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The Relationship between Level of Knowledge, Attitude, and Workload of Nurses with Completeness of Nursing Care Documentation

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ABSTRACT

Objective: Nursing care documentation is a crucial element in the accountability of the nursing profession. Incomplete documentation can reduce the quality of service in the hospital. This study aims to evaluate the relationship between the level of knowledge, attitude, and workload of nurses with the completeness of nursing care documentation in the Emergency Room Hospital, with a more comprehensive approach than previous studies.

Methods: A cross-sectional survey was conducted on all nurses assigned to the Emergency Room of Sanglah Hospital, Denpasar. Interviews with nurses were conducted to collect data on knowledge, attitudes, and workload. Completeness of nursing care documentation was measured through observation method.

Results: Completeness of nursing care documentation was significantly associated with the level of knowledge and attitude of nurses. Multivariate analysis showed that knowledge level had the greatest influence on the completeness of nursing care documentation. This finding suggests that increasing nurses' knowledge can substantially improve the completeness of nursing care documentation.

Conclusion: Completeness of nursing care documentation is significantly associated with nurses' knowledge level. This study introduces a new approach in examining factors affecting the completeness of nursing documentation, providing important insights for improving the quality of care in hospitals.

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1. Introduction

Nursing care documentation is the process of recording every nursing activity provided to patients (Asmirajanti, Hamid, and Hariyati 2019). This documentation is crucial for planning, implementing, and evaluating nursing care. It starts from patient admission until discharge, ensuring that all nursing activities are recorded in the patient's medical records (Shala et al. 2021). Incomplete documentation can lead to various issues, including administrative, financial, educational, research, informational, and legal problems (Carvalho et al. 2021). In recent years, there has been an increase in the number of incomplete nursing care documents in several emergency inpatient units (Boman et al. 2021). Efforts to add nursing staff to reduce workload have been made, but the problem of incomplete documentation remains high (Liu et al. 2018). This inadequacy negatively impacts the overall information services in hospitals (Meri et al. 2019).

Previous research indicates that incomplete nursing care documentation is related to factors such as educational background, length of service, workload, documentation knowledge, and skills (Saar et al. 2021). Chaboyer et al. (2021), Dehghan-Nayeri et al. (2018), Vincelette, Thivierge-Southidara, and Rochefort (2019), have shown that missed nursing care and poor documentation practices are often linked to insufficient training

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and high workload. Additionally, the general knowledge among medical and paramedical staff regarding the completion and utilization of medical records remains low.

While earlier studies have identified various factors affecting documentation completeness, there remains a gap in understanding how knowledge, attitudes, and workload collectively influence documentation practices (Nguyen and Mougenot 2022). Furthermore, most nurses have not received comprehensive training on completing medical records accurately, only informal socializations (Andersson, Graneheim, and Nilsson 2022). This study aims to bridge this gap with a more comprehensive approach.

This study aims to evaluate the relationship between nurses' knowledge, attitudes, and workload with the completeness of nursing care documentation in emergency inpatient units. The findings of this study are expected to provide critical insights for hospital management in enhancing the quality of nursing care documentation. Socially, these findings can improve patient safety and service quality, supporting the accuracy of medical information crucial for optimal patient care.

2. Method Innovations

This study employed a cross-sectional design with subjects comprising all nurses working in the Emergency Inpatient Unit at a general hospital, totaling 76 individuals. Data collection took place from May to June 2013. Each selected nurse was provided with informed consent to agree to participate in the study. Subsequently, each nurse was interviewed to obtain data on their knowledge level, attitudes, and workload. Data on the completeness of nursing care documentation were obtained through observation, specifically by assessing whether all items on the medical record form were filled out.

Data were analyzed descriptively to understand the characteristics of the subjects, including age, gender, education, length of service, and employment status (Reid et al. 2018). Bivariate and multivariate analyses were conducted to determine the relationships between nurses' knowledge, attitudes, and workload with the completeness of nursing care documentation (Assefa et al. 2022). The bivariate analysis assessed individual factors' significance, while the multivariate analysis evaluated the combined effects and identified the most influential factors, providing adjusted odds ratios (Fan et al. 2018). This approach ensured a comprehensive examination of how these variables impact documentation practices, offering valuable insights for improving patient care quality.

3. Result and Discussion

In this study conducted at the Emergency Ward Inpatient Unit of Sanglah General Hospital, Denpasar, the demographics of the nursing staff were characterized by a significant proportion of nurses aged 22-29 years (47.9%), predominantly female (62.5%), educated at the Diploma III level in Nursing (84.2%), with ≤10 years of work experience (62.1%), and the majority being civil servants (75.0%) (Table 1).

Tabel 1. Distribusi responden berdasarkan umur, jenis kelamin, pendidikan, masa kerja dan status pegawai

Variabel	n	%
Age (year)		
22-29	35	(47,9%)
30-37	25	(34,2%)
38-45	14	(19,1%)
Gender		
Male	35	(37,5%)
Women	60	(62,5%)
Pendidikan		
D-III Nursing	80	(84,2%)
S1 Kep	15	(15,8%)
Length of service (years)		
≤10	41	(62,1%)
≥11	25	(37,9%)



Employee status

PNS	60	(75,0%)
Kontrak	19	(25,0%)

Source Data processed by the author in 2024

Regarding the completeness of nursing care documentation (Table 2), it was observed that 57.9% of nurses had inadequate knowledge, 51.3% exhibited a negative attitude towards nursing care documentation, and 61.8% reported having moderate to heavy workloads. The bivariate analysis revealed significant differences in documentation completeness between nurses with good versus poor knowledge levels (84.4% vs. 59.1%, $p=0.018$). Similarly, nurses with a positive attitude were more likely to complete nursing care documentation compared to those with a negative attitude (81.1% vs. 59.0%, $p=0.036$). However, there was no significant association found between workload and documentation completeness. Among nurses with moderate to heavy workloads, 72.3% completed documentation compared to 65.5% with light workloads ($p=0.529$).

Table 2. Bivariate Analysis of Variables with Completeness of Nursing Care Documentation

Variabel	Completeness of Documentation	Complete (%)	Incomplete (%)	Total (%)	P-value
Knowledge	Good	22 (84.4%)	6 (15.6%)	32 (42.1%)	0.011
	Poor	27 (59.1%)	17 (40.9%)	44 (57.9%)	
Attitude	Positive	34 (81.1%)	7 (18.9%)	37 (48.7%)	0.022
	Negative	24 (59.0%)	16 (41.0%)	40 (51.3%)	
Workload	Light	20 (65.5%)	10 (34.5%)	30 (39.5%)	0.523
	Moderate-Heavy	37 (72.3%)	13 (27.7%)	50 (60.5%)	

Source Data processed by the author in 2024

Table 3. Multivariate Analysis Results of Knowledge and Attitude Variables with Completeness of Nursing Care Documentation

Variabel	Adjusted OR	95%CI	Nilai p
Knowledge Level	3.8	1.2-12.7	0.020
Attitude	3.1	1.1-8.4	0.178

Source Data processed by the author in 2024

Further analysis using multivariate logistic regression (Table 3) showed that nurses with good knowledge levels had a significantly higher adjusted odds ratio (OR) of 3.8 (95% CI: 1.2-12.7, $p=0.020$) for completing nursing care documentation compared to those with poor knowledge. Similarly, nurses with a positive attitude had an adjusted OR of 3.1 (95% CI: 1.1-8.4, $p=0.178$) for documentation completeness compared to those with a negative attitude.

The findings of this study underscore the significant influence of nurses' knowledge and attitudes on the completeness of nursing care documentation in the Emergency Ward Inpatient Unit of Sanglah General Hospital, Denpasar. The study revealed that a substantial percentage of nurses in this setting were young (aged 22-29 years), predominantly female, educated at the Diploma III level in Nursing, had ≤ 10 years of work experience, and were primarily civil servants. These demographics provide a context for understanding the factors that may affect nursing care practices, particularly in documentation.

The study found a statistically significant association between good knowledge levels and the completeness of nursing care documentation. Nurses with good knowledge were significantly more likely to complete documentation compared to those with poor knowledge (84.4% vs. 59.1%, $p=0.018$). This finding is consistent



with previous research by Lukman (2002), which also highlighted a correlation between knowledge and nurses' behavior in documentation practices.

Moreover, the study identified a notable impact of attitude on documentation completeness. Nurses with a positive attitude towards nursing care documentation demonstrated a higher completion rate (81.1%) compared to those with a negative attitude (59.0%, $p=0.036$). This suggests that fostering a positive attitude among nurses could potentially enhance documentation practices.

The theoretical framework underpinning this study posits that behavior, including documentation practices, is influenced by both internal factors (such as knowledge and attitude) and external stimuli. Nurses with adequate knowledge are more likely to develop positive attitudes towards meticulous documentation, leading to improved motivation and performance in this aspect of their role. However, it's essential to note that merely increasing knowledge may not always result in behavioral change; other complex factors also play pivotal roles.

Interestingly, the study did not find a significant association between workload and documentation completeness. Despite a majority of nurses reporting moderate to heavy workloads (61.8%), both groups (light workload and moderate-heavy workload) demonstrated relatively similar documentation completion rates (65.5% vs. 72.3%, $p=0.529$). This suggests that while workload is an important consideration, it may not be the primary determinant of documentation quality in this hospital setting where workload distribution might be relatively uniform.

Based on these findings, several implications for practice and future research emerge. To enhance nursing care documentation completeness, interventions should focus on improving nurses' knowledge through targeted training and continuous education initiatives. Moreover, efforts to cultivate positive attitudes towards documentation practices should be prioritized through supportive work environments and leadership encouragement. It is important to note that this study was conducted exclusively at Sanglah General Hospital, Denpasar, limiting the generalizability of its findings to other hospitals or broader populations of nurses. Future research could explore similar themes in different hospital settings to validate these findings across diverse healthcare contexts. The research field of NERs is quite recent and needs a clearer agreement on what the concept entails and the strategies necessary for its management (Cantonnet, 2019).

4. Conclusion

In conclusion, the completeness of nursing care documentation in the Emergency Ward Inpatient Unit of General Hospital, Surabaya, is significantly influenced by nurses' knowledge and attitudes. These factors play critical roles in shaping documentation practices, highlighting the importance of targeted interventions to enhance both knowledge acquisition and attitude development among nurses. By addressing these aspects, healthcare institutions can potentially improve the quality and reliability of nursing care documentation, thereby enhancing patient care.

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