



Socialization Website-Based Nursing Data Analysis Services at Banyumas Regional Hospital

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Abstrak

Penentuan diagnosis keperawatan merupakan bagian yang sangat penting untuk dapat memberikan asuhan keperawatan secara holistik dan komprehensif bagi pasien. Diagnosis keperawatan ditetapkan berdasarkan analisis data keperawatan dari hasil pengkajian keperawatan. Analisis data yang dilakukan secara manual memiliki kelemahan yaitu ketepatan dan keakuratan hasil sangat bergantung pada pengetahuan dan pengalaman perawat dalam melaksanakan proses keperawatan. Proses analisis data keperawatan secara manual juga memerlukan waktu yang relatif lama. Ramut Nursing Data Analysis (RNDA) merupakan layanan analisis data keperawatan pertama dan gratis di Indonesia yang dapat membantu perawat, dosen, dan mahasiswa keperawatan untuk lebih mudah, cepat, dan akurat dalam menganalisis data keperawatan serta menentukan diagnosis keperawatan dari hasil pengkajian keperawatan. Perawat di RSUD Banyumas masih melakukan analisis data keperawatan secara konvensional dan belum familiar dengan keberadaan layanan RNDA, oleh karena itu penting untuk melakukan sosialisasi penerapan RNDA untuk menganalisis data keperawatan di RSUD Banyumas. Kegiatan ini diikuti oleh 35 perawat dengan rangkaian kegiatan meliputi sosialisasi RNDA dengan metode ceramah, demonstrasi langkah-langkah penggunaan RNDA, diskusi dan tanya jawab, dilanjutkan dengan perawat mencoba praktik penggunaan RNDA dan memberikan umpan balik tentang RNDA. Hasil evaluasi kegiatan ini adalah perawat lebih memahami tentang analisis data keperawatan dan RNDA, meningkatkan kecepatan perawat dalam menganalisis data keperawatan pasien, meningkatkan ketepatan identifikasi diagnosa keperawatan pasien, meningkatkan kemudahan yang dirasakan perawat RSUD Banyumas saat menganalisis data keperawatan pasien, dan memberikan umpan balik positif untuk RNDA.

Kata-kata kunci : *diagnosa keperawatan, analisis data keperawatan, RSUD Banyumas*

Abstract

Determining a nursing diagnosis is a very important part of being able to provide holistic and comprehensive nursing care for patients. Nursing diagnoses are determined based on the analysis of nursing data from the results of nursing assessments. Data analysis carried out manually has weaknesses, namely the precision and accuracy of the results, which are very dependent on the nurse's knowledge and experience in carrying out the nursing process. The process of manually analyzing nursing data also takes a relatively long time. Ramut Nursing Data Analysis (RNDA) is the first and free nursing data analysis service in Indonesia, which can help nurses, lecturers, and nursing students more easily, quickly, and accurately analyze nursing data and determine nursing diagnoses from the results of nursing assessments. Nurses at Banyumas Regional Hospital still carry out conventional nursing data analysis and are not yet familiar with the existence of RNDA services; Therefore, it is important to socialize the application of RNDA to analyze nursing data at Banyumas Regional Hospital. The activity was attended by 35 nurses with a series of activities including socialization of RNDA using the lecture method, demonstration of steps for using RNDA, discussion, and questions and answers, followed by nurses trying to practice using RNDA and providing feedback on RNDA. The results of the evaluation of this activity are that nurses understand more about nursing data analysis and RNDA, increase the speed of nurses in analyzing patient nursing data, increase the accuracy of identifying patient nursing diagnoses, increase the ease felt by Banyumas Regional Hospital nurses when patient analyzing nursing data, and providing positive feedback for RNDA.

Keywords : *nursing diagnoses, nursing data analysis, Banyumas Regional Hospital*

1. INTRODUCTION

Nursing care provided by nurses to patients is a series of logical, systematic, dynamic and structured nursing practice activities to solve patient problems and can be scientifically accounted for through the nursing process. The nursing process is a systematic method including nursing concepts and theories, nursing assessment, nursing planning, nursing implementation, and nursing re-evaluation (Doenges & Moorhouse, 2012; Herdman & Kamitsuru, 2018). The planning stage consists of determining the nursing diagnosis, nursing results, and nursing interventions (Herdman & Kamitsuru, 2018). Determining a nursing diagnosis is a very important part for nurses to be able to provide holistic and comprehensive nursing care for patients. Nursing diagnoses are determined based on analysis of nursing data from the results of previous nursing assessments (Rr.T.S. , Hariyati et al., 2021).

Analysis of nursing data and determining a nursing diagnosis is a difficult stage (Bittencourt & Crossetti, 2013). Nurses carry out data analysis of nursing assessment results manually using a nursing diagnosis guidebook, namely the Indonesian Nursing Diagnosis Standards (SDKI) which contains 149 nursing diagnoses along with signs and symptoms

grouped into major data. and minor data (PPNI, 2016). Data analysis carried out manually has weaknesses, namely the precision and accuracy of the results which are very dependent on the nurse's knowledge and experience in carrying out the nursing process. In addition, The process of manually analyzing nursing data also requires a relatively long time. Therefore, more tools are needed to make data analysis more accurate and faster (Lubis et al., 2020).

The Hospital Information and Management System (SIMRS) and other computerized systems in hospitals have provided electronic nursing diagnosis options but have not been able to analyze data from nursing assessments (Hariyati et al., 2021; Lima et al., 2018). SIMRS still focuses on nursing documentation and cannot provide convenience at the nursing data analysis stage. Nurses still have to choose a nursing diagnosis from the many choices of nursing diagnoses. Therefore, we need a system that can guide nurses in analyzing data to determine the right nursing diagnosis and carry out professional care (Hariyati et al., 2021).

Electronic based systems are proven to be better in process and structure than paper based systems (Akhu-Zaheya et al., 2018). Therefore, a technological innovation was developed in the form of a *website-based service* called Ramut Nursing Data Analysis (RNDA) which can help with the online and easy nursing data analysis process. Nurses at Banyumas Regional Hospital still carry out conventional nursing data analysis and are not yet familiar with the existence of RNDA services, therefore it is important to socialize the application of RNDA to analyze nursing data at Banyumas Regional Hospital as a solution to problems experienced by nurses in establishing nursing diagnoses.

2. IMPLEMENTATION METHOD

Time and Place of Implementation

This community service activity was carried out on the 3rd floor of the Thalassemia Hall at Banyumas Regional Hospital on Thursday, October 19 2023 and was attended by 35 nurses. The series of activities include socialization of RNDA using the lecture method, demonstration of steps for using RNDA, discussion and question and answer, then continued with nurses trying to practice using RNDA and providing feedback on RNDA.

3. RESULTS AND DISCUSSION

Ramut Nursing Data Analysis (RNDA) Socialization

Ramut Nursing Data Analysis (RNDA) socialization material was carried out by the PkM team leader, namely Hasby Pri Choiruna, S.Kep., Ns., M.Kep. This activity provides

complete information about RNDA and how to use it. Ramut Nursing Data Analysis (RNDA) is the first and free nursing data analysis service in Indonesia which can help nurses, lecturers and nursing students to more easily, quickly and accurately analyze nursing data and determine nursing diagnoses from the results of nursing assessments. RNDA is a technological innovation in the form of a *website-based service* that can be accessed via the page <https://rnda.ramut.my.id> or <https://bit.ly/ramutnursingdataanalysis>.



Figure 1. RNDA socialization at Banyumas District Hospital

This activity also explains how to use RNDA, namely as follows:

- 1) Check the "Please type" box and the blue "Analyze" button below how to use RNDA. If the "Please type" box and the blue "Analysis" button do not appear on Telegram or Chrome browser, please access <https://rnda.ramut.my.id> or <https://bit.ly/ramutnursingdataanalysis> on the browser's incognito tab Chrome or use another browser such as Via, Opera, Firefox, or Edge.
- 2) Type nursing data in the form of words/phrases in lower case (non-capital) letters, for example dyspnea, infection, head injury, stroke, or diabetes mellitus in the "Please type" box.
- 3) Select the blue "Analyze" button.
- 4) Pay attention to the table that appears under the blue "Analysis" button.
- 5) Consider and select priority nursing diagnoses according to the client/patient's condition.

Demonstration and Practice of Using Ramut Nursing Data Analysis (RNDA)

The next activity was a demonstration and continued with the nurse trying to use Ramut Nursing Data Analysis (RNDA). At this stage a simulation case is given and then the nurse or participant present demonstrates the use of RNDA to analyze data based on the case given. The results of this activity were that 50% of participants took 2 minutes to determine a nursing diagnosis using RNDA. Meanwhile, all participants (100%) stated that Ramut Nursing Data Analysis (RNDA) can help and make it easier to analyze data, speed up the data analysis process, and increase the accuracy of data analysis so that the nursing diagnosis that is made is the right nursing diagnosis and suits the problem. and patient needs.



Figure 2. Demonstration of the use of RNDA

In the discussion and question and answer session there were 3 questions from participants, namely: 1) Can RNDA analyze disease data (for example stroke); 2) Is RNDA accessible for free; 3) Can RNDA analyze more than one symptom at a time? The answer to this question is that RNDA can also analyze disease data and can be accessed for free. Currently RNDA cannot analyze more than one sign and symptom, however RNDA will continue to be developed so that it is hoped that it can facilitate and speed up the analysis of nursing data and plan nursing care comprehensively while still paying attention to the criteria for outcomes in nursing outcomes and actions in nursing interventions.

All participants seemed enthusiastic about taking part in this series of activities. Some feedback from participants include :

- 1) There is a need to socialize RNDA to every unit in Banyumas District Hospital so that all nurses in the room can better understand the use of RNDA
- 2) It is hoped that further development of RNDA will not only be able to analyze nursing diagnosis data but can be synchronized with the Indonesian Nursing Outcome Standards (SLKI) and Indonesian Nursing Intervention Standards (SIKI).
- 3) RNDA can be implemented in the SIMRS application so that RNDA can complete and support nursing care documentation through SIMRS .

Nursing diagnosis is an important part of the nursing care process to help overcome patient problems and help meet patient needs in achieving optimal health. Accuracy in establishing a nursing diagnosis is influenced by the completeness of the assessment data and accuracy in carrying out analysis of these data. Nurses must have good diagnostic skills as a basis for developing nursing intervention plans for patients (Siregar, 2020). RNDA is a technological innovation in the form of a *website* -based service which aims to help and facilitate care and speed up the analysis of nursing assessment data to establish the right nursing diagnosis for patients (Choiruna & Ramadhan, 2022). RNDA was developed by referring to the standard nursing diagnosis guidelines that are applied nationally, namely the Indonesian Nursing Diagnosis Standards (SDKI). This diagnostic standard is a benchmark used by nurses in providing safe, ethical and effective nursing care (PPNI, 2016).

The ability of nurses to be able to formulate appropriate nursing diagnoses is influenced by several factors such as knowledge and understanding of the patient's condition, causal factors, risk factors, and the characteristics of the signs and symptoms experienced by the patient. Therefore, the ability to integrate all of this data is needed to form a conclusion as a basis for establishing a nursing diagnosis (Gleason et al., 2021). Apart from that, other factors that significantly influence the accuracy of enforcing nursing diagnoses based on the IDHS are recent educational factors, team-based competencies, and nurses' clinical practice experience (Nur Hasina et al, 2023). Nursing data analysis, which is still carried out manually, is also greatly influenced by the knowledge and experience of nurses and requires relatively longer time (Bittencourt & Crossetti, 2013). Ramut Nursing Data Analysis (RNDA) is a technological innovation that can guide nurses in analyzing nursing data to determine nursing diagnoses quickly and accurately in carrying out professional nursing care. This is

supported by the evaluation results from this activity, namely that nurses understand more about nursing data analysis and RNDA, increase the speed of nurses in analyzing patient nursing data, increase the accuracy of identifying patient nursing diagnoses, increase the ease felt by Banyumas Regional Hospital nurses when analyzing patient nursing data, as well as positive feedback on RNDA.

4. CONCLUSION

website -based service which aims to help and facilitate care and speed up the analysis of nursing assessment data to establish the right nursing diagnosis for patients. Nurses understand more about nursing data analysis and RNDA, increase speed in analyzing nursing data, increase accuracy in determining nursing diagnoses, and the ease felt by nurses.

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