DESIGN OF COMPUTER-BASED PALIATIVE NURSING AND PALIATIVE SCREENING DOCUMENTATION INFORMATION SYSTEMS

Mulyono[1], Emilia puspitasari sugiyanto[2]*

[1]DIII Electromedical Study Program, Universitas Widya Husada Semarang, Jl. Subali Raya No.12, Krapyak, West Semarang, Semarang, Central Java 50146, Indonesia
[2]DIII Nursing Study Program, Universitas Widya Husada Semarang, Jl. Subali Raya No.12, Krapyak, West Semarang, Semarang, Central Java 50146, Indonesia
*ummu_kifah @yahoo.com

ABSTRACT

Documentation of nursing care is an important part of the nursing process, many methods have been developed to make it easier for nurses to carry out the nursing process. It is hoped that the documentation system developed will be able to facilitate the nurse's task. The palliative nursing documentation process is . special nursing documentation for palliative nursing which consists of assessment, formulation of diagnoses, interventions, implementation and evaluation. The documentation format for palliative nursing care includes a palliative screening assessment. This documentation system was developed in nursing education institutions to facilitate the learning process and provide students with direct experience in the application of the nursing care documentation system, especially palliative nursing. The purpose of this study was to design a computer-based palliative nursing care documentation system. This type of research is design research with expert system analysis. The research activity began with the creation of a diagram of the nursing care documentation process flow system. After the flowchart system is made, the researcher begins to design a system that is in accordance with the flowchart design. The results obtained are the design of the nursing care documentation system and palliative screening. The nursing documentation system can be used for learning palliative nursing care and screening paiative patients using screening. The research activity began with the creation of a diagram of the nursing care documentation process flow system. After the flowchart system is made, the researcher begins to design a system that is in accordance with the flowchart design. The results obtained are the design of the nursing care documentation system and palliative screening. The nursing documentation system can be used for learning palliative nursing care and screening paiative patients using screening. The research activity began with the creation of a diagram of the nursing care documentation process flow system. After the flowchart system is made, the researcher begins to design a system that is in accordance with the flowchart design. The results obtained are the design of the nursing care documentation system and palliative screening. The nursing documentation system can be used for learning palliative nursing care and screening paiative patients using screening.

Keywords: computer-based; design: palliative nursing care; palliative screening

INTRODUCTION

Documentation of nursing care is an important part of the nursing process, many methods have been developed to make it easier for nurses to carry out the nursing process. It is hoped that the documentation system developed will be able to improve the quality of nurse services with easy and efficient documentation.(Li & Chen, 2021)the development of an information system was developed to facilitate the work of the health team by saving work time,

completing tasks faster and with more accurate results. Li also explained that information systems can make communication faster and more comfortable.(Silvia & Tobing, 2020)explained that the documentation system can increase the quantity and quality of nursing care documentation. Nurses as care providers need to understand and be skilled in using the documentation system used in hospitals. Almost all hospitals have developed a medical doctor's documentation system. This is the basis for preparing student nurses to have experience and skills in carrying out technology-based nursing documentation both on campus and during practice.(Mulyono, 2021)knowledge and learning are especially important for nursing students, by applying the nursing documentation system in the documentation process it provides direct experience to students so that when they work later students are already skilled in the application of the documentation system.

Wartonah (2015) the process of palliative nursing documentation includes documentation of assessment processes, formulation of diagnoses, action planning, implementation of palliative nursing actions and evaluation. Besides nursing documentation, palliative patient screening was also developed using palliative screening. The diploma three program nursing study program has advantages in the field of palliative care, and the ability to master technology, on this basis it is necessary to develop a palliative documentation system for the study program. The purpose of this research is to design a computer-based palliative nursing care documentation system.(RI Ministry of Health, 2020)Nurse professional standards include nursing diagnoses referring to the Indonesian Nursing Diagnosis Standards (IDHS) and a list of skills containing nursing interventions referring to the Indonesian Nursing Intervention Standards (SIKI) and outcome criteria referring to the Indonesian Nursing Outcome Standards (SLKI). These standards are made to facilitate nurses in carrying out their work.(Ministry of Health Republic of Indonesia, 2016) Palliative screening is the initial reference for determining the category of palliative patients. Based on this, it is necessary to develop a nursing information system that can be used in educational institutions, especially palliative nursing. which is expected to be able to facilitate the student learning process in accordance with the needs of the field of clinical nursing practice. The purpose of this study was to design a palliative nursing care documentation system and computer-based palliative screening.

METHOD
This research method uses expert system analysis for several stages of activity including System Requirements Analysis, Database Planning, Application Planning, and User Interface Design. The research activity began with the creation of a diagram of the nursing care documentation process flow system. After the flowchart system is made, the researcher begins to design a system that is in accordance with the flowchart design. The results obtained are the design of the nursing care documentation system and palliative screening.
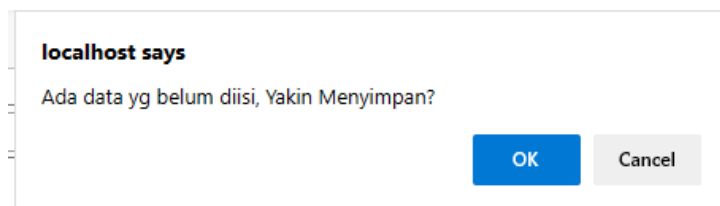
RESULTS
Research activities began with planning an expert system by inputting a data base for the system including the root system of nursing documentation starting from the basis of formulating nursing diagnoses on the basis of SDK, SLKI, and SIKI. In addition to compiling the root system, researchers have also inputted basic palliative screening data. Includes characteristics of palliative patients. After the basic data is created, it is continued with application planning and interface planning. The following are the stages of using the palliative nursing care documentation system.

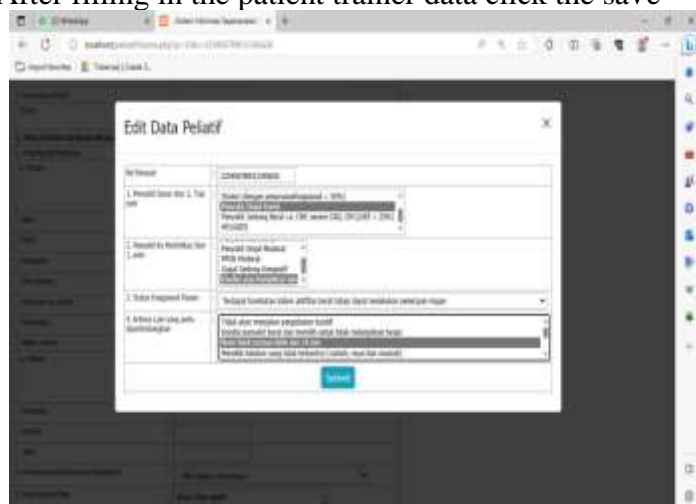The first step Enter the patient's medical record number

If the patient's medical record number has been recorded, the patient's biodata will be displayed, and if it has not been recorded, the nurse must enter the patient's personal data

Click the save button first and make sure the required data fields are filled in, such as the fields for incoming diagnoses and main complaints, the contents match the patient's complaints,

localhost says

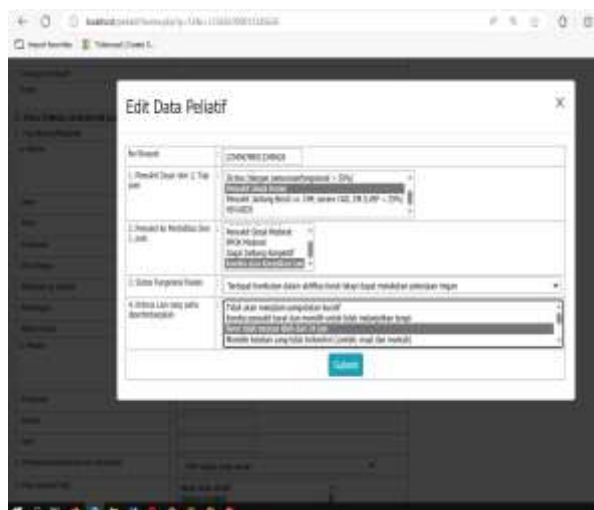Ada data yg belum diisi, Yakin Menyimpan?

OK   Cancel

After that, please click the peliative data button to fill in the patient's palliative data

After filling in the patient trainer data click the save

After that a peliative screening will appear resulting from the input of patient peliative data that has been inputted, if the final value of the peliative data is 0-2 then there is no need for peliative action, 3 observations and if the final value is >= 4 then action is needed.

DISCUSSION

The development of Information and Communication Technology (ICT) is a tool for compiling, conveying and processing information accurately. This palliative nursing documentation system helps compile, convey and process information from patients accurately and efficiently.(Baderi, 2018) Explaining information technology is an activity that includes efforts to process, manipulate, manage, transfer information between media. With this documentation system, it can make it easier for nurses to screen or screen palliative patients. Palliative screening is a tool used to detect patients in the palliative group or not.(Putranto, 2015)palliative screening is an assessment carried out to classify patients in the palliative category or not. In the system created by inputting data, nurses can assess whether the patient is included in palliative screening or not, if the data input results show a value of 0-2 the patient does not need palliative care, if the value is 3 the patient requires observation, and if the value is more than 4 then the patient enters in the palliative category. This compiled nursing documentation also assists nurses in documenting care using the standard SDKI, SLKI, and SIKI approaches. As is well known, the development of information and communication technology has developed many benefits, one of which is to facilitate work.(Prasetyanto & Sukihananto, 2019)explained that computer-based management information systems are now widely used, one of which is in the field of nursing. This can be used as a basis for educational institutions to prepare prospective nurses who have the ability and skills to perform computer-based documentation of nursing care.

Hallila (2014)discussing the role of computers and the internet in the student learning process, student learning today needs to prioritize technology. Educational institutions need to carry out developments in the field of technology in the educational process(Mulyono, 2021)When working as a nurse, you will be required to be skilled in operating technology in hospitals, including nursing documentation information technology, which is currently being developed by many hospitals. The learning approach at the institution will create new nurses who are ready and skilled in using or applying the documentation system. Currently there are still few institutions that develop technology-based documentation, especially in nursing study programs in recording nursing care report assignments. Currently, most of them still use the conventional way of writing so that new students will know when they are doing internships in a hospital, and even then it is limited.

Information system development This nursing intervention uses the root system with a causal approach.(Meo, 2015) (Swedarma & Dwidasmara, 2019)explained that the clinical pathway is an action plan for patients that is multidisciplinary, and contains details about the steps for handling a patient from entering the hospital to leaving the hospital, the clinical pathway approach is implemented with an expert system that explains the causes and effects of events. The activities of the nursing care process are integrated with each other. the way this documentation system works is by using a pakr system where the results of the assessment will be the basis for diagnosis, the diagnosis will be the basis for formulating interventions, interventions will be the basis for implementing nursing actions and finally the evaluation will be based on the results of the achievements of nursing actions.

CONCLUSION
The nursing care intervention information system assists nursing students in preparing nursing interventions in accordance with the SDKI, SLKI and SIKI standards. The nursing intervention information system helps students learn to document computer-based nursing care. It is necessary to develop applications that are easy to access and use in documenting nursing care.

REFERENCES
Ministry of Health Republic of Indonesia. (2016). No Title TOT Palliative Cancer Module for Health Workers. Ministry of Health of the Republic of Indonesia, Directorate of Prevention and Control of Non-Communicable Diseases.

Baderi. (2018). Nursing information system. Nursing Information Systems, 8–11.

Hallila, LE (2014). Nursing students' use of Internet and Computer for their Education in the College of Nursing. International Journal of Nursing & Clinical Practices, 1(1), 1–5. https://doi.org/10.15344/2394-4978/2014/108

INDONESIA, MKR (2020). Number HK.01.07/MENKES/425/2020 Concerning Nurse Professional Standards. in Minister Of Health Republic Of Indonesia (Vol. 7, Issue 2). http://repository.radenintan.ac.id/11375/1/PERPUS PUSAT.pdf%0Ahttp://business-law.binus.ac.id/2015/10/08/pariwisata-syariah/%0Ahttps://www.ptonline.com/articles/how-to-get-better-mfi-results%0Ahttps://journal.uir.ac.id/index.php/kiat/article/view/8839

Li, Q., & Chen, Y. (2021). Application of Intelligent Nursing Information System in Emergency Nursing Management. Journal of Healthcare Engineering, 2021. https://doi.org/10.1155/2021/3998830

Meo, MY (2015). With an Integrated Clinical Pathway to Improve Service Quality. 3(1), 48–55. https://jurnal.unimus.ac.id/index.php/JMK/article/view/4028/3746

Mulyono, ES (2021). Computer-Based Basic Nursing Study Information. Jl. Subali Raya No, 50146(12), 1–12. http://journal.stikeskendal.ac.id/index.php/Keperawatan

Prasetyanto, D., & Sukihananto. (2019). Application of nursing information systems. Journal of Voice Health Research Forikes, 10(2), 135–138.

Putranto, R. (2015). Palliative Module.

Silvia, R., & Tobing, CL (2020). Technology-Based Nursing Care Documentation System To Improve Nursing Care. 1–13.

Swedarma, E., & Dwidasmara, D. (2019). Si Cantik's Role in Improving Nurse Performance in Hospitals. Raflesia Journal of Nursing, 1(1), 1–10. https://doi.org/10.33088/jkr.v1i1.395

SDKI DPP PPNI Working Group Team. (2016). Indonesian Nursing Diagnosis Standards (IDHS), 1st Edition. Jakarta: Indonesian Nurses Association.

SIKI DPP PPNI Working Group Team. (2018). Indonesian Nursing Intervention Standards (SIKI), Edition 1. Jakarta: Indonesian Nurses Association.

PPNI DPP DPP SLKI Working Group Team. (2018). Indonesian Nursing Outcome Standards (SLKI), Edition 1. Jakarta: Indonesian Nurses Association.

Wartonah. (2015). Nursing Process Steps. Basic Human Needs And The Nursing Process, 4,5,6,7,8.