

# Investigation on the Current Situation of Missed Nursing Care and Analysis of Its Influencing Factors Among 1,476 Nurses in Southern Xinjiang

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**Abstract:** *Objective:* To investigate the current situation of nurses' lack of nursing care in southern Xinjiang and analyze its influencing factors. *Methods:* A convenient sampling method was used to select 1476 nurses from two tertiary hospitals in Kashi from May 2022 to December 2022 as the subjects of a cross-sectional survey. The nurses in southern Xinjiang were investigated by general information questionnaire and nursing deficiency scale-nurse version. *Results:* A total of 1476 valid questionnaires were collected in this study. The score of nurses' lack of care in southern Xinjiang was  $(56.05 \pm 9.36)$ , which was above the middle level. Among them, the scores of timely responses to call bells, view patient medical records, fully understand their own patient's condition, and provide emotional support for patients and/or family members were relatively low. Univariate analysis showed that there were significant differences in the scores of nurses' age, nurses' level, nursing career satisfaction and nursing job satisfaction ( $p < 0.05$ ). Multivariate analysis showed that the occupational satisfaction and nursing job satisfaction of nursing staff were the main factors affecting the lack of nursing work ( $p < 0.05$ ). *Conclusion:* The lack of nursing care of nurses in southern Xinjiang is at the upper middle level. The younger the age, the lower the satisfaction of nursing profession and the lower the satisfaction of nursing position, the more serious the lack of nursing care. In order to solve this problem, nursing managers should actively respond to the influencing factors of nursing absence and actively seek effective management measures to reduce the incidence of nursing absence and ensure the safety of patients.

**Keywords:** Xinjiang; Nurse; Lack of care; Nursing management

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## 1. Introduction

Missed Nursing Care refers to the failure of nursing staff to provide appropriate care and attention in the healthcare sector, which negatively impacts patients' health and recovery. This phenomenon not only poses a threat to patients' safety and prognosis but also directly affects the efficiency and sustainable development of the healthcare system<sup>[1]</sup>. According to research, 66.16% to 71.9% of nurses have engaged in missed nursing care behaviors<sup>[2]</sup>.

The occurrence of missed nursing care may lead to prolonged hospital stays, pressure ulcers, physical disabilities, and other adverse outcomes for patients, as well as negatively impacting the hospital's reputation <sup>[3]</sup>. Therefore, addressing this issue fundamentally is crucial for ensuring the quality of healthcare and patient safety. However, as one of the remote regions in China, southern Xinjiang faces complex geographical conditions, inconvenient transportation, relatively backward economic development, and a scarcity of medical resources, making missed nursing care one of the severe challenges confronting healthcare services in the area <sup>[4]</sup>. Hence, this study aims to explore the current situation of missed nursing care in nursing work in southern Xinjiang from the perspective of nurses through a cross-sectional survey and analyze its attributes. Based on these attributes, this study provides nursing managers with a focal point for management to improve the current situation of missed nursing care in southern Xinjiang, enhance nursing quality, and increase patient satisfaction.

## **2. Objects and methods**

### **2.1. Survey objects**

Using a convenience sampling method, 1,476 nurses from two tertiary hospitals in Kashi Prefecture from May 2022 to December 2022 were selected as the research objects for the cross-sectional survey. This study has been approved by the Medical Ethics Committee of Kashi Prefecture Second People's Hospital.

#### **2.1.1. Inclusion criteria**

- (1) Practicing nurses who have obtained professional qualification certificates and have worked in the Kashi region for at least one year
- (2) Nurses who have provided informed consent and voluntarily agreed to participate in this study

#### **2.1.2. Exclusion criteria**

- (1) Nurses undergoing standardized training or further education
- (2) Nurses working in non-clinical positions
- (3) Nurses who leave their jobs or give birth during the intervention period

## **2.2. Methods**

### **2.2.1. General information questionnaire**

Based on the objectives of this study, relevant literature was reviewed, and a general information questionnaire was designed based on previous experience. It mainly includes the nurse's gender, age, educational background, whether the time spent working in the current department is the longest, professional title, nurse competency level, work schedule type, average number of hours worked overtime per day, job satisfaction in nursing, job position satisfaction, and the adequacy of nurse staffing in the department.

### **2.2.2. Nursing omission scale-nurse version (MISSCARE survey)**

This scale was proposed by foreign scholar Kalisch and translated and localized by Chinese scholar Si Fei <sup>[5]</sup>. The scale consists of two parts: Part A, the Missed Nursing Care subscale, which is primarily used to evaluate the omission of nursing activities within the hospital. It contains 24 items and uses a Likert 5-point scale. A higher score indicates more frequent omissions in nursing work, with a test-retest reliability of 0.87. Part B, the Reasons

for Missed Nursing Care subscale, mainly assesses the reasons for nursing omissions. It is divided into three dimensions: manpower, material resources, and communication, with 19 items. A Likert 4-point scale is used, and a higher score indicates that the item is a significant reason for nursing omissions. The Cronbach's  $\alpha$  coefficient for this scale ranges from 0.64 to 0.86, with a test-retest reliability of 0.86.

## **2.3. Survey method**

Based on the intentions and collaboration requests, this study fully communicated with the nursing departments of two tertiary-level hospitals and established WeChat groups. Research subjects who met the inclusion criteria and provided informed consent were invited to join the WeChat groups. The researchers provided unified training on the survey objectives, related concepts, content, questionnaire completion methods, and precautions to ensure that participants understood how to fill out the questionnaire and emphasized confidentiality commitments. To ensure the authenticity and reliability of the survey results, character limits were set in the questionnaire, and participants were required to complete the survey using only one mobile phone or computer for a single submission. The questionnaire could only be submitted after being fully completed. A total of 1,476 valid questionnaires were collected, with a response rate of 98.40%.

## **2.4. Statistical methods**

Data were processed using SPSS 22.0 statistical software. When measurement data conformed to a normal distribution, they were expressed as mean  $\pm$  standard deviation ( $\bar{x} \pm s$ ), and independent sample t-tests were used. Count data were expressed as rates, and comparisons between the two groups were made using the  $\chi^2$  test. In univariate analysis, factors with significant differences in univariate analysis were included in multivariate stepwise regression analysis. A *p*-value of less than 0.05 was considered statistically significant.

## **3. Results**

### **3.1. General information of nurses in Southern Xinjiang**

A total of 1,476 nurses in Southern Xinjiang were surveyed, including 50 males and 1,426 females, aged 19–59 years with an average age of  $(32.05 \pm 6.01)$  years.

#### **3.1.1. Educational qualifications**

36 with secondary vocational education, 648 with junior college education, and 792 with bachelor's degree or above.

#### **3.1.2. Professional titles**

672 nurses, 616 nurse practitioners, and 188 chief nurses or above.

#### **3.1.3. Nurse competency levels**

369 at N0–1 level, 693 at N2 level, 367 at N3 level, and 47 at N4 level.

#### **3.1.4. Work experience**

215 with 1 to < 3 years, 765 with 3 to < 5 years, 323 with 5 to < 10 years, 173 with 10–20 years, and 215 with over 20 years.

### 3.1.5. Work shift types

350 on regular day shifts, 120 on regular night shifts, 154 on auxiliary shifts, and 852 on APN rotation shifts. Average daily overtime hours: 140 with 0 hours, 527 with > 0 to 0.3 hours, 596 with > 0.3 to 1 hour, and 213 with > 1 hour.

## 3.2. Comparison of nursing omission scores among nurses with different demographic characteristics

The results of this study showed that the nursing omission score for nurses in Southern Xinjiang was ( $56.05 \pm 9.36$ ) points. The items with lower scores were “responding promptly to call bells”, “reviewing patient medical records to fully understand the conditions of patients under their care”, and “providing emotional support to patients and/or their families”. There were significant differences ( $p < 0.05$ ) in the score of ages, nurse competency level, satisfaction with nursing profession, and satisfaction with nursing position. See **Table 1**.

**Table 1.** Comparison of scores for nursing omissions among nurses with different demographic characteristics

Category	n	Score	F/t value	p-value
Gender			-1.792	0.073
Male	50	$30.56 \pm 6.08$		
Female	1426	$32.11 \pm 6.01$		
Age (years)			6.189	0.000
≤ 25	188	$57.26 \pm 8.99$		
25 to ≤ 35	739	$56.48 \pm 9.43$		
35 to < 45	282	$54.72 \pm 8.64$		
≥ 45	267	$46.46 \pm 9.85$		
Education Level			1.293	0.276
Technical Secondary School	36	$55.11 \pm 8.10$		
College	648	$56.72 \pm 9.44$		
Bachelor’s Degree or Above	792	$55.35 \pm 9.41$		
Longest Tenure in Current Department			1.640	0.102
Yes	750	$58.97 \pm 4.26$		
No	726	$58.28 \pm 5.26$		
Professional Title			0.996	0.409
Nurse	672	$56.74 \pm 9.60$		
Senior Nurse	616	$55.71 \pm 9.07$		
Nurse-in-charge or above	188	$54.85 \pm 9.41$		
Nurse Rank (N-level)			3.020	0.029
N0–1	369	$56.61 \pm 9.32$		
N2	693	$56.66 \pm 11.93$		
N3	367	$54.11 \pm 8.91$		
N4	47	$53.17 \pm 9.65$		

**Table 1 (Continued)**

Category	n	Score	<i>F/t</i> value	<i>p</i> -value
Years of Experience			2.197	0.054
1 to < 3	215	52.86 ± 6.01		
3 to < 5	765	58.29 ± 9.18		
5 to < 10	323	57.17 ± 9.53		
10 to 20	173	55.56 ± 9.28		
> 20	215	59.38 ± 10.53		
Work Shift Type			1.676	0.171
Day Shift	350	56.62 ± 9.08		
Night Shift	120	59.27 ± 10.14		
Support Shift	154	55.63 ± 9.36		
APN Rotation	852	55.44 ± 9.52		
Average Daily Overtime (hours)			0.904	0.406
0	140	56.54 ± 9.48		
> 0 to 0.3	527	54.38 ± 8.90		
> 0.3 to 1	596	55.57 ± 9.24		
> 1	213	56.06 ± 9.36		
Satisfaction with Nursing Profession			6.241	0.000
Satisfied	417	49.11 ± 6.60		
Somewhat Satisfied	436	50.04 ± 9.91		
Neutral	342	57.54 ± 9.43		
Somewhat Dissatisfied	193	56.17 ± 9.26		
Dissatisfied	88	56.40 ± 8.88		
Satisfaction with Current Position			2.486	0.043
Satisfied	516	50.75 ± 6.83		
Somewhat Satisfied	613	52.00 ± 9.99		
Neutral	134	55.73 ± 9.65		
Somewhat Dissatisfied	115	56.21 ± 9.31		
Dissatisfied	98	57.40 ± 9.11		
Perceived Staffing Level in Department			1.486	0.205
Adequate	529	56.75 ± 9.11		
Fair	442	56.69 ± 9.88		
Basic	357	56.29 ± 9.15		
Less than Ideal	94	54.11 ± 9.06		
Inadequate	54	55.28 ± 9.40		

### 3.3. Results of multiple linear regression analysis on nursing omissions

Using the total score of nursing omissions among nurses in southern Xinjiang as the dependent variable, and age, nurse competency level, satisfaction with nursing profession, and satisfaction with nursing position as independent variables, a multiple linear regression analysis method was employed to further analyze the independent factors contributing to nursing omissions among nurses in southern Xinjiang. The assignment of independent variables is shown in **Table 2**. The results revealed that age, satisfaction with nursing profession, and satisfaction with nursing position were independent factors influencing nursing omissions among nurses ( $p < 0.05$ ). See **Table 3**.

**Table 2.** Variable assignment table

Variable	Assignment method
Age	1 = $\leq 25$ years, 2 = 25 to $\leq 35$ years, 3 = 35 to $< 45$ years, 4 = $\geq 45$ years
Nurse rank	1 = N0-1, 2 = N2, 3 = N3, 4 = N4
Satisfaction with nursing profession	1 = Satisfied, 2 = Somewhat satisfied, 3 = Neutral, 4 = Somewhat dissatisfied, 5 = Dissatisfied
Satisfaction with current position	1 = Satisfied, 2 = Somewhat satisfied, 3 = Neutral, 4 = Somewhat dissatisfied, 5 = Dissatisfied

**Table 3.** Analysis of multiple linear regression results for nursing omissions among nurses in Southern Xinjiang

Variable	$\beta$	S.E.	<i>t</i> -value	<i>p</i> -value	95% CI
Age	-4.665	1.058	-4.409	0.000	-6.743 -2.587
Nurse rank	-0.213	0.630	-0.339	0.735	-1.450 - 1.023
Satisfaction with nursing profession	1.323	0.635	2.083	0.038	0.076 - 2.570
Satisfaction with current position	2.464	0.699	3.525	0.000	1.091 - 3.837

## 4. Discussion

### 4.1. The phenomenon of nursing omissions among nurses in Southern Xinjiang is relatively severe

The results of this study indicate that the score for nursing omissions among nurses in southern Xinjiang was ( $56.05 \pm 9.36$ ), suggesting that the phenomenon of nursing omissions among nurses in this region is relatively severe, and hospital administrators should pay attention to this issue. In this study, the three items with the lowest scores on the nursing omissions scale were “responding promptly to call bells”, “reviewing patient medical records to fully understand the conditions of patients under their care”, and “providing emotional support to patients and/or their families”. The analysis suggests that there may be a shortage of nurses in southern Xinjiang, leading to each nurse being responsible for a larger number of patients. When multiple patients require care simultaneously or emergencies arise, nurses may be unable to respond promptly to call bells. In response to these circumstances, it is recommended that hospitals increase the number of nurses to reduce their workload and ensure that each nurse can better respond to call bells <sup>[6]</sup>.

In this study, it was found that the scores for reviewing patients’ medical records and fully understanding the conditions of patients under one’s care were relatively low. This may be due to a lack of sufficient awareness among nursing staff regarding this task, coupled with the belief that it is a simple operation, leading to a lack of emphasis on it. In response to the aforementioned situation, managers should emphasize the importance of

this operation and its impact on patient safety and the quality of care. They should also randomly select patient cases for nurses to review, implement a reward and punishment system, and enhance nurses' work efficiency and understanding of patient conditions <sup>[7]</sup>.

Finally, providing emotional support to patients and/or their families requires nurses to possess strong empathy, enabling them to understand patients' inner feelings. However, due to the relatively tedious nature of nurses' daily work and the influence of external factors, nurses may not be able to concentrate on listening to patients' feelings, thereby affecting their empathy with patients and reducing the effectiveness of emotional support. To address this issue, it is recommended to establish different "emotional support rooms" in different wards and hang "do not disturb" warning signs at the doors to ensure that emotional support is provided without interruption, thereby offering better emotional support to patients <sup>[8]</sup>.

#### **4.2. Factors influencing nursing omissions among nurses in Southern Xinjiang**

The results of this study indicate that the younger the age, the more severe the nursing omissions. This finding is similar to the survey results of Zhang Jing and others on nurses <sup>[9]</sup>. The reasons for this may include the following: young nurses may have just graduated or started their nursing careers, lacking practical work experience and having not fully received professional training or practice. Therefore, they may feel confused or uncertain when facing complex nursing tasks or emergencies, leading to nursing omissions <sup>[10]</sup>. Secondly, young nurses may not have fully mastered skills in time management, task allocation, and priority setting, resulting in an inability to effectively organize and arrange nursing tasks in a busy work environment, thus leading to nursing omissions <sup>[11]</sup>. This suggests that nursing managers should provide young nurses with ample training opportunities, including the cultivation of theoretical knowledge and practical skills, to help them acquire the necessary professional knowledge and skills and improve the quality of care.

The findings of this study indicate that nurses with lower job satisfaction in nursing are more likely to experience instances of missed nursing care. The reasons for this are as follows: Salary and benefits are crucial to nurses' satisfaction. If nurses' efforts in nursing do not match their income, or if there is a lack of appropriate welfare and incentive mechanisms, it can lead to dissatisfaction among nurses at work. In such cases, nurses may lack motivation and enthusiasm, resulting in missed nursing care <sup>[12]</sup>. Secondly, most nurses hope to have opportunities for continuous learning and growth in their careers. If hospitals fail to provide sufficient opportunities for nurses to enhance their skills and career development, it can lead to frustration and disappointment among nurses, causing a decline in their commitment and interest in work, and subsequently resulting in missed nursing care <sup>[13]</sup>. To address these issues, management should support the development of nurses by providing necessary training and resources, while encouraging nurses to participate in the decision-making process to enhance their job satisfaction and sense of involvement. Additionally, implementing appropriate patient allocation and workload management strategies can ensure that nurses can allocate their time and resources reasonably. Furthermore, providing regular training and learning opportunities enables nurses to continuously update their knowledge and skills and stay abreast of the latest nursing practices <sup>[14]</sup>.

The survey results also show that nurses with higher job satisfaction in nursing positions tend to experience fewer instances of missed nursing care. This may be because nurses with higher satisfaction are usually passionate about their profession, and they are more focused on patients' needs in nursing work. They are more willing to invest time and effort to meet patients' needs, establish good relationships with patients, and thereby reduce the likelihood of missed nursing care <sup>[15]</sup>. On the other hand, nurses with lower job satisfaction in nursing positions



may face higher emotional and mental health issues, such as anxiety, emotional fatigue, and job burnout caused by work stress. These issues may interfere with nurses' attention and concentration, increasing the risk of missed nursing care<sup>[16]</sup>. This suggests that nurses' mental health and work-life balance are crucial for improving job satisfaction and reducing missed nursing care. Management should pay attention to nurses' mental health conditions and provide psychological support and resources, such as psychological counseling services and stress management training. At the same time, encouraging and supporting nurses to maintain a good work-life balance can help alleviate work stress and enhance the quality of nursing care.

## 5. Conclusion

In summary, the level of nursing omission among nurses in southern Xinjiang is above average, with younger nurses and those with lower job satisfaction and lower satisfaction with their nursing positions experiencing more severe nursing omissions. To address this issue, nursing administrators should actively respond to the factors influencing nursing omissions and seek effective management measures to reduce the incidence of nursing omissions and ensure patient safety.

## Disclosure statement

The authors declare no conflict of interest.

## References

- [1] Cui W, Liu T, Lu F, 2023, The Correlation and Role of Head Nurses' Safety Management Level and Pediatric Nurses' Missed Nursing Care. *Anhui Medical Journal*, 44(5): 603–606.
- [2] Zhang Y, Liu R, Jiao X, 2021, The Correlation Between Oncology Nurses' Caring Ability, Job Burnout, and Missed Nursing Care. *Chinese Nursing Research*, 35(11): 2046–2049.
- [3] Zhang X, Du X, Wang X, et al., 2020, Analysis of the Current Status and Influencing Factors of Missed Nursing Care Among Oncology Nurses in Ningxia. *Journal Of Nursing Science*, 35(10): 70–72.
- [4] Huang A, Yan P, Wang Y, et al., 2016, Analysis of Influencing Factors for the Occurrence of Occupational Musculoskeletal Disorders Among Nurses in Southern Xinjiang. *Chinese Nursing Research*, 30(25): 3107–3111.
- [5] Si F, Qian Z, 2017, Chinese Adaptation and Reliability and Validity Testing of the Missed Nursing Care Scale. *Qilu Nursing Journal*, 23(24): 32–35.
- [6] Håkonsen S, Pedersen P, Bygholm A, et al., 2019, Lack of Focus on Nutrition and Documentation in Nursing Homes, Home Care, and Home Nursing: The Self-Perceived Views of The Primary Care Workforce. *BMC Health Services Research*, 19(1): 642.
- [7] Griffiths P, Ball J, Bloor K, et al., 2018, Nurse Staffing Levels, Missed Vital Signs, and Mortality in Hospitals: Retrospective Longitudinal Observational Study. Southampton (UK): NIHR Journals Library.
- [8] White E, Aiken L, Mchugh M, 2019, Registered Nurse Burnout, Job Dissatisfaction, and Missed Care in Nursing Homes. *Journal of the American Geriatrics Society*, 67(10): 2065–2071.
- [9] Zhang J, Zhou Y, 2020, Research on the Current Situation and Influencing Factors of Missed Nursing Care in Pediatric Surgery. *Nursing Practice and Research*, 17(23): 9–11.
- [10] Mei A, Li Q, Han B, 2022, Research on the Impact of Nursing Work Environment on Missed Nursing Care. *Chinese*



Nursing Management, 22(12): 1804–1809.

- [11] Gao W, Liu R, 2019, Qualitative Analysis of Common Missed Nursing Care Items and Influencing Factors in Oncology Departments. *International Journal of Nursing*, 38(14): 2174–2178.
- [12] Bassi E, Tartaglini D, Palese A, 2018, Missed Nursing Care Terminologies, Theoretical Concepts and Measurement Instruments: A Literature Review. *Assist Inferm Ric*, 37(1): 12–24.
- [13] Hessels A, Paliwal M, Weaver S, et al., 2019, Impact of Patient Safety Culture on Missed Nursing Care and Adverse Patient Events. *Journal of Nursing Care Quality*, 34(4): 287–294.
- [14] Griffiths P, Ball J, Bloor K, et al., 2018, Nurse Staffing Levels, Missed Vital Signs and Mortality in Hospitals: Retrospective Longitudinal Observational Study. Southampton (UK): NIHR Journals Library.
- [15] Wu W, Zhou D, He Y, et al., 2020, A Scoping Review of Influencing Factors of Missed Nursing Care at Home and Abroad. *Modern Clinical Nursing*, 19(10): 75–80.
- [16] Li W, Tian L, Su Y, et al., 2020, Research Progress on the Current Situation and Countermeasures of Missed Nursing Care. *Journal of Nursing of PLA*, 37(10): 65–67.

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