

## THE RELATIONSHIP OF NURSE CHARACTERISTICS TO UNDERSTANDING COMPLETENESS OF DOCUMENTATION IN CLIENTS WITH ENDOCRINE DISORDERS AT RS "X" 20223

Yohana Wiratikusuma<sup>1</sup>, Previarsi Rahayu<sup>2</sup>

<sup>1,2</sup> Universitas Medika Suherman

Email: [yohana.wiratikusuma@gmail.com](mailto:yohana.wiratikusuma@gmail.com)<sup>1</sup> [previarsi.rahayu@gmail.com](mailto:previarsi.rahayu@gmail.com)<sup>2</sup>

### ABSTRACT

**Background:** The care of clients with endocrine disorders is often characterized as continuous and complex. Lack of understanding of the completeness of nurse documentation as an evaluation of nurses' compliance with low quality nursing practice standards can result in misdiagnosis and inappropriate treatment for clients. **Objective:** To determine the relationship between nurses' characteristics (age, gender, education) regarding their knowledge and understanding of the documentation of nursing care for clients with endocrine disorders as an evaluation of nurses' compliance with practice standards. **Methods:** Quantitative descriptive correlation cross sectional design, conducted February - August 2023 in two hospitals in West Java. A total of 112 nurses using the Simple Random Sampling technique became respondents. Data analysis of data using multiple logistic regression. **Results:** It is known that there is a significant relationship between age and knowledge of understanding related to nursing care ( $p$  value = 0.039), There is a significant relationship between education and knowledge of understanding related to nursing care ( $p$  value = 0.000). There is a significant relationship between gender and knowledge ( $p$  value = 0.00). **Conclusion:** There is a relationship between age, education level and gender on understanding related to nursing care evaluation of compliance with nursing practice standards in X Hospital in 2023.

**Keywords:** Nurse, Documentation, Endocrine

## 1. INTRODUCTION

Quick and precise handling is needed for clients with Endocrine disorders. One of the health workers who can handle clients quickly and precisely and have a role in providing quality care is the nurse. Through the completion of complete documentation, nurses have responsibly communicated optimally, and carried out nursing practice standards to improve the quality of nursing care in hospitals (Sitorus, 2011). Nursing documents are records of client feedback on nursing care practices in a holistic, systematic, and structured manner as an accountability of nurses' actions to clients in providing nursing care using the nursing process approach. Documentation is considered to be important in nursing because as an integral part of client care, it is expected that all filling is carried out 100% completely and accurately because it is very important for the care of clients with Endocrine disorders which are often sustainable and complex. According to the Regulation of the Minister of Health of the Republic of Indonesia Number 10 of 2015, the form and principles of recording nursing documentation as written evidence of data regarding which contains medical history, diagnosis, treatment plan, medical actions, and the development of the patient's condition, so it is important for nurses to have accurate compliance with nursing documentation to maintain the quality of patient care.

Despite understanding the importance of nursing documentation, nurses' compliance in completing documentation accurately and on time is often a challenge. Several studies have shown that lack of compliance in nursing documentation occurs worldwide, such as incomplete documentation, low accuracy and quality (Tasew et al., 2019). Some nurses consider nursing care documentation to be too complicated, diverse and time-consuming (Nursalam, 2012). In addition, nurses' understanding and compliance are not optimal in implementing nursing care

documentation, which has an impact on the low quality of the completeness of nursing care documentation and will reduce the quality of nursing services (Rum, 2019). According to Furroidah, (2023), factors that influence the completeness of documentation are personal characteristics such as age, tenure, education level, marital status, and motivation can affect individual performance. The systems approach to improving the quality of nursing care involves understanding that the health care system is an entity consisting of various interconnected elements, including inputs, processes, and outputs. The process of nursing care should be in accordance with clinical practice standards and attention to patient needs. Quality improvement in the process stage involves: Several ways of collecting data, namely by direct observation, self-assessment of nurses, and assessment of client documentation. In addition to quality improvement, it is also important to prevent quality problems in the provision of nursing care, such as; Having completeness in the documentation of optimal nursing care: Accurate and complete recording of medical information is important to provide information to other healthcare teams. In addition, good documentation is useful to protect nurses in legal cases and improve the quality of nursing care.

## 2. RESEARCH METHOD

Quantitative Methods: Cross-sectional study: Collecting data from nurses. Factor analysis is basically a part of multivariate analysis is very useful for reducing variables regression analysis, to identify the relationship between the characteristics of nurses and their understanding of compliance in the completeness of documentation. Sample selection using Probability sampling method and using sampling

based on Simple Random Sampling. Data collection techniques using questionnaires distributed to hospitals. Independent Variable; Age, Gender, Last education. Dependent Variable; Understanding the Completeness of Nurse Documentation as an Evaluation of Nursing Practice Standards

**3. RESEARCH RESULT**

**1.Univariate Analysis Results**

**a) Frequency Distribution Based on Gender, Age, Education, Length of Work, Treatment Unit, and Knowledge**

Based on table 4.1. It is known that the majority of respondents are female, namely 89 (79.5%). The majority of respondents were 26-35 years old, namely 74 (66.1%). The majority of respondents have a Ners education, namely 46 (41.1%). The majority of respondents worked for a long time as an executive nurse, namely 43 (38.4%). The majority of respondents worked in the nursing unit, namely 82 (73.2%). The majority of respondents had non-optimal knowledge, namely 73 (65.2%).

**Table 4.1**  
**Frequency Distribution of Respondent Characteristics Based on Gender, Age, Education, Length of Work, Treatment Unit, and Knowledge In "X" Hospital 2023 with n = 112**

Variabel	Kategorik	Total	
		n	%
Gender	Male	23	20,5
	Female	89	79,5
Age	20 - 35 years	9	8,0
	26-35 years	74	66,1
	36 – 45 years	27	24,1
	More than 46 years	2	1,8
Education	Diploma	45	40,2
	Bachelor of Nursing	21	18,8
	Ners	46	41,1
Length of Service Managing Nurse	Managing Nurse	43	38,4
	Junior Executive Nurse	35	31,3
	Advanced Managing Nurse	34	30,4
Maintenance Unit	Outpatient Unit	30	26,8
	Inpatient Unit	82	73,2
Knowledge	Optimal	39	34,8
	Not Optimal	73	65,2

Source: Primary data processed based on data obtained (2023).

2. Bivariate

a. Analysis Result Relationship between Gender and Comprehension Knowledge

Table 4.2

Distribution of Respondents Based on Gender and Knowledge Understanding at "X" Hospital in 2023(n = 112)

Gender	Knowledge of Understanding Askep		Total	OR (95% CI)	p value	
	Optimal	Not Optimal				
	N	%	N	%	N	%
Man	15	65,2	8	34,8	23	100
Female	24	27,0	65	73,0	89	100
Jumlah	39	34,8	73	65,2	63	100

Source: Primary data processed based on data obtained (2023).

Base on Table 4.2. The results of the analysis of the relationship between gender and knowledge of understanding obtained that there are as many as 15 (65.2%) nurses who are male and optimal for knowledge of understanding related to nursing care. While among nurses whose gender is female there are 65 out of 24 (73.0%) who are not optimal in understanding knowledge related to nursing care. Statistical test results obtained p value = 0.001, it can be concluded that there is a difference in the proportion of gender between optimal and non-optimal knowledge of understanding related to nursing care (there is a significant relationship between gender and knowledge of understanding related to nursing care). The results of the analysis also obtained an OR value = 5.078, meaning that nurses who are male have a risk factor of 5.078 times to be optimal compared to those who are not optimal in understanding knowledge related to nursing care.

b. Relationship between Age and Comprehension Knowledge

Table 4.3

Distribution of Respondents Based on Age and Understanding Knowledge At "X" Hospital in 2023 (n = 112)

Years	Knowledge of Understanding Askep				Total	value
	Optimal		Tidak Optimal			
	N	%	N	%	N	%
20 – 35 years	7	77,8	2	22,2	9	100
26 – 35 years	22	29,7	52	70,3	74	100
36 – 45 years	9	33,3	18	66,7	27	100
More than 46 years	1	50,0	1	50,0	2	100
Jumlah	39	34,8	73	65,2	112	100

Source: Primary data processed based on data obtained (2023).

Base on table 4.3. The results of the analysis of the relationship between age and knowledge of understanding obtained that there are 22 (29.7%) nurses aged 26-35 years and optimal for knowledge of understanding related to nursing care. While among nurses aged there are 22 out of 74 (29.7%) who are not optimal in understanding knowledge related to nursing care. The statistical test results obtained a p value = 0.039, it can be concluded that there is a difference in the proportion of age between optimal and non-optimal knowledge of understanding related to nursing care (there is a significant relationship between age and knowledge of understanding related to nursing care).

c. Relationship between Education and Comprehension Knowledge

Table 4.4

Distribution of Respondents Based on Education and Knowledge Understanding at "X" Hospital in 2023 (n = 112)

Source: Primary data processed based on data obtained (2023).

Base on table 4.4. The results of the analysis of the relationship between education and knowledge of understanding obtained that there are as many as 30 (66.7%) nurses who are Ners educated and optimal for

	Knowledge of Understanding Askep		Not Optimal		Total	p value
	N	%	N	%		
Ners	30	66,7	15	33,3	45	100
Bachelor of Nursing Diploma	1	4,8	20	95,2	21	100
Jumlah	39	34,8	73	65,2	63	100

knowledge of understanding related to nursing care. While among nurses with diploma education there are 38 out of 46 (82.6%) who are not optimal in understanding knowledge related to nursing care. Statistical test results obtained p value = 0.000, it can be concluded that there is a difference in the proportion of education between optimal and non-optimal knowledge of understanding related to nursing care (there is a significant relationship between education and knowledge of understanding related to nursing care).

**3. Multivariate Analysis Results**

Multivariate analysis was conducted to determine the relationship of one or more independent variables with one or more dependent variables. If the bivariate results produce a p-value <0.25, the variable goes directly to the multivariate stage. This test uses multiple logistic regression to control for possible confounding.

The steps in this modeling are:

**a. Bivariate Selection**

Bivariate selection is carried out after each independent and confounding variable is analyzed bivariate with the dependent variable. If the bivariate results resulted in a p value <0.25 then the variable entered the multivariate stage.

**Table 4.5**  
**Bivariate Selection Results of Research Variables**

No	Variable	p-value
1.	Gender	0,001
2.	Age	0,218
3.	Education	0,000
4.	Length of service	0,240
5.	Treatment Unit	0,266

Source: Primary data processed based on data obtained (2023).

In table 4.5. There is 1 variable that has a p-value > 0.25, so it is not included in the modeling, namely the care unit and 4 variables, namely the variables of gender, age, education and length of work have a p-value < 0.25. Characteristics related to nurses' understanding of knowledge related to nursing care, there are 4 variables that become candidates and enter into multivariate modeling. The results of bivariate selection of all variables resulted in a p value <0.25, only the care unit had a p value >0.25. However, the variable of the care unit was not analyzed multivariate because the substance of checking the care unit was a less important variable associated with nurses' understanding knowledge related to nursing care.

**b. Preliminary Model**

The complete modeling stage to determine the dominant characteristics of nurses' understanding of knowledge related

to nursing care by creating a model that includes variables and potential confounding without including interactions (not testing for interactions). Then the initial modeling is obtained in the following table:

**Table 4.6**  
**Initial Modeling Characteristics of Respondents with Nurses' Understanding Knowledge related to Nursing Care at "X" Hospital in 2023 with n = 112**

Variable	Initial Modeling			
	<i>B</i>	<i>SE</i>	<i>Exp (B)</i>	<i>p-value</i>
Gender	2,797	0,738	16,389	0,000
Age	0,534	0,445	1,705	0,231
Education	1,746	0,388	5,734	0,000
Length of service	0,239	0,307	1,270	0,436

Source: Primary data processed based on data obtained (2023).

In table 4.6. From the results of the analysis, it can be seen that there are 2 variables whose p value is > 0.05, namely age and length of work, the largest of which is length of work, so that further modeling of the length of work variable is excluded from the model.

After the length of service is removed we see the change in OR values for the variables of gender, age, and education.

Variabel	OR Length of service	OR Length of service none	Change OR
Gender	16,389	16,257	13%
Age	1,705	1,741	3,6%
Education	5,734	5,906	17%
Length of service	1,270	-	-

Source: Primary data processed based on data obtained (2023).

With the results of the OR comparison, it was seen that there were > 10%, so it was re-entered into the model. Furthermore, the variable with the largest p value is age,

so it was excluded from the model and the results. After age was excluded, we can see the change in OR:

Variabel	OR Age	OR Age None	Change OR
Gender	16,389	17,422	103%
Length of service	1,270	1,306	3,6%
Education	5,734	5,599	13,5%
Age	1,705	-	-

Source: Primary data processed based on data obtained (2023).

It turned out that after age was excluded, the OR of the sex and education variables changed by >10%, thus the age variable was re-included in the model.

**Table 4.7**  
**Multiple Logistic Regression Modeling**

Variabel	Model 1	Model 2	Model 3
	<i>p-value</i>	<i>p-value</i>	<i>p-value</i>
Gender	0,000	0,000	0,000
Age	0,231	0,206	-
Education	0,000	0,000	0,000
Length of service*	0,436	-	0,380

Description: \*Confounding

Source: Primary data processed in 2023

**c. Final Model**

**The final model generated using multiple logistic regression modeling is as follows:**

**Table 4.8**  
**Final Modeling Results Characteristics of Respondents with Understanding of Nursing Care at "X" Hospital in 2023**

Variable	Initial Modeling			
	<i>B</i>	<i>SE</i>	<i>Exp (B)</i>	<i>p-value</i>

Gender	2,797	0,738	16,389	0,000
Age	0,534	0,445	1,705	0,231
Education	1,746	0,388	5,734	0,000
Length of service	0,239	0,307	1,270	0,436

Source: Primary data processed in 2023

The results of multivariate analysis showed that the variables significantly associated with knowledge were gender and education. While the variables of length of work and age as confounding variables. The results of the analysis obtained the Odds Ratio (OR) of the gender variable is 16.389, meaning that nurses who are female will have optimal knowledge 16 times higher than nurses who are male after controlling for variables of education, length of work, and age. The results of the analysis obtained the Odds Ratio (OR) of the education variable is 5.734, meaning that nurses with Ners education will have optimal knowledge 6 times higher than nurses with bachelor's and diploma education after controlling for variables of gender, length of work, and age. From the results of this study, it means that gender has the greatest influence on nurses' understanding of knowledge related to nursing care.

#### 4. DISCUSSION

The completeness of nursing documentation can be related to client deaths due to medication errors that can occur if communication is not well established between nurses, medical staff, and patients. Therefore, it is important for nurses together with other health workers who provide health services to clients need to carry out the process of recording data, collecting, storing, monitoring information until the evaluation is documented 100% completely. Based on the research that has been conducted regarding the significant relationship between nurses' characteristics and their understanding of compliance in

documentation completeness, the following results were obtained; The characteristics of the respondents, the majority of respondents were female, namely 89 (79.5%). The majority of respondents' age is 26-35 years old, namely 74 (66.1%). The majority of respondents have a Ners education, namely 46 (41.1%). The majority of respondents worked for a long time as an executive nurse, namely 43 (38.4%). The majority of respondents worked in the nursing unit, namely 82 (73.2%). The majority of respondents had non-optimal knowledge, namely 73 (65.2%).

Analysis of the relationship between gender and knowledge of understanding obtained that there are as many as 15 (65.2%) nurses who are male and optimal for knowledge of understanding related to nursing care. While among nurses whose gender is female there are 65 out of 24 (73.0%) who are not optimal in understanding knowledge related to nursing care. Statistical test results obtained  $p$  value = 0.001, it can be concluded that there is a difference in the proportion of gender between optimal and non-optimal knowledge of understanding related to nursing care (there is a significant relationship between gender and knowledge of understanding related to nursing care). The results of the analysis also obtained an OR value = 5.078, meaning that nurses who are male have a risk factor of 5.078 times to be optimal compared to those who are not optimal in understanding knowledge related to nursing care.

Analysis of the relationship between age and knowledge of understanding obtained that there are as many as 22 (29.7%) nurses aged 26-35 years and optimal for knowledge of understanding related to nursing care. While among nurses aged there are 22 out of 74 (29.7%) who are not optimal in understanding knowledge related to nursing care. The statistical test results obtained a  $p$  value =

0.039, it can be concluded that there is a difference in the proportion of age between optimal and non-optimal knowledge of understanding related to nursing care (there is a significant relationship between age and knowledge of understanding related to nursing care).

Analysis of the relationship between education and knowledge of understanding obtained that there are as many as 30 (66.7%) nurses who are Ners educated and optimal for knowledge of understanding related to nursing care. While among nurses with diploma education there are 38 out of 46 (82.6%) who are not optimal in understanding knowledge related to nursing care. Statistical test results obtained  $p$  value = 0.000, it can be concluded that there is a difference in the proportion of education between optimal and non-optimal knowledge of understanding related to nursing care (there is a significant relationship between education and knowledge of understanding related to nursing care).

The results of multivariate analysis showed that the variables significantly associated with knowledge were gender and education. While the variables of length of work and age as confounding variables. The results of the analysis obtained the Odds Ratio (OR) of the gender variable is 16.389, meaning that nurses who are female will have optimal knowledge 16 times higher than nurses who are male after controlling for variables of education, length of work, and age. The results of the analysis obtained the Odds Ratio (OR) of the education variable is 5.734, meaning that nurses with Ners education will have optimal knowledge 6 times higher than nurses with bachelor's and diploma education after controlling for variables of gender, length of work, and age. From the results of this study, it means that gender has the greatest influence on nurses' understanding of knowledge related to nursing care.

Nurses' non-compliance in conducting nursing documentation can be influenced by external and internal factors. External factors (coming from outside the nurse) include workload, working conditions, documentation guidelines, nursing documentation format, work group characteristics, job characteristics, environmental characteristics. (Rum, 2019). In addition, supervision and rewards also have an influence on the implementation of nursing care documentation. There are some thoughts from nurses who say that documentation is not needed, the recording system is too difficult and time-consuming, not all nurses in the hospital have an understanding of the same knowledge and abilities regarding document completeness standards. Then from internal factors (factors that come from within each individual because all behavioral control comes from individual nurses), such as personal characteristics of nurses including age, tenure, education and knowledge. Each individual has their own characteristics so that there are fundamental differences between one person and another. This research is in accordance with research conducted by Furroidah, (2023), the factors that influence the completeness of documentation are personal characteristics such as age, tenure, education level, marital status, and motivation can affect individual performance.

In addition, nurses need to be more responsible and increase knowledge of nursing literature, and foster a good attitude in completing nursing documentation. Other factors that influence the completeness of documentation according to Evie (2019) are knowledge factors, training factors and workload factors on the completeness of documentation.



## 5. ADVICE

Documentation is an integral part of client care that must be 100% complete and accurate as it is critical to client care. Especially in clients with Endocrine disorders which are often ongoing and complex. It is expected that nurses maintain the quality of nursing care by writing all medical history, diagnosis, treatment plan, medical actions, and progress optimally.

Despite understanding the importance of nursing documentation, nurses' compliance in completing documentation accurately and on time is often a challenge. Nurses are expected to be more responsible and increase their knowledge of nursing literature, as well as foster a good attitude in completing nursing documentation. In the face of these challenges, nurses working in inpatient and outpatient service units always strive to achieve 100% completeness of documentation according to standards.

It takes a commitment, good time management skills in determining the priority scale of the nurse's activities in providing nursing care, reducing the culture or habit of delaying working on the completeness of documentation so that the documentation can be filled in completely, accurately, on time. It is also necessary to have a policy that comes from the nursing management department in terms of supporting the completion of nursing documentation; such as training to improve knowledge, direction, evaluation, and member training.

## 6. REFERENCES

Anita, S. Y., Kustina, K. T., Wiratikusuma, Y., Sudirjo, F., Sari, D., Rupiwardani, I.,

- ... & Sucandrawati, N. L. K. A. S. (2023). *Manajemen Risiko*. Global Eksekutif Teknologi.
- Douglass, L.M. (1992). *The effective nurse: Leader and manager*. St. Louis: Mosby.
- Erna, N. K., & Dewi, N. L. P. T. (2020). Kepatuhan Perawat dalam Melakukan Dokumentasi Asuhan Keperawatan. *Holistic Nursing and Health Science*, 3(1), 17-23.
- Evie, S., & Suswinarto, D. Y. (2019). Analisis Faktor-Faktor Yang Berhubungan Dengan Kelengkapan Dokumentasi Keperawatan Oleh Perawat Pelaksana di Ruang IGD RSUD Mokopido Tolitoli. *Prosiding Poltekkes Kemenkes Palu*, 1(1), 6-17.
- Furroidah, F., Maulidia, R., & Maria, L. (2023). Hubungan Karakteristik Perawat Dengan Tingkat Kepatuhan Dalam Menerapkan Pendokumentasian Asuhan Keperawatan. *Jurnal Ilmiah Kesehatan Media Husada*, 12(1), 26-38.
- Gillies, D.A. (1996). *Nursing management: A system approach*. 3rd ed. Philadelphia: W.B. Saunder Company.
- Hrp, E. R. (2019). Pentingnya Pengetahuan Perawat Terhadap Pendokumentasian Asuhan Keperawatan Nursalam. (2014). *Manajemen keperawatan aplikasi dalam praktik keperawatan profesional edisi 4*. Jakarta : Salemba Medika.
- Rum, M. R. (2019). Pengaruh Kepatuhan Perawat Dalam Pendokumentasian Asuhan Keperawatan. *Jurnal Ilmiah Kesehatan*, 18(1), 4-9.
- Peraturan Menteri Kesehatan Republik Indonesia Nomor 10 Tahun 2015 tentang Standar Pelayanan Keperawatan di Rumah Sakit Khusus
- Rahmawati H (2021), Modul Asuhan Keperawatan Berdasarkan Evidence Based Practice (EBP): Intervensi Inovasi Untuk Menurunkan Length Of Stay (LOS) Pasien Dengan Gangguan Sistem Endokrin Di Intensive Care Unit (ICU)

- Risnawati, R., Herman, A., Kurniawan, F., Shafwan, A., Harmanto, H., Njakatara, U. N., & Perdana, S. (2023). Dokumentasi Keperawatan.
- Rum, Malihah Ramadhani. (2019). Pengaruh Kepatuhan Perawat Dalam Pendokumentasian Asuhan Keperawatan. *Jurnal Ilmiah Kesehatan*, 18, 4-9. [10.33221/jikes.v18i1.191](https://doi.org/10.33221/jikes.v18i1.191).
- Sitorus, R. & Panjaitan, R. (2011). Manajemen keperawatan: Manajemen keperawatan di ruang rawat. Jakarta: Sagung Seto.
- Rosdiana, D., Hadi, M., & Sulaeman, S. (2021). Faktor-Faktor Yang Berhubungan Dengan Pelaksanaan Indikator Mutu Keperawatan Di Ruang Rawat Inap Rsud Dr. Dradjat Prawiranegara. *Jurnal Mutiara Ners*, 4(1), 40-49. <https://doi.org/10.51544/jmn.v4i1.1361>
- Sitorus, R & Panjaitan, R. (2011). Manajemen Keperawatan: Manajemen Keperawatan di Ruang Rawat. Jakarta; CV Sagung Seto
- Sulastri, K. (2023). Analisis Karakteristik Pasien dan Tingkat Kepuasan Pasien Terhadap Pelayanan Kefarmasian di Puskesmas Sukaindah Kabupaten Bekasi Pada 4 Juni-29 Juni Tahun 2022.
- Sova Evie, & Dwi Yogyo Suswinarto. (2020). Analisis Faktor-Faktor Yang Berhubungan Dengan Kelengkapan Dokumentasi Keperawatan Oleh Perawat Pelaksana Di Ruang Igd Rsud Mokopido Tolitoli. *Prosiding Poltekkes Kemenkes Palu*, 1(1), 6-17. Retrieved from <http://jurnal.poltekkespalu.ac.id/index.php/PPKP/article/view/3>
- Anita, S. Y., Kustina, K. T., Wiratikusuma, Y., Sudirjo, F., Sari, D., Rupiwardani, I., ... & Sucandrawati, N. L. K. A. S. (2023). *Manajemen Risiko*. Global Eksekutif Teknologi.
- Wiratikusuma, Y., Acihayati, J. P., & Supardi, S. (2023). The Effect Of Nursing Round Training On Patient Satisfaction In Nursing Services At Rs X Jakarta. *Jurnal Mutiara Ners*, 6(1), 34-45.
- Zebua, F. (2020). Prinsip-Prinsip Dan Standar Dokumentasi Dalam Keperawatan.