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# Increased Nurses' Understanding of Nursing Documentation Based Electronic Health Record (EHR) Through Training

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**ABSTRACT**

Understanding nurses in the nursing documentation system influences nursing behaviour in documenting nursing care. Innovation and awareness of the importance of using technology can also improve the quality of nursing care. Electronic Health Record (EHR) facilitates nurses to improve work efficiency and generate more time to improve the quality of care services. In addition, aims to maintain the security and confidentiality of patient data. This study aimed to determine nurses' understanding before and after being given training on nursing documentation and EHR. The research design used pre-experimental. The sample of this study was the head of the room and the team leader, totalling 45 respondents. This activity integrates several methods, including lectures, brainstorming, and case simulations in documenting nursing care. Nurses' comprehension was measured before and after training using questionnaires. The process of data analysis using the Wilcoxon signed rank test obtained p-value of 0.000 < 0.005. Nurses' understanding has improved compared to before the training. Continuous training on and monitoring evaluation of documentation accuracy will improve the quality of nursing care documentation.

***Keywords:*** *nurse's, nursing documentation, EHR*

## INTRODUCTION

Nursing documentation is a database or health record as long as the client receives treatment in health services both in hospitals and other health services. Nursing documentation is very important because it can be legal evidence of the process of professional action to protect clients and nurses (Rahmi, 2021).

The results of research by Asmirajanti et al (2019), stated that nursing care documentation is inadequate. Assessment of functional status of decubitus risk (20.8%), biological status (0.4%), formulation of nursing diagnosis (20.8%), identification of patient needs (41.3%). %), quality of life (66.3%), collaborative intervention in drug administration (60.8%), observation of vital signs (23.3%), monitoring of activities of daily living (37.5%), mobilization/rehabilitation (37.5%), outcomes (46.7%), and continuing nursing activities (0.8%). Inaccurate nursing documents cause communication between professions and nursing care evaluation to be not optimal.

The results of the preliminary study found that Kartini Hospital does not yet have a Nursing Care Standard (SAK), the accuracy in filling out nursing documentation is still below

the established standards, nurses' understanding of nursing documentation is still lacking and does not know electronic-based documentation.

The results of research by Saputra, C., Arif, Y., & Yeni (2019), factors that affect the completeness and accuracy of nursing documentation include nurse knowledge factors, only mostly high, namely as many as 91 people (59.9%), nurse workload as many as 87 people (57.2%) and the use of nurse information technology is mostly incapable, which is as many as 90 people (59.2%)

Nurses' understanding of the use and benefits of nursing documentation systems influences nurses' behavior in using documentation systems for effective communication. Nursing managers have an important role to encourage innovation and increase awareness of the importance of using technology in providing quality nursing care (Sarawasta & Hariyati, 2020).

The results of the study stated that the use of EHR in nursing documentation also gave satisfaction to nurses. The implementation of an information system that takes into account the satisfaction of nurse users significantly affects the utilization of the system and the quality of nursing services (Agarta, A., & Febriani, 2019). The information technology-based nursing process provides convenience in obtaining information to support decision making, the completeness of the nursing process and improving the quality of documentation is one of the factors that can increase nurse satisfaction (Riyani et al., 2022).

Nursing documentation plays an important role in all kinds of increasingly critical community demands and affects public awareness of their rights in health services. Improper documentation has an impact on decreasing the quality of care because it cannot evaluate the success of nursing care (Basri, B., Utami, T., & Mulyadi, 2020). The accuracy of nursing documentation can be improved by equipping nursing staff with new knowledge and experience through education, training or digital media. One of the efforts to improve the quality and professionalism of nursing work is through knowledge-management-based training.

The training is expected to improve the ability of nurses in nursing documentation in accordance with documentation standards so that the quality of work in nursing practice can be achieved properly.

## METHOD

The design of this study used pre-experimental. The respondents of this study were the head of the room and the head of the nursing team at Kartini Hospital, Metro Hospital Kebon Jeruk and Metro Hospital Sidoarjo as many as 45 nurses. Data collection using questionnaire instrument nurses' understanding of nursing documentation and EHR given before and after training. The training method provided uses lectures, brainstorming, and case simulations. The statistical test used is the Wilcoxon signed rank test to determine the difference in respondents' understanding before and after being given training.

## FINDING AND DISCUSSION

Characteristics of respondents

Table 1: Distribution of respondents by gender, education level 2023 (N=45)

| Variable | | Frequency | Percentage |
|---|---|---|---|
| | | **n** | **%** |
| **Gender** | 1. Male | 7 | 15.6 |
| | 2. Female | 38 | 84.4 |
| | Total | 45 | 100.0 |
| **Level of education** | 1. Diploma 3 in nursing | 26 | 57.8 |
| | 2. Diploma 4 in nursing | 1 | 2.2 |
| | 3. Bachelor of nursing | 6 | 13.3 |
| | 4. Ners | 12 | 26.7 |
| | Total | 45 | 100 |

The results of the analysis showed that most respondents with female gender were 38 respondents (84.4%). The proportion of education level is mostly diploma in nursing 26 respondents (57.8%).

Table 2: Distribution of respondents by age and length of service 2023 (N=45)

| Variable | Mean | SD | Min-Maks |
|---|---|---|---|
| **1. Age** | 32 | 6.262 | 20-48 |
| **2. Length of working** | 7 | 5.609 | 1-23 |

The results of the analysis showed that the mean age was 32 years with the youngest age 20 years and the oldest age 48 years.

Table 3: Distribution of respondents by participation in 3S (SDKI, SLKI, SIKI) training 2023 (N=45)

| No | Regional origin | Frequency | % |
|---|---|---|---|
| 1 | Attend training | 1 | 2.2 |
| 2 | Haven’t attend training | 44 | 97.8 |
| Total | | 45 | 100.0 |

The results of the analysis showed that the majority of respondent haven’t attend training 44 respondent (97.8%).

Specific data understanding of nursing documentation

Table 4: Pre and post test results

| | **Understanding** | **Frequency** | | | |
|---|---|---|---|---|---|
| | | Pre test | | Post test | |
| | | n | % | n | % |
| 1. | Unsatisfactory | 20 | 44.4 | 3 | 6.7 |
| 2. | Poor | 20 | 44.4 | 5 | 11.1 |
| 3. | Average | 5 | 11.1 | 5 | 11.1 |
| 4. | Good | 0 | 0 | 3 | 6.7 |
| 5. | Very good | 0 | 0 | 29 | 64.4 |
| | **Total** | 45 | 100,0 | 70 | 100,0 |

**. Correlation is significant at the 0.01 level (2-tailed).

Pre-test analysis showed that respondents' understanding at the time of pre-test between unsatisfactory and poor criteria the results were the same 44.4%, the post-test results showed significant changes in significant categories, namely in the very good category which was originally 0 changed to 64.4%, Wilcoxon analysis obtained p value 0.000 < 0.005. This means that there is a difference between before and after training.

The results showed that the majority of trainees had a very lacking understanding, Post-test results after being given training material showed significant changes in the excellent category that originally did not exist, changed to most in the very good category. The results of statistical analysis show there is a difference between before and after nursing documentation training.

The majority of nurses at the hospital have never attended training on nursing documentation. This certainly affects the nurse's insight on how to do nursing documentation properly and correctly. Rahmi (2019), professional nurses in carrying out their duties must refer to applicable professional standards, including standards for the implementation of nursing care and proper documentation. This shows the accountability of nurses regarding responsibilities and responsibilities, so that nursing documentation becomes an important element in the implementation of nursing professional standards.

Nursing documentation is one of the indicators of the quality of health services, as well as a means of written communication between nurses. Documentation carried out accurately, systematically and completely makes it easier for nurses to coordinate with their teams so that continuity of nursing care can be realized (Purwoto et al, 2023). Alignment of documentation with the nursing process, using standardized terminology, using easy-to-use formats and systems is essential for good quality nursing documentation (De Grood, K., Triemstra, M., Paans, W., & Francke, 2018).

One intervention to make this happen is through the training provided to nurses. Training as a process to improve individual skills, skills to support individual needs due to the demands of work (Suhardi, 2021). This is in line with Rendana, A., & Muharni's (2020) research, that training affects care knowledge about 3S (SDKI, SLKI, SIKI) in providing nursing care. The implementation of educational programs through training has a significant effect on nurses' knowledge and practice. Training programs for nurses are necessary to keep their

knowledge and practice up to date (Mc Carthy, 2023). Documentation training is an activity that aims to improve the mastery of nurses' knowledge and skills about the five nursing stage processes that must be fully documented (Rahmawati, R., & Ula, 2017).

Understanding and awareness of nurses in nursing documentation is not absolutely influenced by training because many influencing factors such as length of service affect work experience where the longer the nurse works, the more you will understand the technique of filling out nursing documentation. Likewise, the excessive workload of nurses is also an obstacle, but apart from this training as a first step to improve individual knowledge, the higher the knowledge in each individual, the potential for quality improvement in nursing care documentation.

## CONCLUSION

Training programs are needed to improve nurses' understanding of nursing documentation, this is the basis for improving nursing care in patients and monitoring the evaluation of the accuracy of nursing care documentation.

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