Research Paper

Missed Nursing Care and Its Relationship With Nurses' Self-efficacy

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ABSTRACT

Background: Nursing care is an essential part of health care services and should be provided at the highest level. However, some nursing care is neglected for various reasons. This study examines the relationship between nurses' self-efficacy and missed nursing care (MNC).

Methods: In this descriptive-correlational study, 285 nurses from hospitals affiliated with Alborz University of Medical Sciences, Iran, were selected using proportion-to-size sampling in 2024. Data collection tools included the general self-efficacy scale (GSE-17) and the Kalisch MNC. We analyzed the data using descriptive (frequency, percentage, mean±SD) and inferential (Mann-Whitney, Kruskal-Wallis, and Spearman correlation coefficient) statistics in SPSS software, version 16 at a significance level of 0.05.

Results: Nurses' total self-efficacy and MNC scores were 64.70±7.57 (moderate) and 55.01±6.73 (high), respectively. The results also showed a significant negative correlation between self-efficacy and MNC (P≤0.001). Moreover, among the demographic variables, age, marital status, and Job category were significantly related to self-efficacy and MNC.

Conclusion: The results showed a negative relationship between nurses' self-efficacy and MNC. It is suggested that appropriate training programs be designed and implemented to improve nurses' self-efficacy and reduce MNC.

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Highlights

- MNC is defined as care that is delayed, partially completed, or not completed at all.
- It is a global phenomenon, with prevalence rates ranging from 55% to 98% in different countries.
- Self-efficacy was significantly negatively associated with MNC.
- Nurses' age, marital status, and Job category were significantly related to self-efficacy and MNC.

Plain Language Summary

Missed nursing care (MNC) in healthcare facilities greatly affects service quality and service users' trust. This kind of care is delayed, partially completed, or not completed at all. In general, factors contributing to MNC fall into three categories: labor resources, material resources, and teamwork and communication. This study found a negative association between nurses' self-efficacy and MNC.

Introduction

One of hospitalized patients' rights is to have their needs met and to receive safe, comprehensive care (Ebadi et al., 2021). As the largest workforce in healthcare, nurses play a critical role in ensuring safe, high-quality hospital care as planners, coordinators, providers, and evaluators (Karimi, 2021; Chegini et al., 2020). During multiple shifts and heavy workloads, nurses must decide how to provide quality, acceptable care amid multiple patient demands. Therefore, they tend to prioritize tasks and determine which tasks to perform and which to eliminate or postpone. In such situations, nurses may shorten routine care, delay care, or refrain from providing it altogether. This condition sometimes leads to nurses not meeting standards of care (Chegini et al., 2020). Missed nursing care (MNC) is defined as care that is delayed, partially completed, or not completed at all (Chaboyer et al., 2021). Kalisch (2006) proposed the MNC concept, and Kalisch et al. (2009) presented the MNC model. The structural variables of this model are hospital characteristics, ward characteristics, staff-related outcomes, and patient-related outcomes (Kalisch et al., 2009). However, it remains one of the most important and prominent concerns in many health care systems. It is a global phenomenon (Chaboyer et al., 2021), with prevalence rates ranging from 55% to 98% in different countries (Labrague et al., 2022). In addition to affecting patient safety, MNC violates patients' rights and jeopardizes their recovery (Ebadi et al., 2021). MNC leads to several negative consequences, such as decreased patient satisfaction, increased medication errors, urinary tract infections, patient falls, pressure ulcers, critical incidents, reduced quality of care and patient readmissions (Lake et al., 2020), lower job satisfaction, a higher tendency for nurses to leave the job, and increased organizational costs related to longer hospital stays and readmissions (Abere et al., 2024; Hanifi et al., 2025).

Nurses cite various causes of MNC, including unpredictable changes in service needs, emergency conditions of patients, high workload, lack of support from the treatment team, shortage of nursing staff, unbalanced and unfair division of labor, unavailability of medications and equipment when needed, failure to provide required care by other members of the treatment team, inappropriate handover and transfer of patients from the previous shift or another department, failure of equipment and supplies to function properly when needed, lack of support from treatment team members, tension or poor communication with medical staff and other support and auxiliary departments, unavailability or absence of nurses to provide patient care, and excessive activities related to admission and discharge of patients as reasons for the phenomenon (Dehghani et al., 2023). In addition to environmental, teamwork, and managerial factors (Labrague et al., 2022), occupational factors such as work experience, shift type, and job satisfaction are associated with the occurrence of MNCs (Zárate-Grajales et al., 2022). Finally, some nurse characteristics, such as self-efficacy, can also play an important role in determining the ability to provide nursing care (Indrawati et al., 2025).

Self-efficacy is an important individual factor for nurses that increases their clinical decision-making ability and improves the quality of nursing care (Zarezadeh et al., 2021). Albert Bandura derived the concept of self-efficacy from his psychological research (Bandura, 1997). According to Bandura's self-efficacy theory, later renamed social cognitive theory, self-efficacy is defined as a person's perception of their ability to perform specific behaviors through 4 processes: cognitive, motivational, affective, and choice (Shorey & Lopez, 2021). According to this theory, people's beliefs about their abilities and talents positively affect their actions and are the basis of their activities. If a person believes he cannot achieve the expected results or prevent unacceptable behaviors, his motivation to do the task will decrease, and he may not complete it (Beiranvand et al., 2019). People with high self-efficacy can more easily overcome problems because they believe they can solve them and have had successful experiences. Also, when difficult situations arise, these people focus on their abilities to solve the problem and look for solutions instead of negative and unfavorable interpretations of the situation (Shengyao et al., 2024). Nurses with higher self-efficacy see obstacles as opportunities instead of threats. These people overcome difficult situations, cope better with specific situations, achieve positive results in activities, show greater commitment to their goals, are more motivated, perform better, and ultimately perform their duties better (Abadian & Sharifi, 2024).

Given the high importance of nursing care quality and, on the other hand, the potential role of self-efficacy in reducing nursing errors (Ozsaker et al., 2025), examining the relationship between these 2 variables can guide the development of effective educational and implementation programs to improve nursing services. Despite the importance of this issue, few studies have examined it, especially in Iran. The present study investigated the relationship between self-efficacy and MNC among nurses.

Materials and Methods

Design, setting, and sample

This descriptive-correlational study, conducted in 2024, investigated the relationship between nurses' self-efficacy and MNCs. The research population included all nurses in hospitals affiliated with the Alborz University of Medical Sciences in Iran. Based on the Krejcie & Morgan (1970) table, the sample size was determined to be 285 nurses (α=0.05, d=0.05). We used a proportion-to-size sampling method from Imam Hassan, Imam Jafar, Shahid Madani, Shahid Rajai, Bahonar, Kowsar, and Kamali hospitals. The inclusion criteria were at least a bachelor's degree in nursing, at least 6 months of work experience, and no psychiatric illnesses or related medication use (self-reported). Incompletely completed questionnaires were discarded.

Study instruments

Data were collected using a demographic form, the general self-efficacy scale (GSE-17), and the Kalisch MNC questionnaire. The demographic questionnaire includes age, gender, marital status, level of education, work experience, work shift, job category, and employment type.

GSE-17 consists of 17 items on a 5-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5). Scores range from 17 to 85, with higher scores indicating greater self-efficacy. Therefore, the scores between 17-34, 34-51, and above 51 indicate weak, moderate, and high self-efficacy, respectively. The scale designers reported acceptable construct and criterion validity and reported reliability using Cronbach α of 0.86 (Sherer et al., 1982). This scale was psychometrically tested in Iran. Its construct validity was confirmed using exploratory and confirmatory factor analysis, and its reliability was evaluated using the Cronbach α and reported as 0.83 (Asgharnejad et al., 2006). In the present study, the reliability value of this questionnaire was determined using the Cronbach α method as 0.89.

The Kalisch MNC questionnaire was developed in 2009 and consists of 24 items. It is scored based on a 4-point Likert scale ranging from "rarely forget" (1) to "always forget" (4). The questionnaire scores range from 24 to 96, and higher scores indicate a higher likelihood of forgetting care. Kalish et al. (2009) reported the qualitative content validity of this scale at a desirable level and its reliability using the Cronbach α in the range of 0.64-0.86. This questionnaire has been psychometrically validated in Iran, and its content validity index (CVI) and content validity ratio (CVR) have been reported to be 98 and 99 percent, respectively. Its reliability using Cronbach's α has been reported to be 0.98 (Khajooee et al., 2019). In the present study, the reliability of this questionnaire was calculated using the Cronbach α method at 0.93.

Data analysis

Data were analyzed using SPSS software, version 26. The normality of the data was assessed using the Kolmogorov-Smirnov test and was not confirmed (P>0.05).

Therefore, we used non-parametric tests to analyze the data. Demographic and main variables were first described using Mean±SD, frequency, and frequency percentage. The Spearman, Mann-Whitney, and Kruskal-Wallis tests were used to examine the relationship between the main research variables and the demographic characteristics of the participants. The significance level was set at 0.05.

Results

Of the 285 participants, 10 were excluded because they did not complete the questionnaires. Therefore, we analyzed data from 275 participants. The mean age of the nurses was 34.22±6.64, and 88.7% were women. Most participants were married (75.6%), and 78.5% were staff nurses. Nurses' total self-efficacy and MNC scores were 64.70±7.57 (range: 53.45–75.01) and 55.01±6.73 (range: 47.12- 63.56), respectively (Table 1).

The Spearman correlation coefficient was used to examine relationships among the research variables. The results showed a significant relationship among all three variables: as age increases, self-efficacy increases, and MNC decreases. There is also a significant moderate relationship between self-efficacy and MNC (r=-0.319, P<0.001), such that MNC scores decrease as self-efficacy increases (Table 2).

Regarding the relationship between demographic variables and self-efficacy and MSN, the results showed a significant relationship between level of education, marital status, job category, and work shift and self-efficacy, such that people with an MSN degree, married, higher job category, and fixed shift had more self-efficacy than their colleagues. There was also a significant relationship between gender, marital status, and job category and MNCs, such that married nurses with higher job categories and females had fewer MNCs than their colleagues. Employment type was not significantly related to the main variables (Table 3).

Table 1. Descriptive statistics of demographic and main research variables: frequency of demographic variables (n=275)

Variables	Group	No. (%)/ Mean±SD
Gender	Male	31(11.3)
	Female	244(88.7)
Level of education	BSN	255(92.7)
	MSN	20(7.3)
Marital status	Single	67(24.4)
	Married	208(75.6)
Job category	Staff Nurse	216(78.5)
	Head nurse	27(9.8)
	Supervisor	32(11.6)
Work shift	Fixed	23(8.4)
	Rotating	252(91.6)
Employment type	Permanent	220(80.0)
	Contract	29(10.5)
	Others	26(9.5)
Age (y)		34.22±6.64
Self-efficacy		64.70±7.57
MNC		55.01±6.73

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Table 2. Correlation between MNC and self-efficacy and age (n=275)

Variables	Self-efficacy	MNC	Age
Self-efficacy		r=-0.319 P=<0.001*	r=0.159 P=0.008*
MNC	r=-0.319 P value=<0.001*		r=-0.169 P=0.007*
Age	r=0.159 P=0.008*	r=-0.169 P=0.007*	

*The Spearman correlation.

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Discussion

This study investigated the relationship between MNC and nurses' self-efficacy. The findings showed that the average total score for MNC was moderate, similar to findings from studies conducted in Iran (Hanifi et al., 2025; Alimorad & Moradi, 2024; Mohammadi et al., 2023; Dehghani et al., 2023) and other countries (Abere et al., 2024; Mainz et al., 2024; Bragadottir et al., 2020). Other studies have reported different findings, including high (Roohani et al., 2024) or low levels of MNC (Ghorbanzadeh et al., 2023; Khajooee et al., 2019). The main justification for these contradictory findings lies in the concept's breadth and the complexity of the reasons behind this phenomenon (Indrawati et al., 2025). In general, the three main categories of factors related to MNC include job resources, material resources, and teamwork and communication. Each factor varies widely and stems from multiple causes. Therefore, it is expected that MNC will vary across contexts, medical centers, and human resource distributions (Abere et al., 2024; Chegini et al., 2020). Among the demographic variables, gender, marital status, and job category were significantly related to MNC. The MNC rate was higher among men than women, single employees fthan married employees, and nurses than head nurses and supervisors. In line with this finding, Monalisa et al. (2023) attributed the high rate of MNC among men to the smaller number of male nurses, differences in communication styles, and longer working hours. Another study found that single nurses generally have less clinical experience because they are younger. Our study found a statistically significant relationship between age and MNC, confirming this finding. In addition, in line with our findings, other similar studies have reported a higher rate of MNC among clinical nurses than among nurses in other nursing categories (Roohani et al., 2024; Alimorad et al., 2024). The main reasons for this difference may relate to job roles, workloads, and experience (Mainz et al., 2024).

Nurses' mean self-efficacy score was above average. Similarly, a systematic review found that Iranian nurses' self-efficacy is higher than average (Abadian et al., 2024). Other studies in Iran also reported similar findings (Komeili Sany et al., 2024; Zarezadeh et al., 2021). Other studies in China (Wang et al., 2025), Egypt (Atalla et al.,

Table 3. The relationship between demographic variables, self-efficacy and MNC (n=275)

Variables	Group	MNC		Self-efficacy	
		P	Mean±SD	P	Mean±SD
Gender	Male Female	0.007	58.00±7.353 54.63±6.566	0.985*	64.10±8.619 64.77±7.451
Level of education	BSN MSN	0.595	54.98±6.825 55.35±5.509	0.031*	64.77±7.676 67.95±5.326
Marital status	Single Married	0.020	56.90±7.660 54.40±6.303	0.000*	61.64±8.064 65.68±7.160
Job category	Nurse Head nurse Supervisor	0.048	55.47±6.861 53.07±4.178 53.50±7.220	0.000**	63.92±7.447 66.59±4.838 68.38±9.047
Work shift	Fixed Rotating	0.128	52.87±4.855 55.20±6.850	0.019*	68.26±5.454 64.37±7.668
Employment type	Permanent Contract Others	0.675	55.12±6.697 54.45±7.174 54.69±6.734	0.731**	64.74±7.402 63.83±8.435 65.35±8.265

*The Mann-Whitney, **The Kruskal-Wallis.

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2025), and Turkey (Altıntaş et al., 2024) also reported similar findings. In contrast, other domestic and international studies have reported nurses' self-efficacy as average or low (Aydin & Karaçar, 2025; Behnoori et al., 2023; Mokhtari et al., 2023; Zhang et al., 2022). This difference may reflect variations in the tools and definitions used to measure self-efficacy, work environment conditions and supports, and cultural and temporal differences between studies. Overall, these factors lead to inconsistent results in research on nurses' self-efficacy (Wang et al., 2025; Behnoori et al., 2023). Another factor affecting nurses' self-efficacy is their personal and professional characteristics (Mokhtari et al., 2023). In line with this, the present study found that older, married, higher-ranking, and fixed-shift nurses showed higher self-efficacy. These findings suggest that experience is an important factor in individuals' achievement of self-efficacy. Because most nurses with the personal and professional characteristics mentioned above have more work experience, they are expected to have higher self-efficacy than other groups (Altıntaş et al., 2024).

There was a significant negative relationship between MNC and nurses' self-efficacy, such that MNC decreased as self-efficacy increased. This finding is consistent with Bandura's social cognitive theory, which considers self-efficacy a key determinant of effective performance in work environments (Bandura, 1997). According to this theory, nurses with stronger self-efficacy act more diligently, consistently, and responsibly in their duties, reducing the likelihood of errors or negligence in care (Abadian et al., 2024). These results align with other studies. For example, Berdida and Alhudaib (2025) found that nurses with higher levels of professional self-efficacy reported less MNC. Another study in Turkey found a negative relationship between MNC and professional self-efficacy among nurses (Yildiz et al., 2024). Zhang et al. (2024) also emphasized that self-efficacy mediates the relationship between job stress and clinical performance, suggesting that improving self-efficacy can reduce the negative effects of stress on quality of care. In Iran, Nazari et al. (2024) found that nurses with low MNC rates have greater moral competency. Begjani et al. (2024) also found a positive relationship between burnout and MNC. In general, several factors can affect self-efficacy and the incidence of MNC. Among them, high workload, workforce shortages, lack of managerial support, and stressful hospital conditions reduce self-efficacy and increase the chance of forgotten care (Abere et al., 2024). In contrast, organizational support, positive feedback, in-service training, and participation in clinical decision-making can improve nurses' self-efficacy and reduce the chance of neglecting essential care (Labrague et al., 2020).

Limitations of this study include its cross-sectional design, which does not allow examination of cause-and-effect relationships, and the use of self-report scales, which raises the possibility of forgetting or social desirability bias.

Conclusion

The results showed a significant negative relationship between MNC and nurses' self-efficacy. Nurses with higher self-efficacy are more accurate and responsible, and are less likely to forget, procrastinate, or delay care delivery. Therefore, strengthening self-efficacy through education, organizational support, and a suitable work environment can play an important role in reducing MNC and improving the quality of nursing care. Because self-efficacy and MNC are complex constructs, and various factors influence their promotion or decline, qualitative, systematic review, and meta-analysis research are suggested to understand the relationship between these concepts better.

Ethical Considerations

Compliance with ethical guidelines

Permission to conduct the present study was obtained from the Research Department and Ethics Committee of Alborz University of Medical Sciences (Code: IR.ABZUMS.REC.1400.184). In this research, we observed all provisions of the Declaration of Helsinki, including participants' awareness of the research objectives, confidentiality of information, voluntary participation, and completion of an informed consent form.

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Authors' contributions

Conceptualization, methodology, investigation, and writing the original draft: Bahman Aghaie, Khadijeh Alvandi, and Tahereh Fallahnezhad; Data collection: Hanie Dahmardeh, Ali Javadzadeh, and Seyed Kazem Mousavi; Data analysis: Bahman Aghaie, Khadijeh Alvandi, Tahereh Fallahnezhad, Hanie Dahmardeh, Ali Javadzadeh, and Seyed Kazem Mousavi; Review and editing: Reza Norouzadeh, Zahra Hezbiyan, Hanie Dahmardeh, Ali Javadzadeh, and Seyed Kazem Mousavi; Final approval: All authors.

Conflict of interest

The authors declared no conflict of interest.

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