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**The ramifications of Missing Nursing Care on adverse patient outcomes are profound. Insights gleaned from data offer valuable perspectives on nursing practices and their direct repercussions on patient well-being.**

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### Chronicle

### Abstract

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The study aims to explore the correlation between missed nursing care and adverse patient outcomes. It delves into the reasons behind missed nursing care leading to negative patient consequences. The research framework employs missed nursing care as an independent variable and adverse patient outcomes as a dependent variable. Utilizing convenient sampling, this cross-sectional quantitative deductive study gathered data from nurses. All factors under scrutiny were assessed via questionnaires utilizing an appropriate Likert scale. Out of a total population of 411 nurses, 202 were sampled. The study's findings indicate a direct relationship between missed nursing care and adverse patient outcomes, demonstrating that an increase in missed nursing care corresponds to a rise in negative patient consequences. These outcomes were statistically significant, with reliable scales and valid data. The research concludes that reducing missed nursing care is pivotal for improving adverse patient outcomes. It recommends offering advanced skill courses, implementing thorough monitoring of nurses' activities, and mandating the self-reporting of missed patient care and adverse events.

**Keywords:** Missed Nursing Care, Adverse and outcomes

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## INTRODUCTION

The study aimed to elucidate the reasons behind missed nursing care, recognizing the significance of nurses' perspectives on their experiences. When nursing care is inadequately provided, patients, nurses, and organizations may all face repercussions. Implementing management strategies such as enhancing nurse job satisfaction and ensuring adequate staffing is crucial to reduce instances of missed nursing care. Further research is essential to comprehensively grasp the predictors of the consequences stemming from missed nursing care (Janatolmakan et al., 2022). Missed nursing care presents a global challenge with diverse implications, necessitating an understanding of clinical nurses' experiences (Alireza et al., 2022). Nurses' workload related to medication administration directly influences missed care, particularly in tasks involving developmental care that demand time and patience, often conflicting with prioritizing safety and encountering inadequate working conditions (Soohyun et al., 2022). The repercussions of missed nursing care extend to negative impacts on nurses' health, job

commitment, personal lives, and can lead to psychological burnout, ultimately affecting patient outcomes (Alfuqaha et al., 2019; Jiang et al., 2017). Numerous factors contribute to missed nursing care, including hospital infrastructure issues, ward working environments, inadequate staffing, tight deadlines, and prolonged shifts (Chegini et al., 2020). Workplace variables such as resource availability, organizational aspects, and leadership by head nurses significantly influence the prevalence of missed nursing care (Jangland et al., 2018). Previous studies have linked nurses' socio-demographic characteristics like gender, age, education, job title, and clinical experience duration to missed care (Blackman et al., 2018). Ensuring patient safety and the availability of necessary services and equipment requires experienced and competent nursing staff. The strain caused by increased workload and psychological challenges amid the COVID-19 pandemic heightened the risk of missed nursing care (Ki et al., 2020; Wang et al., 2020).

Every aspect of nursing care, if neglected, can lead to adverse outcomes. For instance, failure to comply with patient turning and ambulation instructions elevates the risk of falls, pressure ulcers, and health issues due to immobility (Smith, Morin, Wallace, & Lake, 2018). Neglecting oral hygiene could increase the chances of infections such as gingivitis, periodontitis, and aspiration pneumonia (Willis & Brady, 2022). The omission of nursing care globally remains a critical concern, termed as a pandemic issue, with adverse consequences ranging from medication errors and patient falls to hospital-acquired infections, bed sores, and readmissions (Recio-saucedo et al., 2018). Healthcare stakeholders emphasize understanding the reasons behind missed nursing care due to its direct impact on patient outcomes (Ball et al., 2018).

Recent research underscores the essential link between nursing care omission, necessary patient care, and nurse staffing, signifying its significance in patient outcomes (Griffiths et al., 2018). Globally, the omission of nursing care remains a persistent issue affecting patient safety and optimal care delivery (Agency for Health Care Research and Quality, 2019). Over the past decade, researchers have sought to comprehend fundamental nursing care and the underlying causes of its omission (Kitson et al., 2018). The term 'rationing care,' while related to missed nursing care, holds distinct differences, involving willingness and planning and suitability to deny giving care patient. (Habermann, Halvorsen et al., 2019). Frequently nursing care that was missed was included in the patient feeding and mobilization, patient relatives provided these kinds of care in Turkey. In developed health care system the known fact is that patient attendant generally contributes to the caring process of Alzheimer's disease, schizophrenia, and cancer or older patients and children. (Hagedoorn et al., 2019).

## **SIGNIFICANCE OF THE STUDY**

The significance of this study lies in its ability to decrease adverse patient events while benefiting both nurses and healthcare facilities. It sheds light on the impact of missed nursing care on nurses and poor patient outcomes. There's a clear necessity to establish workplace policies or guidelines and implement monitoring mechanisms to diminish missed care instances and improve patient outcomes. Nurse managers play a crucial role in overseeing staff to enhance patient safety and health by fostering transparency and serving as examples within the organization, effectively reducing missed medical appointments and subsequently improving patient outcomes.

**Missed nursing care and adverse patient outcomes**

Moura et al. (2019) recommended that habitual nurses with poor norms and values can enhance missed nursing care through internal perception changes. McMullen et al. (2017) highlighted patient safety as the foremost concern for nurses, emphasizing its potential to elevate job satisfaction. Cho et al. (2020) noted that increased workload and multitasking heighten the likelihood of missed nursing care, negatively impacting patient outcomes. Evidence from numerous global studies, including large-scale cross-sectional and longitudinal investigations, suggests a correlation between hospitals with higher registered nurse staffing and reduced adverse patient outcomes (Peter et al., 2022). Amorim-Lopes and Drach-Zahavy (2019) underscored the negative impact of missed nursing care on patients, nurses, and healthcare organizations. Suhonen and Scott (2018) identified missed nursing care as a prevalent issue in healthcare settings. Recio et al. (2018) established a strong correlation between missed nursing care and adverse patient outcomes such as medication errors, urinary tract infections, patient falls, pressure sores, critical incidents, and readmissions.

Liu et al. (2018) associated missed nursing care with poor patient care, compromised safety, and decreased patient satisfaction. Marguet and Ogaz (2019) highlighted teamwork and clinical leadership as pivotal factors in reducing missed nursing care and enhancing inpatient care quality. Unsafe care, as highlighted by WHO (2020), is a major contributor to global morbidity and mortality. Studies consistently link missed nursing care to negative patient outcomes, including medication errors, skin problems, and pulmonary complications (Griffiths et al., 2018). Park, Hanchett, and Ma (2018) shed light on missed nursing care leading to adverse events compromising patient safety and care standards. Villamin et al. (2018) found that patients experiencing missed nursing care had worse clinical outcomes, including medication errors, hospital-acquired infections (HAIs), falls, limited patient mobilization, bed sores, and increased mortality. Zang et al. (2020) emphasized the necessity of reducing missed nursing care to enhance patient well-being and the quality of care, ultimately reducing errors.

**METHODOLOGY****Population and sample size**

The complete nursing staff of the Punjab Institute of Neurosciences, Lahore (PINS), was part of the population considered for our present study. This encompassed 411 nurses from diverse departments like emergency, intensive care, operating rooms, neurosurgical wards, and neurology. The sample size for the study, comprising 202 nurses from PINS, Lahore, was determined using the Taro Yamane formula (Yamane, 1973).

**Questionnaire and measurement**

This section contains details on the questionnaire used to assess the Professional Quality of Life and its relationship with adverse patient outcomes mediated by missed nursing care. Specifically, it provides information about the questionnaire designed to measure missed nursing care. Negative patient outcomes were evaluated using items from the Caring Behaviors inventory—a refinement of the 42-item instrument by Ying Wu et al.,

Nurs Res. Jan-Feb 2006. All measurements were assessed on a 5-point Likert scale, where 1 indicated 'never,' 2 denoted 'rarely,' 3 signified 'occasionally,' 4 represented 'frequently,' and 5 conveyed 'very frequently.'

### Demographic Profile of the Respondents

The study's sample consisted of 202 nurses from various departments, encompassing Neurosurgery Ward, Neurology, ICU, Operation Theatre, Emergency, and HDU. Among the participants, 126 nurses (62.4%) were aged between 21 and 30, 38 (18.8%) fell within the age range of 31 to 40, and 50 (24.8%) were between 41 and 50 years old. In terms of shifts, 70 nurses (34.7%) were on morning duty, 32 (15.8%) were on evening shifts, and another 32 (15.8%) worked night shifts. Distribution across departments was as follows: 71 (35.1%) in the neurosurgery ward, 52 (25.7%) in neurology, 29 (14.4%) in emergency rooms, 14 (6.9%) in HDUs, and 23 (11.4%) in operating rooms. Below Figure 1 also shows the distribution of the nurse according to their respective department which reveals that majority of the nurses belonged to neuro surgery ward. As for qualifications, 85 (42.1%) held general nursing diplomas, 79 (39.1%) had post-RN degrees, 11 (5.4%) possessed generic degrees, and 27 (13.4%) had advanced degrees.

**Table 1.**

Demographic Variables	Categories	Frequency	Percentage
Age	21 to 30	82	40.6
	31 to 40	80	39.6
	41 to 50	37	18.3
	51 to 60	3	1.5
Qualification	diploma in midwifery	27	13.4
	diploma in general nursing	85	42.1
	Bscn	79	39.1
	Generic	11	5.4
Shift	Morning	28.2	28.2
	Evening	41.6	41.6
	Night	30.2	30.2
Experience	1 to 3 year	33	16.3
	4 to 6 year	57	28.2
	7 to 9 year	52	25.7
	10 to 12 year	34	16.8
	12+ year	26	12.9
Department	Neurosurgery Ward	71	35.1
	Neurology	52	25.7
	ICU	13	6.4

Operation Theater	23	11.4
Emergency	29	14.4
HDU	14	6.9

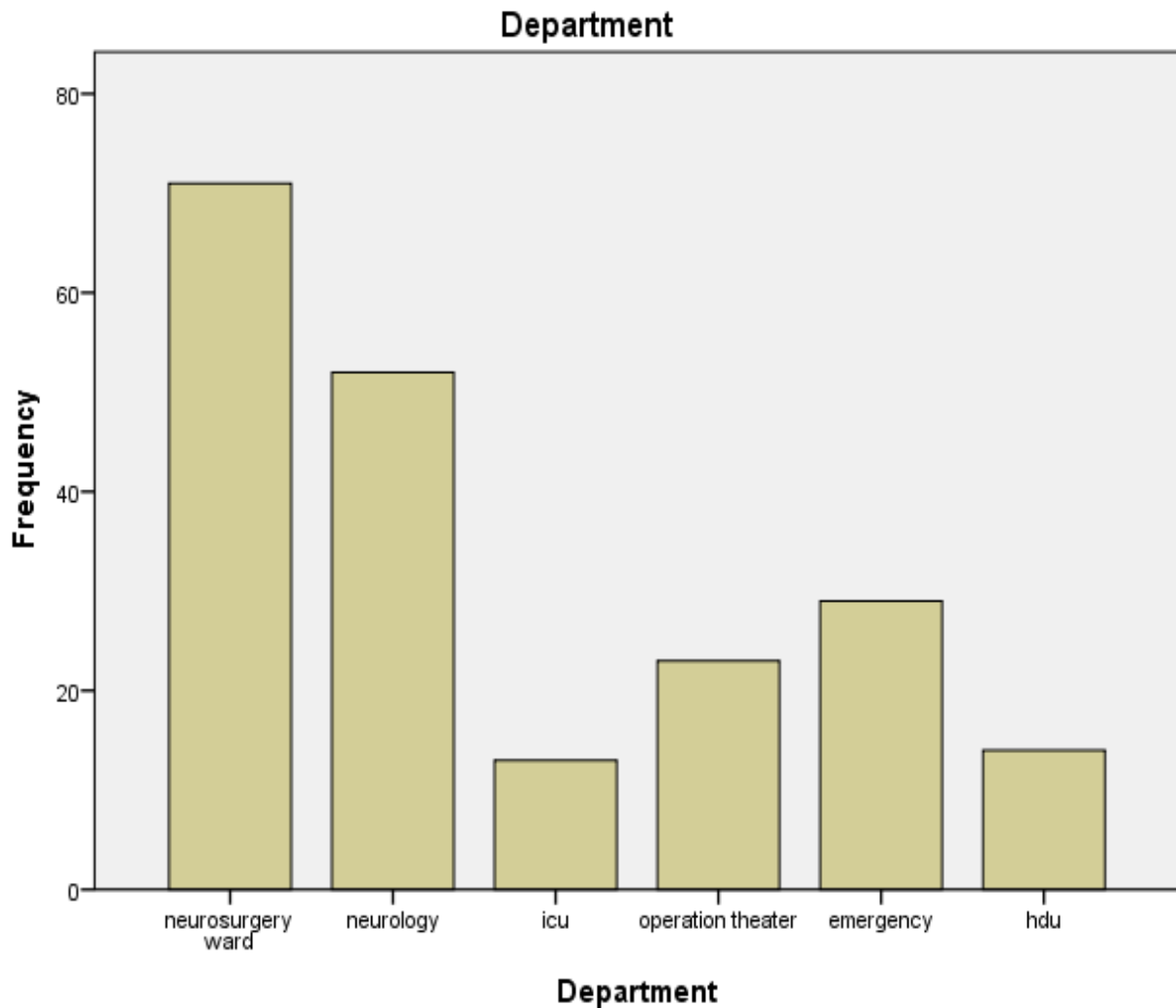


Figure 1.

Departmental Distribution of Nurses.

**Descriptive Statistics and Correlation**

Table 2 presents the descriptive statistics and correlation. According to the findings in Table 2, the mean values for the variables 'MNC' (Missed Nursing Care) and 'adverse patient outcomes' were 2.9509 and 2.9386, respectively. Additionally, the table displays the skewness and kurtosis values. Notably, all skewness and kurtosis values fell within the range of +2 to -2, indicating the normality of the data. Furthermore, all variables exhibited significant correlations.

**Table 2.**  
**Descriptive Statistics and Correlation**

	Mean	SD	MNC	APO	Skewness	Kurtosis
MNC	2.9509	.52479	1		-.363	1.580
APO	2.9386	.77153	.582**	1	-.373	.208

### Reliability and Validity

Cronbach's alpha was employed to evaluate data reliability, where a standard threshold is set at greater than 0.7. As indicated in Table 4, all Cronbach's alpha values exceeded 0.7, affirming the reliability of the data. Furthermore, Table 4 illustrates the construct validity assessed through the Kaiser-Meyer-Olkin (KMO) Bartlett's test. All variables exhibited KMO values surpassing 0.5, and each value was found to be significant, signifying the establishment of both reliability and validity.

**Table 3.**  
**Reliability and validity**

Reliability			Validity			
Constructs	Cronbach's alpha	Number of items	KMO	Approx. Square	Chi- df	Sig
MNC	.755	24	.665	546.832	105	.000
APO	.617	5	.693	546.321	1	.000

## HYPOTHESES TESTING

Table 4 displays the values for R, R-square, and adjusted R-square, which are .582a, .339, and 0.336, respectively. According to the ANOVA results, a 1% change in adverse patient outcomes corresponds to an 86% change in missed nursing care, indicating a substantial positive impact. This suggests that missed nursing care significantly influences burnout. The hypothesis models demonstrate positive and significant values, supporting their acceptance. The increase in missed nursing care aligns with an observed increase in burnout.

**Table 4.**  
**Path Coefficients**

Model Summary	R= .582 <sup>a</sup>	R Square=.339	Adjusted R Square=.336	Durbin-Watson=2.004
ANOVA <sup>a</sup>	Df=1	Mean Square=40.566	F=102.596	Sig.= .000 <sup>b</sup>
Coefficients <sup>a</sup>	Std. Error=.085	B=.856	t = 10.129	Sig=.000

### Ethical Consideration

All participants in the study were informed beforehand that there would be no compensation or incentives provided for their participation. They volunteered willingly, without any coercion. Stringent measures were implemented to uphold complete

confidentiality of the data; each survey was structured in a manner ensuring the anonymity of participants, safeguarding their identities from both the researcher and any external party. Assurance was given that the gathered information would be solely utilized for research purposes. Furthermore, all required permissions were obtained and approved by the Superior College of Nursing.

## **DISCUSSION**

This section focuses on discussing the findings of the present study, shedding light on several key aspects. It delves into the direct relationship between independent and dependent variables. The subsequent discussion regarding the acceptance or rejection of hypotheses is objective-oriented. The global issue of nursing care omission has been labeled a pandemic concern (Caldwell-Wright, 2019). Nurses, as the largest contingent of healthcare providers, bear direct responsibility for patient care (Bany et al., 2018). Adverse patient events, defined by the AHRQ Patient Safety Network (2019), encompass preventable harmful experiences resulting in the omission of nursing care. The World Health Organization (2019) emphasizes patient care and protection as paramount in healthcare delivery, underscoring nurses' pivotal role in care provision and the reduction of care omissions.

Studies by Boamah et al. (2018) and Aiken et al. (2017) conclude that nursing assessments provide a reliable estimation of negative patient incidents. Vizcaya-Moreno (2020) proposes that leveraging the nursing process—comprising assessment, nursing diagnosis, implementation, evaluation, coupled with double-checking, surveillance, and interprofessional collaboration—reduces missed nursing care and adverse events. Khatatbeh et al. (2021) suggest that the involvement and support of supervisors decrease harmful patient events, nosocomial infections, and medication errors.

## **CONCLUSION**

The study concluded that patients experiencing missed nursing care encountered adverse outcomes, establishing a significant correlation between both variables. Decreasing missed nursing care is crucial to enhance positive patient outcomes. It's recommended to offer advanced skill courses, implement vigilant monitoring of nurses' activities, and mandate self-reporting of missed nursing care and adverse patient events.

## **LIMITATIONS AND FUTURE DIRECTIONS**

Even though all of our hypotheses were confirmed and all of our goals were achieved, there are some limitations in the current study. Time constraints forced the study's confinement to a single hospital, and because it was cross-sectional, all of the data was gathered at once, whereas the longitudinal study provided a multidimensional perspective that the current study does not have.

## **DECLARATIONS**

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**Availability of data and material:** Data sources for the variables are clearly outlined in the methodology.

**Authors' contributions:** All authors contributed equally to the creation of this work.

**Consent to Participate:** Yes

**Consent for publication and Ethical approval:** As this study does not involve human or animal data, ethical approval is not necessary for publication. All authors have provided their consent.

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