

# Determinants of Incomplete Documentation of Nursing Care: A Cross-Sectional Study

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## Abstract

**Background:** Incomplete documentation of nursing care may be related to individual characteristics, including age, length of work, education, and supervision.

**Aim:** The current research was conducted with aim to determine the determinants of incomplete documentation of nursing care on the ward.

**Method:** This analytic observational research was conducted using a cross-sectional design involving 105 ward nurses. Data was collected using a checklist form including translated MCSS-26 and a researcher-made nursing documentation checklist. Data analysis was performed by SPSS software (version 16) and chi-square test.  $p < 0.05$  was considered statistically significant.

**Results:** There was a relationship between nursing documentation and gender ( $p < 0.002$ ), education level ( $p < 0.017$ ), and good supervision ( $p < 0.003$ ). The correlation test using the t-test showed that there was no relationship between age and nursing care documentation ( $p > 0.688$ ), nor between work length and nursing care documentation ( $p > 0.516$ ).

**Implications for Practice:** This study has identified the weaknesses of the nurse documentation system in the nursing wards. This has implications for increasing nurse and patient satisfaction and can also increase hospital accreditation and improve the quality of nursing care services.

**Keywords:** Characteristics, Documentation, Nursing, Supervision

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## Introduction

Documentation is an authentic record in the application of professional nursing care management. It is as a formal legality of responsibility and accountability to protect clients against service quality. Documentation also protects nurses in carrying out nursing care. Therefore, nurses are required to record all nursing interventions (1–3). Proper documentation of nursing care is a manifestation of nurse professionalism (4–6). The two main factors which can affect nursing documentation include internal factors such as knowledge, attitudes, abilities, motivation, and characteristics of nurses (age, education, and length of service), and external factors including the characteristics of group, job, organization, and environment. Individual characteristics, including age, experience or years of service, education, and supervision can influence the implementation of documentation (7–9).

Nursing supervision is one of the management functions at the actuating stage, which aims to direct nurses to work effectively, measurably, efficiently, and according to standards in order to reduce the risks in providing nursing services. This activity is an individual observation of leadership activities in the nursing care process, and the function of the delegation is to maintain accountability and evaluate nursing care appropriately. Nursing supervision is carried out in the form of clinical supervision (10–12). In addition, lack of monitoring and evaluation of the implementation of supervision in the inpatient room regarding the performance of management related to nursing care documentation, especially in filling out nursing care in each room, has not been standardized, as there is still incomplete assessment or formulation of nursing diagnoses not based on Indonesian Nursing Diagnosis Standards (IDHS), Indonesian Nursing Intervention Standards (SIKI), and Indonesian Nursing Outcome Standard (SLKI).

There are reports of care which need the nurse's signature. Supervision that has been carried out so far has only focused on nurses' mistakes in actions taken on patients, but still needs to give rewards to nurses who are consistent with the implementation of activities. Previous studies found a significant relationship between the supervision and nursing documentation, which means that the nursing supervision is a dominant factors in determining of nursing documentation (13). Another study concluded that supervision made a possibility for nurses to share their lived experiences about their daily life with patients, which could promote personal and professional development and thus improve care quality (14). The nursing leaders are also expected to support, motivate and increase the number of staffs for a better documentation practice (15,16). Therefore, the present study was conducted with aim to explore determinants of nursing care documentation in the ward of Raden Mattaher hospital.

## Methods

This observational analytic study was conducted using a cross-sectional design with aims to determine the relationship between nurse characteristics (age, education level, years of service, and supervision of nursing leader) with the implementation of nursing care documentation in the Raden Mattaher Hospital ward, Jambi Province, Indonesia. The nurse characteristic variable was chosen because previous studies did not focus on this variable. In addition to the initial observations at Raden Mattaher Hospital, the diversity of nurse characteristics is an interesting thing to study further in relation to nursing documentation. This study was conducted in May-June 2022 on 105 nurses who were randomly selected. The inclusion criteria were nurses on duty in the ward, nursing staff, and government employees. Meanwhile, the study did not include nurses who were sick or on leave. The sample size was calculated using the Slovin formula at a precision (d)=0.05.

Data collection was carried out by interviewing using a modifiable checklist. The independent variables in this study were the characteristics of the nurses (age, education level, and years of service) and the supervision of the head of the ward. Two evaluators from Medical College of Halu Oleo University assessed the implementation of supervision of the nursing leader using the Manchester Clinical Supervision Scale-26 (MCSS-26), which was translated to Indonesian version. MCSS-26 consists of 26 statements with a total score of 26 to 106. In this scale, 53 to 106 is categorized in Good supervision, and 26 to 52 is categorized in Poor supervision. The content validity of the nursing supervision questionnaire was previously translated to the NEC (National English Center) by Mr. Arfian Hikmat Ramadan, S.Pd., M.Hum. This questionnaire was tested for content validity by management nursing experts. The value of the validity test of the nursing supervision questionnaire ranged from 0.362 to 0.644. Based on the reliability test, the alpha chroanbach

reliability coefficient was 0.923 above the established standard of 0.7. The nursing care documentation was assessed using a questionnaire that had been tested for validity and reliability. The nursing documentation checklist consists of 20 question items, with a validity value of  $<0.05$ , while the reliability value obtained Cronbach's Alpha value of 0.866.

Data were presented as numbers and percentages for categorical variables. Then proceed with bivariate analysis using the chi-square test to determine the correlation between the variables. All tests with  $p < 0.05$  were considered significant. Statistical analysis was performed using the SPSS application (version 16.0).

### Ethical Consideration

The study protocol was approved by the Health Research Ethics Commission of the Ministry of Health, Jambi, and registration number: LB.02.06/2/158/2022.

### Results

As the results of Table 1 showed, the majority of the respondents was female ( $n=88$  (83.3%)), the majority of respondents aged 45-59 years ( $n=60$ , (57.1%)), the education of respondents was BSN ( $n=55$ , (52.4%)), and the working period  $\geq 5$  years was found in the majority of respondents ( $n=92$ , (87.6%)).

**Table 1. Distribution of research variables**

Variable	N (%)
<b>Gender</b>	
Male	17 (16.2)
Female	88 (83.3)
<b>Supervision</b>	
Good	87 (82.9)
Poor	18 (17.1)
<b>Age (yrs)</b>	
18-44	45 (42.9)
45-59	60 (57.1)
<b>Educational level</b>	
Vocational	50 (47.6)
BSN	55 (52.4)
<b>Work length (yrs)</b>	
$\geq 5$	92 (87.6)
$< 5$	13 (12.4)
<b>Nursing care documentation</b>	
Good	94 (89.5)
Poor	11 (10.5)

Moreover, Table 2 showed that 87 respondents (82.9%) was categorized in Good supervision, the age ranges in most respondents ( $n=60$ , (57.1%)) was 45-59 years, the education level of the majority of respondents was BSN ( $n=55$ , (52.4%)). Good documentation was the superior among three categorized, as many as 94 respondents (89.5%). The results of the chi-square test showed that three of the studied variables have a significant relationship. The results of t-test showed that there was no relationship between age and nursing care documentation ( $p=0.688$ ), nor between work length and nursing care documentation ( $p=0.516$ ). The results of the Chi-square test showed that gender, supervision, and educational level significantly related to the good documentation of nursing care ( $p=0.002$ ,  $p=0.003$ , and  $p=0.017$ , respectively).

**Table 2. Statistical test results between variables**

Variable	Nursing Care documentation		<i>p</i> -value
	Good N (%)	Poor N (%)	
<b>Gender</b>			
Male	11 (64.7)	6 (35.3)	0.002*
Female	83(94.3)	5 (5.7)	
<b>Supervision</b>			
Good	82 (94.3)	5 (5.7)	0.003*
Poor	12 (66.7)	6 (33.3)	
<b>Age (yrs)</b>			
Mean±SD	42.03±11.80	40.42±18.29	0.688**
<b>Educational level</b>			
Vocational	53 (96.4)	2 (3.6)	0.017*
BSN	41 (82)	9 (18)	
<b>Work length (yrs)</b>			
Mean±SD	7.18±2.36	6.68±2.84	0.516**

\*Chi-square test; \*\* t-test

## Discussion

The current study was focused on the determinants of nursing care documentation in the inpatient room of Raden Mattaher Hospital. The results of this study showed that older or senior nurses, as well as nurses who have BSN education and good supervision were more likely to show good care.

The young adult stage is the peak development of the physical condition in applying the knowledge and skills. Each individual has more complex cognitive abilities and moral judgments in this stage. Older people are generally more responsible and thorough than young people because younger people may be less experienced (17, 18). The results of chi-square test in the present study showed a significant relationship between the educational level of nurses and the documentation of nursing care. It means that the higher a nurse's education, the better she is at documenting nursing care. Education is an experience that develops the abilities and qualities of one's personality. The higher a person's education, the greater the desire to utilize knowledge and skills (19, 20). Education affects the mindset of an individual, while mindset influences a person's behavior; in other mentions, the mindset of someone with low education will be different from the mindset of someone with higher education.

The results of the current research showed a significant relationship between the nurse's work length and the documentation of nursing care. It means that the longer the nurse's work length, the better the documentation of nursing care. The length of work determines a person's performance in carrying out the duties (21). The more time a person spends working, the more experience he will have, including clinical skills. The work period will affect one's experience; the longer the work, the more experience, so work productivity also increases. The length of work also determines a person's performance in carrying out tasks. The longer a person works, the more skillfully and quickly he completes the task. Skills are essential for nurses. These skills are not only in the technical field, but also in nursing care documentation activities. The longer the working period of a nurse, it is hoped that their performance will also increase in documenting nursing care (22).

In the present study, the results of the chi-square test analysis regarding the relationship between the nursing leader supervision and the documentation of nursing care showed that 82% respondents were in good category of supervision. There was a significant relationship between the supervision of the head of the room and documentation of nursing care. It means that the implementation of nursing supervision led to the better documenting nursing care by the nurses. Supervision, which is a continuous activity currently carried out by nursing managers or work unit leaders, has the goal of increasing one's knowledge and skills, where it is hoped that there will be an increase in the quality of performance through direction, observation and guidance so that in the end it can improve the quality of nursing services.

This study had some limitations. The first limitation pertains to the limited sample size of nurses. In addition, since only one hospital was assessed in the current study, the generalizability of the findings might be limited. Moreover, there was no special time allocated for interviewing nurses and the busyness of the treatment room, so the answers given by the nurse may be so that to avoid broader questions.

### **Implications for practice**

This study has identified the shortcomings and weaknesses of the nurse documentation system in the nursing wards, so that the study results can be used as the nurses working in the hospital can improve the nursing care documentation system. This finding has implications for increasing nurse and patient satisfaction and can also increase hospital accreditation and improve the quality of nursing services.

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### **Conflicts of interest**

The authors declared no conflict of interest.

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### **Authors' Contributions**

ER performed the study's conceptualization and design, supervised data collection, and performed statistical analyses. AB contributed to the development of the research methodology, coordinated the data collection process, and ensured data accuracy. YEL assisted with participant recruitment, data management, and initial analysis. DES provided subject matter expertise, contributed to the interpretation of findings, and drafted the manuscript. All authors participated in critical revision of the manuscript for intellectual content and approved the final version for publication.

### **References**

1. Toney-Butler TJ, Thayer JM. Nursing process. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024. PMID: 29763112.
2. Koehn AR, Ebright PR, Draucker CB. Nurses' experiences with errors in nursing. *Nursing outlook*. 2016;64(6):566–74.
3. Kebede M, Endris Y, Zegeye DT. Nursing care documentation practice: the unfinished task of nursing care in the University of Gondar Hospital. *Informatics for Health and Social Care*. 2017;42(3):290–302.
4. Feleke SA, Mulatu MA, Yesmaw YS. Medication administration error: magnitude and associated factors among nurses in Ethiopia. *BMC nursing*. 2015;14(1):1–8.
5. Asamani JA, Amenorpe FD, Babanawo F, Ofei AMA. Nursing documentation of inpatient care in eastern Ghana. *British Journal of Nursing*. 2014;23(1):48–54.
6. Asmirajanti M, Hamid AY, Hariyati RT. Nursing care activities based on documentation. *BMC nursing*. 2019;18(1):1–5.
7. Andualem A, Asmamaw T, Sintayehu M, Liknaw T, Edmealem A, Gedfew B, et al. Knowledge, attitude, practice and associated factors towards nursing care documentation among nurses in West Gojjam Zone public hospitals, Amhara Ethiopia, 2018. *Clinical Journal of Nursing Care and Practice*. 2019;3(1):1–13.
8. Adereti CS, Olaogun AA. Use of electronic and paper-based standardized nursing care plans to improve nurses' documentation quality in a Nigerian teaching hospital. *International journal of nursing knowledge*. 2019;30(4):219–27.
9. Afolayan JA, Donald B, Baldwin DM, Onasoga O, Babafemi A. Evaluation of the utilization of nursing process and patient outcome in psychiatric nursing: Case study of psychiatric Hospital Rumuigbo, Port Harcourt. *Advances in Applied Science Research*. 2013;4(5):34–43.

10. Snowdon DA, Leggat SG, Taylor NF. Does clinical supervision of healthcare professionals improve effectiveness of care and patient experience? A systematic review. *BMC Health Services Research*. 2017;17(1):1–11.
11. Semachew A. Implementation of nursing process in clinical settings: the case of three governmental hospitals in Ethiopia, 2017. *BMC research notes*. 2018;11(1):1–5.
12. Cutcliffe JR, Sloan G, Bashaw M. A systematic review of clinical supervision evaluation studies in nursing. *International journal of mental health nursing*. 2018;27(5):1344–63.
13. Yulianita H, Hariyati RT, Pujasari H, Komariah M, Fitria N. Improving the quality of nursing documentation using supervision of the head of room. *EurAsian Journal of BioSciences*. 2020;14(2):7579-84.
14. Hansebo G, Kihlgren M. Nursing home care: changes after supervision. *Journal of Advanced Nursing*. 2004;45(3):269–79.
15. Nakate G, Dahl D, Drake KB, Petrucka P. Knowledge and attitudes of select Ugandan nurses towards documentation of patient care. *African Journal of Nursing and Midwifery*. 2015;2(1):56-65.
16. Taiye BH. Knowledge and practice of documentation among nurses in Ahmadu Bello University Teaching Hospital (Abuth) Zaria, Kaduna State. *IOSR Journal of Nursing Health Sciences*. 2015;4(6):1–6.
17. Wisuda AC, Putri DO. Kinerja Perawat Pelaksana Dalam Pendokumentasian Asuhan Keperawatan Di Instalasi Rawat Inap. *Jurnal' Aisyiyah Medika*. 2019;4(2):230–8.
18. Sudaryati S, Afriani T, Hariyati RT, Herawati R, Yunita Y. Diskusi Refleksi Kasus (DRK) Efektif Meningkatkan Kemampuan Perawat dalam Melakukan Dokumentasi Keperawatan Sesuai Standar 3s (SDKI, SLKI, SIKI). *Jurnal Keperawatan Silampari*. 2022;5(2):823–30.
19. Khamidovna PO. Methods of teaching young people to communication in pedagogical activity. *Journal of Academic Research ISSN*. 2021; 2181(2020): 26-31.
20. Guljakhon U, Shakhodat P. Developing teachersprofessional competence and critical thinking is a key factor of increasing the quality of education. *Mental Enlightenment Scientific-Methodological Journal*. 2020;66–75.
21. Labrague LJ, De los Santos JA, Tsaras K, Galabay JR, Falguera CC, Rosales RA, et al. The association of nurse caring behaviours on missed nursing care, adverse patient events and perceived quality of care: A cross-sectional study. *Journal of Nursing Management*. 2020;28(8):2257–65.
22. Yulianto A. Kinerja Perawat: Pengalaman Dan Pendapatan Gaji Dalam Pelaksanaan Pendokumentasian Asuhan Keperawatan. *Jurnal Ilmiah Kesehatan*. 2017;6(2):73–8.