




Application of web-based nursing documentation systems in nurses

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Abstract

The rapid development of information technology affects all fields, especially health. The development of global health technology cannot be separated from digital technology and the internet. Nurses make a significant contribution to health services and must be able to provide services according to the standards set forth in nursing documentation using information technology. The purpose of this service is to increase the knowledge and skills of nurses to produce information technology-based nursing documentation. This service method includes gathering information on nurses' knowledge about the implementation of SDKI, SLKI, and SIKI, pre-test post-test assessment, training in providing web-based SDKI, SLKI, and SIKI material. The results achieved with this training were that the knowledge and skills of nurses increased in making web-based nursing documentation, namely 30 nurses answered correctly about nursing diagnoses, signs and symptoms and interventions. As for the outcome, only 28 nurses answered correctly.

Keywords: Nursing documentation; SDKI; SLKI; SIKI; Web

Penerapan sistem dokumentasi keperawatan berbasis web pada perawat

Abstrak

Pesatnya perkembangan teknologi informasi mempengaruhi segala bidang, terutama kesehatan. Perkembangan teknologi kesehatan global tidak lepas dari teknologi digital dan internet. Perawat memberikan kontribusi signifikan terhadap layanan kesehatan dan harus mampu memberikan pelayanan sesuai standar yang dituangkan dalam dokumentasi keperawatan dengan menggunakan teknologi informasi. Tujuan dari pengabdian ini adalah untuk meningkatkan pengetahuan dan keterampilan perawat untuk menghasilkan dokumentasi keperawatan berbasis teknologi informasi. Metode pengabdian ini meliputi pengumpulan informasi pengetahuan perawat tentang implementasi SDKI, SLKI, dan SIKI, penilaian pre-post test, dan pelatihan. Hasil yang dicapai adalah pengetahuan dan keterampilan perawat meningkat dalam membuat dokumentasi keperawatan berbasis web, yaitu 30 perawat menjawab benar tentang diagnosis keperawatan, tanda dan gejala dan intervensi. Sedangkan untuk luaran hanya 28 perawat yang menjawab benar.

Kata Kunci: Dokumentasi keperawatan; SDKI; SKLI; SIKI; Web

1. Introduction

Nursing documentation with a web-based nursing information system has begun to be widely used in the field of nursing. Management information systems in Indonesia are

still experiencing many problems. Outside Indonesia, technology has helped a lot in the management of nursing education, especially the use of computers in nursing care. In Indonesia, the process of using computers in nursing documentation is very slow, so it is necessary to refresh the application of nursing information systems for the development of nursing education (Prasetyanto & Sukihananto, 2019).

Indonesian Nursing Documents which previously used NANDA (North American Nursing Diagnosis Association) have now switched to SDKI (Indonesian Nursing Diagnosis Standards). The transfer of use to Nursing documents uses SDKI (Indonesian Nursing Documentation Standards), SLKI (Indonesian Nursing Outcomes Standards), and SIKI (Indonesian Nursing Intervention Standards) to create even better nursing documents. This transfer of use in nursing documentation requires training for nurses in compiling nursing documentation with SDKI, SLKI and SIKI (Sukeesi, 2021). Nursing documentation currently no longer uses paper reports or books with many pages, but just looks at it on a computer screen and nurses can see all patient data. The development of information technology-based nursing documentation has had an impact on nurses, including: shorter documentation time, reading convenience, accessing documents and activating them as learning tools. Information technology is an inevitable part of the modern world. Currently, the role of technology in human activity has grown rapidly. Technology allows people to experience different conveniences. This affects people's desire to receive high-tech, high-quality health care services. As a holistic health service provider, nurses must be able to adapt their care services to existing technological advances. A good Care Information System increases the continuity and quality of care (Hariyati et al., 2018).

Documentation of care is the responsibility and accountability of professional nurses in providing care to patients. Accurate documentation can improve the quality of service in hospitals. Nurses' lack of knowledge about electronic nursing documentation can be overcome through education, training, and administrative oversight. This will have a positive impact on the quality and quality of services provided (Sianturi et al., 2022).

Permata Medika Hospital in Semarang is trying to improve the quality of service, one of which is with nursing documentation. However, the nursing documentation at the hospital does not yet use an information system based on SDKI, SLKI and SIKI. Based on the background above, that the main problem faced by partners is how to apply nursing diagnoses based on web-based SDKI, SLKI and SIKI or information systems. Therefore, the community service implementation team provides a solution in the form of introductory training and application of nursing diagnoses with information systems. The expected results of this service are that nurses are able to create nursing documentation with a web-based information system.

2. Method

The participants in this activity were 30 nurses which were held in February 2023. Before carrying out this community service activity, the team conducted interviews with nurses to socialize and train them in using web-based SDKI, SLKI, and SIKI. Previously, nurses in making nursing documentation were not web/computer based. Therefore, the team conducted a three-month training program starting from the data collection process to activity evaluation. The methods used are:

- a. Data collection
Pre-testing extracts information about nurses' level of knowledge regarding the implementation of SDKI, SLKI, and SIKI.
- b. Training
The training took place over two days in the form of materials on how to implement the SDKI, SLKI, and SIKI. Training ends with a posttest.
- c. Accompaniment
Support nursing staff in performing documentation. This activity was carried out for one month.
- d. Evaluation
The final activity of this service is to evaluate knowledge and skills in implementing the SDKI, SLKI and SIKI with the use of the web.

The materials needed in this service are adequate internet for training, participants are asked to prepare the SDKI (Indonesian Nursing Diagnosis Standards), SLKI (Indonesian Nursing Outcome Standards) and SIKI (Indonesian Nursing Intervention Standards) as training references.

3. Result and Discussion

3.1. Provision of materials for applying SDKI, SKLI, and SIKI

Before conducting the training, the team distributed pretest sheets to the participants to measure the participants' level of knowledge before receiving the material. This activity was ended by giving a posttest sheet to measure the participants' level of knowledge after the participants were given SDKI, SLKI, and SIKI material. This training was carried out by providing material on SDKI, SLKI, and SIKI (Figure 1) and web-based SLKI and SIKI (Figure 2). The results of the training activities provided are as follows.

- a. Data collection
The pretest explores information about the level of knowledge of nurses regarding the implementation of the IDHS, SLKI, and SIKI. The results obtained from the pretest were 30 participants who answered correctly about nursing diagnoses as many as 25 participants, signs and symptoms of 22 participants, outcomes 24 participants and interventions 25 participants.
- b. Training
The training lasted for two days in the form of material on how to implement SDKI, SLKI and SIKI. The training ends with a post test. The results obtained from the posttest were of the 30 participants who answered correctly about the nursing diagnosis as many as 30 participants, signs and symptoms of 30 participants, outcomes 28 participants and interventions 30 participants.
- c. Accompaniment
Support nursing staff in doing documentation. This activity was carried out for one month.
- d. Evaluation
The final activity of this service is to evaluate knowledge and skills in implementing SDKI, SLKI and SIKI by using the web. Of the 30 participants who

answered all were correct, namely regarding nursing diagnoses, signs and symptoms and interventions. As for the output, only 28 participants answered correctly.



Figure 1. Presentation of SDKI, SKLI and SIKI



Figure 2. Presentation of SDKI, SKLI and SIKI web-based

3.2. Pretest and posttest

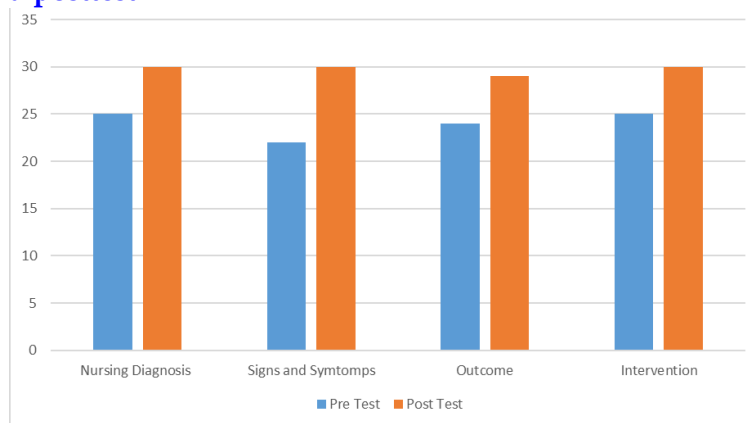


Figure 3. Graph pretest and posttest training

Based on Figure 3, the results show that the knowledge and skills of nurses in documenting web/computer assisted care increase during training and mentoring. This can be seen from the results of the evaluation carried out after the completion of the training and mentoring. The training is delivered with instructions on how to create documentation and provide trigger cases for service participants to analyze. Trigger Cases are meant for participants to be able to compile documents on various new

diagnoses and interventions that need to be determined, as well as understand the various types of cases that arise. By offering a variety of trigger cases, the result enhances participants' knowledge and skills. The support and training provided can help nurses develop their work effectively and efficiently, including improving nurse skills in documenting care. The essence of nursing documentation is activity creation care that guarantees the growth of perspective, attitude, mindset and professional behavior for all nurses. Through a scientifically sound, systematic and logical approach and documentation of the nursing process, all activities in the nursing process can be restated for review, development or improvement. quality and continuous documentation, nurses need to be equipped with training in nursing care documentation (Limbong et al., 2021).

Improving the quality of knowledge before and after training has a big impact. This can provide information for hospitals to monitor and assess document (Sukezi, 2021). Amalia's research results (2018) Findings in hospital management, especially nursing service management, provide guidelines that set standards regarding the documentation of nursing care using a computerized nursing information system that allows nurses to protect themselves from the law. Setting Nurses are also expected to thoroughly clean up internal maintenance documentation. Nurses who do not produce complete or incomplete documentation must be seen by the supervisor or room manager (Amalia et al., 2018).

4. Conclusion

The impact of service activities carried out to expand the knowledge and skills of nurses has an effect on increasing the production of nursing documentation. This increase in knowledge and skills is proven by observing the practice of web-based nursing documentation carried out by nurses implementing SDKI, SLKI, and SIKI.

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