks such as facilitating coordination in addition to patient care, their main duty. In order to solve this problem, nurse managers need to learn time management skills and realize the importance of time management (Boduç & Baykal, 2021).

The analysis of the nurses' TMQ total and subscale mean scores (Table 3) showed that their time planning subscale and time attitudes subscale scores were below-median, and their time wasters subscale scores were above-median. Their total mean score was  $93.70\pm 11.65$ , meaning that they were inefficient in time management. Ahmed (2012) also have determined that nurse managers were poor at managing time. The analysis of the current study's findings reveals consistency with the results from the study of nurse managers. This is expected because of the hospital working conditions, the role of nurses and the lack of time management training. To solve this problem developing effective time management courses should be done for all nurses (Ahmed, 2012).

The current study's results regarding the significant effect of the level of education on the TMQ total scores (Table 4) are in line with Goudarzian et al. (2017) finding of the directly proportional relationship between time management efficiency and the level of education. Additionally, Gezginler and Lorcü (2019) have determined that healthcare professionals with master's degrees have the most efficient skills and those with bachelor's degrees have the least efficient time management skills. However, Marzban, Hekmatyar, Nasrollahzade and Rahimkarimi (2017) have found that level of education did not affect time management skills. This finding is in direct conflict with the current study. Using time effectively is related to education level. Because the higher the level of education, the more likely it is to take courses on time management.

The time planning subscale scores were significantly affected by the nurses' views on their own management of time (Table 4). The scores increased from weak to moderate and good in direct proportion to the time planning scores. Jiayuan, Zhengming, Xueqing, Junzhu and Zhaohui (2015) have found that 92.41% of the participating students believed they could efficiently manage time. Despite viewing time as extremely important and wishing to manage their own time, 58% did not plan time and 70% spent more than one hour on media. This result shows that most students lack the perspective needed for time planning and thus, cannot manage their time. However, Alsalem et al.'s (2017) study, which aimed to determine the relationship between students' academic performance and time management skills, has found that students with higher grades planned their time better.

The nurses' time management training status significantly affected their TMQ total scores (Table 4). Elsabahy et al. (2015) have designated the cause of untrained nurses' time management problems as being unable to prioritize and schedule daily activities, which improved after receiving time management training. Ghorbanshiroudi, Khalatbari, Maddahi, Khelghatdoost and Keikhayfarzaneh (2011) have found that time management training was effective in reducing occupational stress in nursing. Similarly, Ebrahimi et al.'s (2014) finding that time management behaviors of nurse managers improved after receiving time management training supports the current study's finding that receiving time management training increased the nurses' time management scores. Also the results of Zhang, Liu, An and Gu's (2020) study showed that the time management training program significantly improved nursing undergraduates' time management. On the other hand, Ahmed (2012) has not found a significant difference between nurse managers who were trained in time management and those who were not.

The nurses' years of professional experience significantly affected their TMQ total scores (Table 4). The current study is consistent with Ebrahimi et al.'s (2014) report of a significant relationship between the clinical experience and time management of nurses and head nurses. Similarly, Ziapour et al. (2015) have determined that nurse managers with professional experience over 21 years managed their time with maximum efficiency, while the efficiency of those with between 11 and 15 years of professional experience was minimal. On the other hand, Habib et al. (2018) have not found a relationship between professional experience and time management skills.

The type of duties nurses performed significantly affected their time planning subscale scores (Table 4). It was observed that nurses who worked in managerial position had higher scores and used time more effectively than staff nurses. This is because planning, targeting and managing goals are the most important duties of managers. Supporting the current study's results, Adar Uyaniker's (2014) study with a sample of 120 nurse managers, has suggested that top-level nurse managers and supervisor nurses were better at managing time than first-level nurse managers. The recent trend of filling higher management positions with highly educated people (those with bachelor's degrees and master's degrees) can account the results. However Yüksel (2016) has found that the nurses working in the Infection Control Committee were significantly better at managing time than the top-level nurse managers, supervisor nurses and first-level nurse managers. This may be because the Infection Control Committee unit is more stable and planned.

When the type of the institutions the nurses worked in was subjected to analysis, working for private institutions was found to significantly affect their time attitudes subscale scores (Table 4). Similarly, in Ahmed's (2012) study of the time management problems of Jordanian nurse managers, private hospitals were significantly better in time management than public hospitals, supporting the current study's findings. This finding may be associated with nurse/patient ratio and supplies. In private hospitals, patient numbers are lower and the number of nurses and supplies is higher than in public hospitals.



## Conclusion and Recommendations

The study found that nurses were moderately efficient in time management, got caught in time traps and needed to receive training to address these problems. Since the findings revealed flaws in their time management, the priority is for all nurses to receive training to efficiently manage time and to avoid getting caught in time traps. Measures and improvements that respond to circumstances creating environments for time traps are necessary, as well as an emphasis on planning. Also for the most effective and accurate use of time, nurse candidates should be given adequate time management training (including planning, goal-setting, determining priorities, self-evaluation and controlling activities) during the undergraduate period.

This study's findings can benefit hospital managers, nurse managers, nurses and researchers in the following ways:

Recommendations for hospital managers and nurse managers:

- Provide nurses and young nurse managers (in particular) with time management training.
- Include the topic of time management while organizing orientation programs for new graduate nurses and other healthcare workers.
- Assign the duties of healthcare workers and nurses in particular with respect to their job descriptions.
- Improve the working conditions of hospitals, particularly in terms of time wasters.

Recommendations for nurses:

- Improve time management skills by attending orientation and continuing education programs provided by their institution.
- Try to put the attitudes and behaviors they were taught in time management training into practice.
- Be mindful of time management not just in their professional lives, but in their personal lives as well.

Recommendations for researchers:

- It is recommended to investigate the time management skills of nurses in different sample groups and sizes and the reasons for being caught in time traps.
- Researchers should investigate whether there is a relationship between time management skills and other fields.
- In order to use time more efficiently, the importance of the concept of time management should be emphasized.
- It is thought that raising awareness of nurses will contribute to them in using their time effectively. Studies and projects to be carried out for this purpose may be useful.

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