IMPLEMENTATION OF TERMINOLOGY STANDARDS IN NURSING DOCUMENTATION IIN HEALTHCARE: SCOPING REVIEW

Desak Kadek Sastrawati[1*], NLP. Dina Susanti[2], Ni Luh Gde Nita Sri Wahyuningsih[3], Ni Nyoman Nuartini[4]

[1-4]Faculty of Health, Institute of Technology and Health Bali

Email Korespondensi: sakdek@gmail.com

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ABSTRACT

Nursing care documentation is a document that contains the patient's condition starting from bio-psycho-social-spiritual assessment, nursing plan, intervention in accordance with the plan that has been prepared and evaluation carried out by nurses on patients from the patient's arrival to the patient's discharge. This scoping review aims to determine the application of terminology standards in health services. This study uses a scoping review. The search strategy used databases namely PubMed, ScienceDirect and Researchgate. The articles obtained were selected based on publications published between 2015-2025, the search used MeSH terms and PCC format in the selection of articles. A total of 15 articles describing the application of terminology standards in nursing care documentation were found. The use of international standards in European, American and African countries in preparing documentation are NANDA-I, NIC NOC, INCP, FinCC. While in Indonesia using NANDA, NIC NOC and SDKI, SLKI SIKI standards. However, the application of documentation using the SDKI, SLKI SIKI standards is still not optimal and nurses do not understand the practical implementation of the three standards. So referring to this, further study is needed in the future.

Keywords: Nursing, Documentation, Standardize Terminology.

INTRODUCTION

Nursing documentation is a document that contains the patient's condition starting from bio-psycho-social-spiritual assessment, nursing plan, intervention in accordance with the plan that has been prepared and evaluation carried out by nurses on patients from the patient's arrival to the patient's discharge (Juniarti et al., 2020). Nursing documentation is a very important part of nursing services, namely as a means of communication between nursing professions, a benchmark for quality nursing services, proof of the responsibility and accountability of nurses, a source of data and a means of research and standards in carrying out nursing care (Amalia et al., 2018). Nursing documentation that is not carried out in accordance with standards can have an impact on patient safety and the quality of services provided to patients, risking communication errors between nursing care providers and patients, which can result in a decrease in the quality of nursing services (Nellisa et al., 2022).

The quality of nursing documentation globally is still low. Based on studies conducted in several countries, less than 50% of nursing care documents are of low quality. Research results show that the quality of nursing documentation in New Zealand reached 52%, America reached 32.7% and Europe 32.3% (Nora et al., 2023). Meanwhile, the results of research conducted at Kaliwates Jember Hospital, East Java found that 66% of the majority of nurses did not understand the standards of nursing care based on Indonesian nursing standards (SDKI, SLKI and SIKI) (Yuwanto & Prasetyo, 2023).

Based on previous research conducted in Brazil, nursing documentation records that use NANDA-I and NIC standards show better results than nursing records that do not use standards (Silva et al., 2017). This is similar to research conducted in Finland which states that the use of the Finnish Care Classification (FinCC) standard in nursing practice can improve the quality of documentation in recording patient information in a clear and standardized way (Mykkanen et al., 2022). Meanwhile, research conducted in Indonesia states that the implementation of nursing care based on the 3S standards (SDKI, SLKI, SIKI) has been recognized and implemented, but the documentation of the stages of the nursing process is not optimal and there are still nurses who do not understand the nursing care documentation standards. (Syarif et al., 2021). Based on the results of this research illustrates the use of standards in the documentation of nursing care is very important to create uniform terminology and improve the quality of quality nursing services.

LITERATURE REVIEW

The Finnish Care Classification (FinCC) nursing terminology standard was originally based on the Clinical Care Classification (CCC) developed in Finland for more than 20 years, and further developed and widely used by Finnish healthcare organizations. The standard has a hierarchy of Finnish nursing diagnosis classification (FiCND), Finnish nursing intervention classification (FiCNI), and Finnish nursing outcome classification (FiCNO) to assess patient care. This study shows that structured and standardized nursing documentation can be used to generate new knowledge for nursing care practice at the ward level (Mykkanen et al., 2022).

The use of non-standard terminology can lead to variations in the way care is provided to patients. This can result in differences in care outcomes, as each nurse may have a different interpretation and approach to the same problem. It also causes medical records to be inconsistent and difficult for other nurses to understand. This can lead to miscommunication that can potentially increase the risk of clinical errors (Yuwanto et al., 2023).

RESEARCH METHODS

This scoping review was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. The article search was conducted from 2015 to 2025. Article searches were conducted from 2015 to 2025. Articles were searched internationally and nationally according to predetermined themes. The source of this article used electronic databases with high quality criteria, namely PubMed,

ScienceDirect and Researchgate. The article search was adjusted to the Medical Subject Heading (MeSH) guidelines with the keywords used, namely 'nursing' AND 'documentation' AND 'standardize terminology'.

Table 1. Population, Concept, Context (PCC) Framework.

Criteria	Inclusion	Eksclusion
Population	Nurses who perform nursing documentation	Nurses who do not perform nursing documentation
Concept	Implementation terminology standards in nursing documentation	Nursing documentation that does not use standard terminology
Context	1. In the world (some countries). 2. Year of publication of national and international articles/journals 2015 - 2025. 3. In English language.	1. Only focuses on one country. 2. Year of publication of national and international articles/journals below 2015. 3. Other than english language.

Based on the results of literature searches through publications on three databases and using keywords that have been adjusted to MeSH, researchers obtained 2,273 articles that match these keywords. The results of the search that had been obtained were then checked for duplication, 465 articles were found to be the same so they were excluded and 1,808 articles remained. The researcher then filtered based on the title / abstract identification that was adjusted to the theme of the systematic review, there were 1,018 articles that were excluded because they were not suitable and 790 articles remained. Then selection was made based on systematic review / scoping review/ literature review and 437 articles were excluded, electronic health records were excluded as many as 53 articles, language used other than english were excluded as many as 9 articles, articles published before 2015 were excluded as many as 61 articles and the remaining 230 articles. Assessment of article eligibility based on inclusion and exclusion criteria of 215 articles, overall manuscript and conformity with eligibility criteria obtained as many as 15 articles that can be used in systematic reviews. The results of the selection of research articles can be illustrated in the PRISMA figure below.

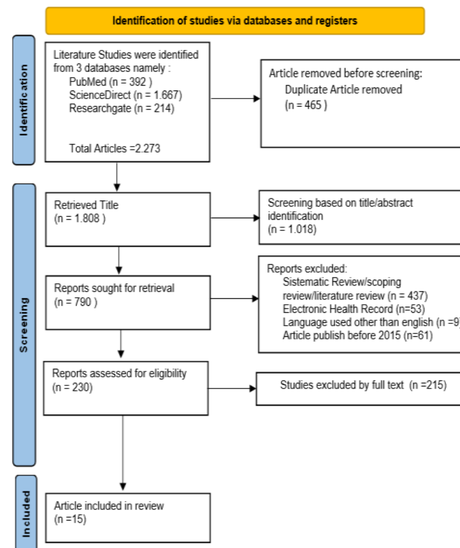

Figure 1. Preferred Reporting Items for Systematic Review (PRISMA)

Risk of bias assessment

Researcher using the Critical Appraisal Skills Programme independently assessed the quality assessment of all included studies, namely The Joanna Briggs Institute (JBI). The purpose of JBI Critical Appraisal Tools is to assess the methodological quality of a study and to determine the extent to which a study has addressed the possibility of bias in its design, conduct and analysis.

RESEARCH RESULT

The final results of the journal search obtained 15 articles that fit the predetermined inclusion and exclusion criteria. Based on the research design, researchers included all research designs except literature review, systematic review and scoping review. Based on the 15 articles that have been reviewed, they come from several countries, namely Nigeria (1), Spain (1), Finland (1), Brazil (1) and Indonesia (11). All of the articles obtained were quantitative studies. There were 9 articles using cross-sectional study design and 6 articles using quasi-experimental. The instruments used in these articles varied, including NANDA nursing records, NIC NOC, FinnCC, questionnaires, observation sheets, checklists, knowledge questionnaires and NMIS prototypes. The use of terminology standards in European, American and African countries in preparing nursing documentation uses international standards, namely NANDA-I, NIC NOC, INCP, FinCC. While in Indonesia using NANDA, NIC NOC and SDKI, SLKI SIKI terminology standards.

Table 2. Summary Results Of Articles

No	Author and Year	Design	Sample	Variable	Outcome
1	(Omonigho, 2019)	Descriptive and analytic	5 PHC (180 Nursing documentation)	– Independent Variable: Use of NANDA-I,	Documentation of care at maternal and child health

				NIC & NOC standards – Dependent Variable: Nursing documentation	units in PHC is done using standardized terminology (NNN) such as NANDA-I, NIC, and NOC.
2	(Rivas et al., 2016)	Cross-sectional study	79,601 patients from 34 primary health care centers (PHCCs) and 217 Nurses	– Independent variable: Nursing process documented with standardized nursing language (NANDA-I, NIC, and NOC). – Dependent Variable: Patient progress notes	The use of a documented nursing process using standardized nursing language (NANDA-I, NIC, and NOC) resulted in better health outcomes compared to patients managed by nurses who did not use the process.
3	(Mykkanen et al., 2022)	Descriptive	Anonymized aggregate data of surgical patients at 3 hospitals	– Independent variable: Finnish Care Classification (FinCC) standardized nursing data – Dependent Variable: Knowledge	All participating hospitals used FinCC to document nursing diagnoses, interventions and outcomes. However, there were variations in use between hospitals, including duration of use and version of FinCC applied.
4	(Hariyati et al., 2015)	Quasi-experimental design	255 Nursing Documentation	– Independent Variable: Nursing	SIMPRO improves the quality of documentati

				Documentation – Dependent Variable: SIMPRO Model	on. The development of NMIS (the nursing management information system) resulted in a prototype that connects NANDA-I, NIC, and NOC to assist nurses in carrying out the nursing process so that they can produce complete, sustainable, and quality nursing documentation.
5	(Silva et al., 2017)	Cross-sectional study	138 documentation records from two Hospitals	– Independent Variable: Quality of nursing process – Dependent Variable: NANDA-International (NANDA-I) and Nursing Interventions Classification (NIC)	Documentation records at facilities using the NANDA-I and NIC classifications showed statistically superior outcomes related to the implementation of advanced nursing processes compared to using ICNP.
6	(Rohilah et al., 2022)	Cross-sectional study	80 Nurses & 80 Medical Records	– Independent Variables: Factors that influence documentation	3S nursing documentation (SDKI, SLKI, SIKI) is more complete

				– Dependent Variables: Completeness of documentation based on NANDA, NIC NOC and SDKI, SLKI, SIKI standards.	compared to NANDA NIC NOC based documentation.
7	(Syarif et al., 2021)	Descriptive	33 Nurses	– Independent Variable: Implementation of nursing care documentation – Dependent Variable: 3S Standards (SDKI, SLKI and SIKI)	The implementation of nursing care based on the 3S standards (SDKI, SLKI, SIKI) has been known and applied, but documentation of the stages of the nursing process has not been optimal and there are still nurses who do not understand the documentation of nursing care.
8	(Tanrewali et al., 2023)	Quasi-experimental design	72 nurses	– Independent Variable: Nursing Documentation – Dependent Variable: 3S Standards (SDKI, SLKI and SIKI)	There is significant difference in completeness documentation nursing based on 3S (SDKI, SIKI, SLKI) based Evidence Based Practice (EBP) before

					and after mentoring.
9	(Kurniawandari et al., 2018)	Descriptive	111 nursing care documents	– Independent Variables:- – Dependent Variables: Implementation of Nursing Documentation	Nursing care documentation in the assessment aspect, diagnostic aspect, planning aspect, and evaluation aspect, was stated to be complete with a percentage above 70%.
10	(Harmini et al., 2024)	pre-experiment design with a one group pre-post test-only model	82 nurses	– Independent Variable: 3S Training (SDKI, SLKI, SIKI) – Dependent Variable: Quality of nursing services	There is a significant positive influence of providing nursing process training on the quality of nursing care documentation.
11	(Sulistyawati & Susmiati, 2020)	Cross-sectional study	87 nurses	– Independent Variable: Implementation of 3S – Dependent Variable: Nursing Care Documentation Quality Information System	There is a significant relationship between the implementation of 3S and the quality of nursing documentation. Most respondents implemented 3S (SDKI, SIKI, and SLKI) well.
12	(Yuwanto & Prasetyo, 2023)	Quasi experimental with one group pre test post test	150 nurses	– Independent Variable: Documentation training – Dependent Variable:	Nurses knowledge and skills in documenting nursing care increased

		design approach		Nurses' knowledge	after being given standard SDKI, SLKI and SIKI training.
13	(Purnamasari et al., 2023)	Pre - post test design without control sample	131 nurses	– Independent Variable: In House Training 3S – Dependent Variable: Increased knowledge of nurses	There was an increase in nurses' knowledge about 3S-based nursing care after training.
14	(Yuwanto et al., 2023)	Quasi-experimental design without a control group	150 nurses	– Independent Variable: Training in filling out documentation – Dependent Variable: Quality of filling out documentation Instrument	After training and mentoring in filling out nursing documentation, the quality score of filling out nursing documentation increased. Nursing terminology based on Indonesian Nursing Standards (SDKI, SLKI and SIKI) significantly improved the quality of nursing documentation.
15	(Anggariswa et al., 2024)	Descriptive	225 Patient medical records	– Independent Variables: - – Dependent Variables: Implementation of nursing diagnosis (SDKI)	The implementation of nursing documentation that follows Indonesian nursing diagnosis standards in

	inpatient wards is classified as "sufficient," with a percentage of 54.7%.

DISCUSSION

This scoping review identified that the application of nursing terminology standards in health services in several countries varies widely. Based on research in Nigeria, the terminology standards used are NANDA-I, NIC and NOC. Standardization of terminology has benefits in facilitating communication between healthcare teams about patient care, making it easier to input patient data into electronic health records, and can be used in research on the effectiveness or outcomes of patient care using nursing standards (Omonigho, 2019). Similarly, research conducted in primary health care centers in Spain and Brazil found that the use of nursing standards (NANDA-I, NIC, and NOC) resulted in better health outcomes and superior application of advanced nursing processes compared to patients treated by nurses who did not use these standards (Rivas et al., 2016) (Silva et al., 2017).

Meanwhile, the implementation of nursing care in Indonesia has so far referred to international nursing care standards such as the North American Nursing Diagnosis Association (NANDA), Nursing Intervention Classification (NIC), Nursing Outcome Classification (NOC). Although there are several standards and references that have been recognized internationally, because they have not been standardized and standardized and have not been developed by considering cultural disparities and the uniqueness of nursing services in Indonesia, these standards are considered less suitable for application in Indonesia. However, the existing standards can be a reference and input in compiling standards that are more in accordance with the culture and uniqueness of nursing services in Indonesia. Therefore, the nursing professional organization responded to this diversity by compiling nursing care standards based on SDKI, SLKI, SIKI. These three nursing care standards help nurses improve their ability to provide nursing care to patients to achieve optimal health (Syarif et al., 2021). However, the implementation of documentation using these standards is still not optimal and nurses do not yet understand the implementation of the practices of these three standards, nurses rely more on personal experience or education, which shows a lack of uniformity in the implementation of nursing care (Syarif et al., 2021).

The use of several different terminology standards in nursing practice across healthcare settings can create heterogeneity and further challenges in nursing documentation. The implementation of SDKI, SLKI, and SIKI provides clear guidance for nurses in making clinical decisions. With standardized terminology, nurses can more easily diagnose and perform nursing interventions that are appropriate to the patient's condition (Tanrewali et al., 2023). The use of SDKI, SLKI, and

SIKI in nursing practice not only improves the quality of nursing documentation but also contributes to effective communication, systematic care planning, and objective outcome measurement. By implementing these three standards, it is expected that patients will receive more optimal care (Yuwanto et al., 2023).

CONCLUSION

This Scoping Review concludes that the application of standard terminology in nursing documentation in health services in several countries varies widely. This standardization of terminology can help nurses communicate between health teams, make it easier for nurses to enter patient data into electronic health records, and be used in research on the effectiveness or outcomes of patient care. The standards applied to health services in several countries include NANDA-I, NIC, NOC, FinCC, INCP, SDKI, SLKI and SIKI. Meanwhile, the application of nursing documentation standards in Indonesia so far still refers to international standards such as NANDA, NIC, NOC. However, because they have not been standardized and standardized, these standards are considered less suitable for application in Indonesia. So PPNI responded to this diversity by compiling nursing standards based on SDKI, SLKI, SIKI. These three nursing care standards help nurses improve their ability to provide nursing care to patients to achieve optimal health. However, the application of documentation using these standards is still not optimal and nurses do not understand the implementation of the practice of these three standards. So referring to this, further studies are needed in the future.

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